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MUSCULAR DEVELOPMENT

THE WORLD'S BIGGEST BODYBUILDING MAGAZINE!

Volume 46, Number 12, December 2009

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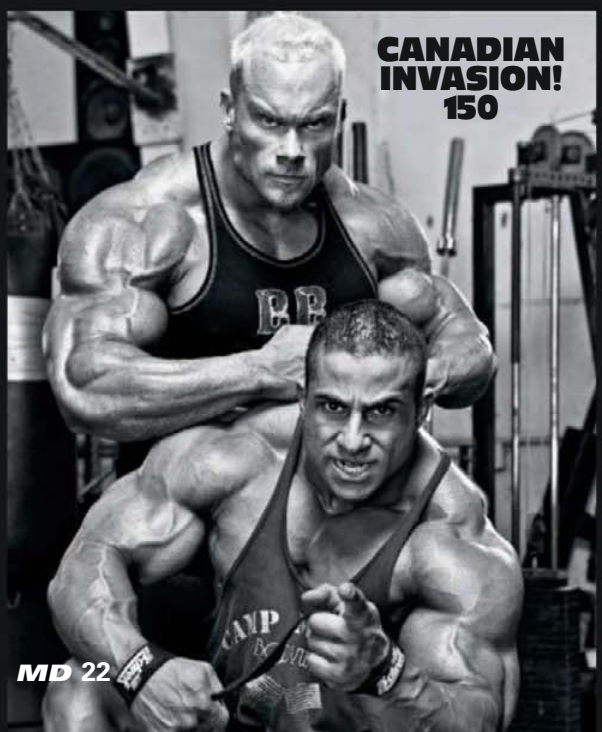
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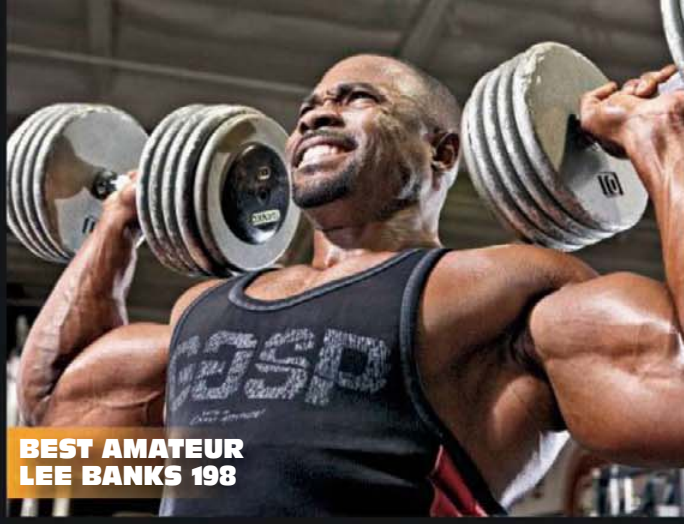
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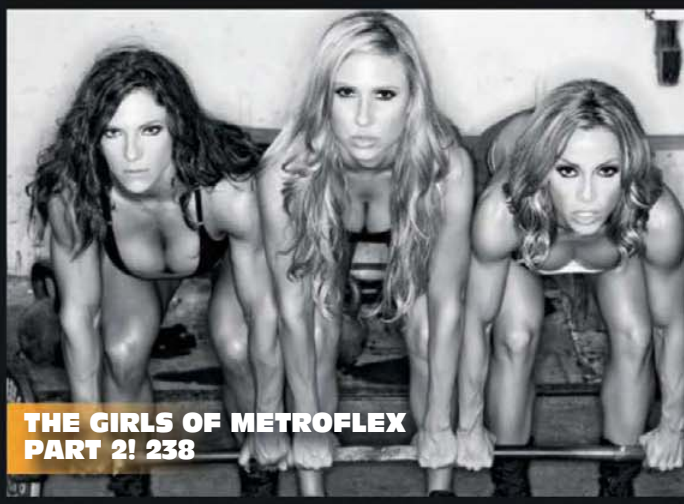
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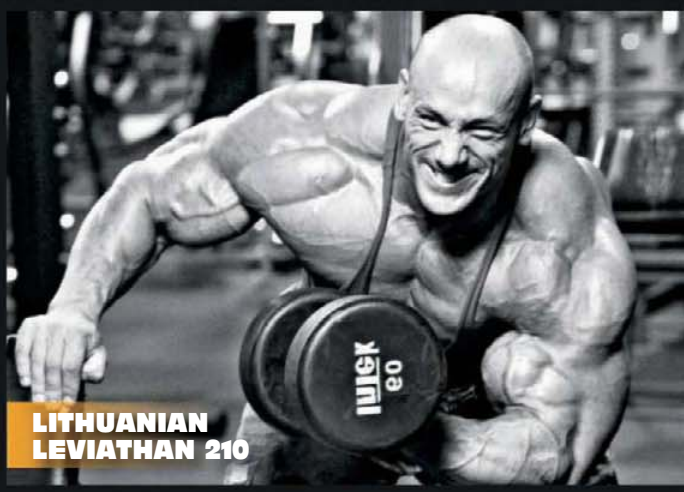
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editor's letter

By Steve Blechman Publisher & Editor-in-Chief

ROAD TO THE NATIONALS

The battle at the beach is about to begin. MD will be there, the weekend of November 20th and 21st, at the NPC Nationals in Ft. Lauderdale— the show that wraps up the amateur season for the whole year. This contest has given us some of the best pro bodybuilders the sport has ever seen, such as **Lee Haney**, **Shawn Ray**, **Kevin Levrone**— and MD's own **Evan Centopani**, who won the Overall in 2007. To win at the Nationals almost guarantees you a great pro career— it's *that tough* a competition. And the lineup this year is an impressive mix of classic shape and proportion, heavyweight mass monsters, and some of the biggest arms the sport has **ever** seen.





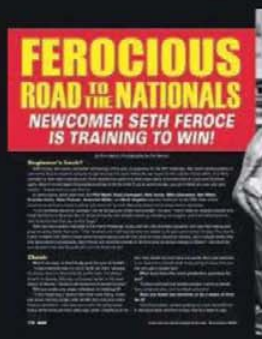
But before we look at MD's top picks for the showdown, I'd like to draw your attention to the two amazing young pros on our cover, our new team MD athletes, Fouad Abiad and Ben Pakulski. Fouad and Ben both hail from Ontario, and both became pros by winning the Super-heavyweight and Overall titles at the CBBF Canadian Championships. Ron Harris talks with Fouad 'Hoss' Abiad and Ben 'Pak-Man' Pakulski about how each one got their start, their strong points— and what they each still need to work on.

Ron also gets them to rate each other's physiques. "Amazing back and shoulders," offers Ben about Fouad. "His quads, hams and calves are at the Olympia level already," says Fouad about Ben. These rookies are making some big noise in the IFBB; both of them are forces to be reckoned with! Read "Canadian Invasion!" on page 150, for their full profiles, contest histories, and the work they're doing with Hany Rambod.

Lee Banks may just be the best amateur heavyweight in America. If you're gonna beat him— you're gonna have to be **damn** good. Lee gave MD's own Mark Alvisi the fight of his life in the Heavies at the USA this year before Mark stormed the Overall. Everyone who's beaten Lee in the last few years is already a pro; Banks just needs to come into Ft. Lauderdale at his best to ace his pro card. And Lee feels good about the Nationals; he's already beaten all the other Heavies going in. Read "Bank on It!" on page 198 by Ron Harris, to find out how this 'body shaper,' as he calls himself, added quality mass to balance his physique, as he amped-up his training with Hany Rambod, to prepare for the Nationals.



Big Robert Burneika will be armed and **dangerous** at the Nationals this year. This huge Russian diamond-in-the-rough, a gigantic bastard about the size of **Jay Cutler**, owns some of the biggest cannons in the sport. Inspired at the age of 14 by **Arnold** "Pumping Iron" on the silver screen, Robert knew in that moment he would never want to work in his dad's auto-body shop; instead, his goal would be to make his body into something spe-



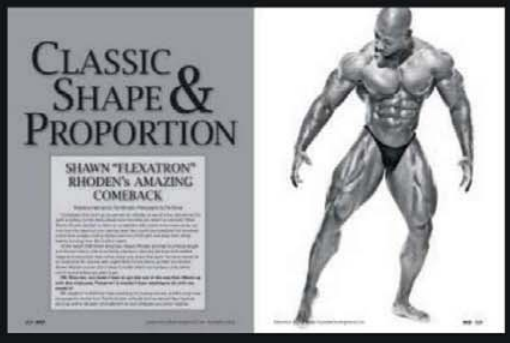


cial. "I found that I was naturally very strong," Burneika says about the immediate results he achieved when he began lifting. Read "Lithuanian Leviathon," on page 210, to find out about this mass invasion, straight out of Mother Russia!

Young newcomer and new Team MD athlete Seth 'Ferocious' Feroce is training to win! Seth carries tons of muscle and is very complete. Some say he hasn't paid his dues; he never competed until spring of this year, but then took Light-heavyweight and Overall at the Pittsburgh Championships and Heavyweight Winner in Northern Kentucky. Is he good enough for the 'fast track' to the IFBB? "It all comes down to who looks best that day on the stage," answers Seth Feroce in "Ferocious Road to the Nationals," on page 178.



Flex Wheeler looks at some of the competition at the upcoming Nationals and 'critiques their physiques.' In "Battle in Fort Lauderdale!" on page 166, Flex gives us the 2009 NPC Nationals Preview. New pros, coming right up!



Classic shape and proportion; that about sums up the amazing physique of Shawn Rhoden. In "Shawn 'Flexatron' Roden's Amazing Comeback," on page 224, Flex Wheeler talks with Shawn, who decided to return to competition after seven years away, and then stormed to a Heavyweight and Overall victory at the IFBB North American. Read about 'Flexatron's' triumphant return to the stage.

This month marks the debut of George Farah's "The Pro Maker" on page 320. Farah gives a detailed breakdown of his "Pre-contest Game Plan" and talks about how to create a pro. You won't want to miss it!

And don't miss "The Girls from Metroflex, Part II" on page 238. That's right— the girls are back in town and getting *physical*!

The rest of the issue is jam-packed as usual, with the latest news, views and in-depth scientific research from the industry's top experts; everything you need to know about bodybuilding. It's all right here in the **world's best** hardcore resource. See you next month! ■

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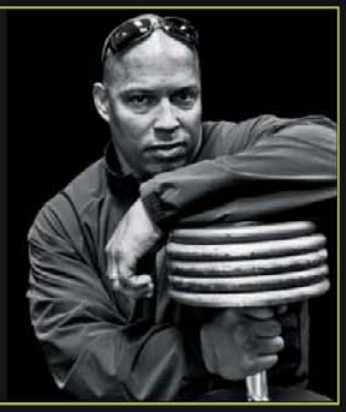
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The Write Stuff



Shawn's Ray's 'Industry Insider Buzz' is a welcome addition to the MD lineup. It's cool to get the latest scoop on bodybuilding from a true legend in the sport, Mr. Shawn Ray. It's good to see pro bodybuilders who have a career after they hang up their posing trunks. Shawn has proven that he has brains to top off his champion physique, and the pen can be mightier than the dumbbells and tanning oil.

Marvin, e-mail

The True Victor

What a gut-wrenching story about Victor Martinez ["Don't Count Me Out," Oct. 2009]. Victor is a true warrior and champion, on the bodybuilding stage and in his personal life. His focus and determination under the most extreme circumstances and personal tragedy is amazing. He has overcome so much in life, yet Victor perseveres. He is a 'true victor' in all walks of life.

Lawanda, e-mail

Let's Hear It for the Ladies!

Way to go MD, giving more coverage to women's bodybuilding. Cheri Owen's 'Art of the Physique' [Oct. 2009] put a well-deserved spotlight on the great Iris Kyle. Cheri's interview was insightful, as usual. It speaks well of MD to be giving the ladies more space. Best of all, the job is in the capable hands and articulate voice of Cheri.

Cynthia, e-mail



Dorian Yates: A Classy Guy

It's great to see Dorian Yates' 'Blood and Guts' column in MD each month. His column is one of the most thoughtful and informative sections of the magazine. Perhaps best of all, Dorian is a gentleman who has class. I've been training for 30 years and 'class' seems to be a dying concept in gyms. People used to be more polite, more courteous, and would put their weights away. Now you have guys who grunt and scream while they do their set. It's like feeding time at the zoo. In fact, I've been to zoos where the animals were more polite than some gym members, and they—the animals— smelled better, too.

Allan, e-mail

An Important Message

I'm a longtime reader of MD, and I think that Publisher Steve Blechman's messages in his Editor's Letter are terrific. Each month, Steve flexes his philosophical and mental muscles and gives MD's readers a unique perspective on what's inside the issue. We get a warm and enthusiastic welcome, and we have no choice but to keep reading the best bodybuilding magazine on the planet!

Kostya, e-mail

Royal Flush

Gregg Valentino is the king of bodybuilding humor! His Ramblin Freak column is hysterical, and I'm especially partial to his 'toilet humor.' He says the kind of crazy shit (oops… pardon the pun) that we all think about eventually, but very few journalists have the balls to report. He really gets to the bottom of things!

Mark, e-mail

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COMING SOON...



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By TEAM MD

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TEAM MD BRINGS YOU INDUSTRY SIGHTINGS FROM THE 2009 MR. OLYMPIA, SEPTEMBER 25 & 26TH, 2009.



1st Place-
JAY CUTLER



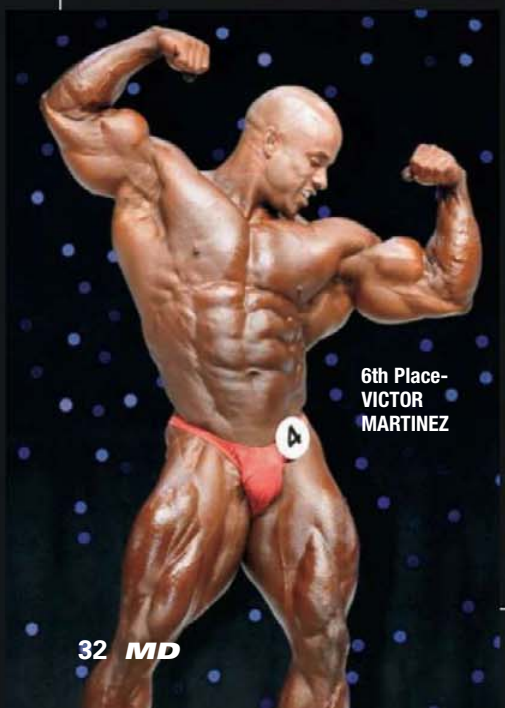
2nd Place-
BRANCH WARREN



4th Place-
KAI
GREENE



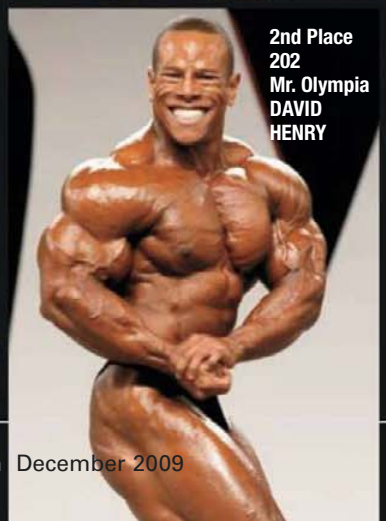
5th Place-
PHIL HEATH



6th Place-
VICTOR
MARTINEZ



3rd Place-
DEXTER JACKSON



2nd Place
202
Mr. Olympia
DAVID
HENRY







Fitness
Winner-
Adela
Garcia



1st Place
202
Mr. Olympia
KEVIN ENGLISH



1st Place
Ms.Olympia
Iris Kyle



Figure
Winner-
Nicole
Wilkins





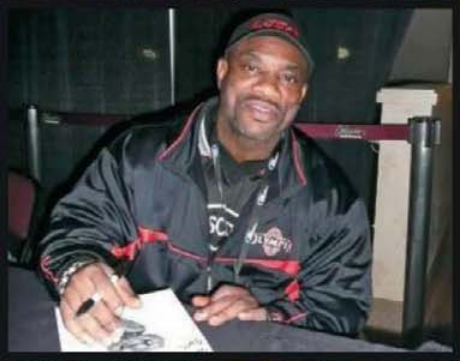
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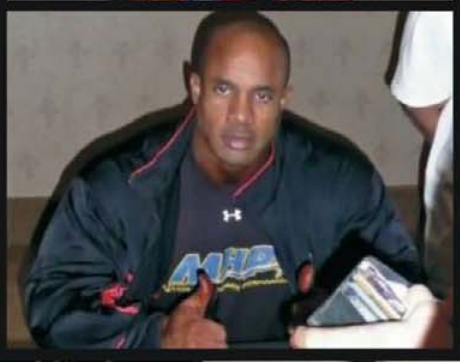
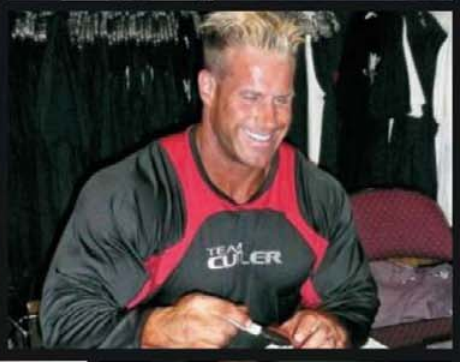
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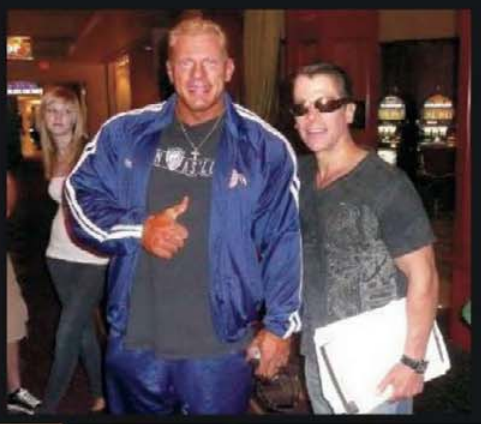




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SHAWN RAY'S Industry InsiderBuzz

By Shawn Ray





Shawn 'Flexatron' Rhoden Enters the Pros

Congratulations to the newest member of the men's IFBB pro division, **Shawn 'Flexatron' Rhoden,** after he ran away with the Overall North America title in Cleveland, Ohio on August 29th. After winning the heavyweight division at 218 pounds, Shawn trampled the rest of the class winners and earned his way into the big league.

One thing that I can appreciate is that this kid took seven years off from competition to help his late father and run the family business, only to come back with eight months of contest training and effectively destroy the entire lineup! Can you image what this guy will do when he realizes how good he actually is and can be?

Sponsored by GENr8, the makers of Vitargo S2, Shawn plans on getting his feet wet on the pro stage in 2010 but is taking his time choosing when and where his pro debut will be. Shawn is based in Maryland and is of Jamaican descent. He has a physique and structure reminiscent of MD's very own **Flex Wheeler,** with room and time to grow. Congratulations, brother!



Dexter Is Rarely 'Off'

By the time you read this, we could have a new Mr. Olympia champion and if so, congratulations to **Kai**, **Victor** or **Phil**— all of whom I believe could upset the 2008 champion if he didn't bring his 'A' game! There are a lot of 'ifs' in bodybuilding but when it comes to the Mr. Olympia, one thing we have come to realize is that **Dexter Jackson** rarely shows up 'off.' Anyone who beats him deserves all the glory. If Dexter remains victorious, we know he's a worthy champion.

PHOTOGRAPHY BY PER BERNAL AND BILL COMSTOCK

Jeff Olcsvary: A Bodybuilder Serving His Country

Respect goes out to NPC national competitor **Jeff Olcsvary** as he has embarked 'full throttle' into serving his country! At 39, he is heading to take on a Special Forces prep course for 15 days. Jeff says, "Just to get ready for Special Forces selection and assessment course, they pretty much beat the hell out of us with PT running, rucking and Log PT for 15 days to see if we're worth training. If we're selected, we move on to language training and other fun training. It takes a little over a year to graduate as a Green Beret but man, it's well worth it!

"There are so many things we can do as a 12-man team that the rest of the army can't do. Besides the obvious, we help other countries with humanitarian efforts, as well as train them to defend themselves against foreign invaders. But all in all, the training they give me helps me understand from a whole other perspective about muscle failure, endurance and just a great reality on what the human body is really capable of!"

Well said, Jeff. We wish you all the best in your new endeavor, and thanks for helping to keep America safe!

Tony Pearson: Lookin' Good In Vegas

Where are they now? I ran into **Tony Pearson** at the USA Championships in Las Vegas last July, and he has been taking up residence there since leaving the pro stage. Tony is a highly-respected personal trainer. Still looking very svelte, he has shaved his crop and joined the 'baldies' (me, Flex, Ronnie and **Chris Cormier**). In his heyday, Tony was a mixed pairs world champion, posing with the likes of **Juliette Bergman**, **Carla Dunlap** and **Shelly Gruwell** in the early '80s before finally winding up in the WBF as 'Jet Man' in the now-defunct Vince McMahon federation in the start of the '90s. Tony battled it out with the best of them— Bannout, Dickerson, Robinson, the Mentzer brothers and the 'new jacks' of the late '80s and early '90s— including me! Yup Tony, you still look like you're a few months away from one more show. What say you, *old man*? Keep up the good work!

Hidetada Yamagishi Bounces Back

Kudos to **Hidetada Yamagishi** for securing a sponsorship contract with Gaspari Nutrition! Almost two years ago during the holiday season, Hide sat in a jail cell, withering away and not knowing what his future would hold. A failure to his people back home in Japan, Hide had some work ahead of him and rather than fall apart, Hide picked up the pieces and got back onstage, placing eighth in the Atlantic City Pro in 2008 and then a very respectable fourth at the Iron Man in January of this year, thus qualifying to compete in this year's Mr. Olympia. In May, Hide would strike again, placing fifth in the New York Pro where he arguably could have been as high as third.

As of this writing, Hall of Fame Bodybuilder and CEO of Gaspari Nutrition, **Rich Gaspari,** has signed Hidetada to a contract to represent his company as he prepared for the Mr. Olympia. What a difference hard work will do for one of the nicest pros on the circuit today!





Shawn Ray's Industry Insider Buzz



Kai Greene Is 'Living the Dream'

Speaking of contracts, **Kai Greene** has extended his contract with supplement giant MuscleMeds for an additional two Years! Kai— who has risen from the streets of New York to the pinnacle of bodybuilding— is truly 'living the dream!' Congrats, big man— you earned it!

Melvin Stumbles, Gustavo Rumbles In Atlantic City

The final IFBB pro contest prior to the Mr. Olympia Weekend— the Atlantic City Men's Pro, held on September 12th— offered a few surprises and comebacks. The defending champion from 2008, **Melvin Anthony**, took a tumble at a crucial time two short weeks prior to the Mr. Olympia— down to fourth place this time around. **Gustavo Badell,** who has been consistently off in recent shows, busying himself by adding family members to his crew (four children), surprised the field with a victory for his efforts! And $18,000 to boot!

James 'Flex' Lewis picked up where he left of at last year's Europa Pro by holding off a vastly-improved **Jose Raymond**. Lewis nailed his conditioning and improved on his weakness while battling 24-hour stomach flu. The 202-pound division has really taken the industry by storm, producing some quality, competitive athletes who found a home among guys who are relatively close in height and weight— where the playing field is a bit more level, making for interesting battles.



Iron Man Pro: Much More Than Muscle

We are fast closing in the 21st Iron Man Pro, held in Los Angeles on January 23-24, 2010. The IFBB contest is part of the highly-successful Fitness EXPO held in concert with it. They have everything from MMA exhibitions and autograph signings, powerlifting, Strongman events, street dancing to the 'Fittest Couple' contest! Contest promoter **John Balik** and event organizer **Marc Missoric** have always gone above and beyond in preparation for the best event weekend in Southern California! For more information, visit www.thefitexpo.com.

New Role For Kevin Levrone?

The 'Maryland Muscle Machine,' **Kevin Levrone,** is at it again. The bodybuilder-turned-actor seems to have turned 'bodybuilder' again with no competitive plans on the horizon— at 45 years young. The father of a 3-year-old son, Gabriel, has come full circle by packing 30-plus pounds of muscle by transforming his once 185-pound body into a '230-plus' athlete! Kevin began hitting the weights to get back on track and resume his passion and somewhere along the way, his muscle memory kicked back in, and he has been growing by the day! With no plans to ever compete again, Kevin claims to have a few secrets to his success that will be revealed in due time. Keep up the hard work, Big Kev— you're looking better than ever!



Battle at the Beach

The NPC National Bodybuilding, Figure & Bikini Championships are coming on November 20-21st to Hollywood, Florida. The 'Battle at the Beach' will be held at the Westin Diplomat Resort & Spa. Pro cards will be at stake, not to mention the very best amateur bodybuilders from the United States going at it! For ticket and entry information, contact Betz/Larsen Event Management, Inc. 407 876-4467 or e-mail Pambetz@aol.com and visit national-bodybuilding.com.

For all your muscle news and information, tune in weekly to Team MD Radio Show with yours truly and Flex Wheeler, Mondays at 4 p.m. PST/7 p.m. EST. S Ray ■

THE GOSPEL AccordingtoLEE

By Lee Priest



Disclaimer:
He's got an opinion— actually a lot of opinions— and he's not afraid to express them. Being politically correct is not how Lee Priest rolls, so if you are easily offended, you may want to flip a couple pages!



Never Satisfied: When Fans Always Want More, More, MORE!

I have come to notice a very annoying trend in fans over the last couple years. Before I get into it, let me say that there are some truly great fans out there. I and all the other pros do appreciate having these loyal fans to support us and recognize that without them we would have no careers and when you think about it, no sport at all to be part of. But then you get those fans that just never stop bitching and complaining, and demanding more no matter how much they are given. These are the so-called 'fans' I would like to whack over the head with a frying pan, or at least tell them to fuck off at times.

As I write this shortly before the Mr. Olympia contest, the latest complaint is that there is not enough coverage on the athletes leading up to the Olympia. Just over the last couple weeks I have seen videos on MD with guys like **Kai**, **Victor**, **Branch**, and **Dennis Wolf**, training in the final weeks leading up to the big show. The fans are able to watch these 100 percent free of charge on MD's website. Isn't that great?

You would think so, but apparently not. Some fans complain that we aren't seeing every single workout plus a new interview every day with every single MD athlete going into the Olympia. And if they are told that some new footage has been shot, they start posting 10 seconds later, demanding to know why the edited video isn't up already for them.

Never mind that this is the biggest contest of the year for these guys. Never mind that getting ready for any show— especially a show of this caliber— takes every last ounce of your energy. Never mind that the last thing you are thinking about is to shoot videos every day, charting your progress for everybody to see. No. Speaking from experience and having competed in the Mr. Olympia six times, I can tell you that you are focused on one thing and one thing only, and that is to train hard, diet even harder, and show up in your best condition so the fans and the press can say, "Wow, he looks great!"

But now we have some fans who feel it is their God-given right to have access to the pros 24/7, regardless of where they are or what they are doing. They feel the pros owe it to them to be accessible day or night and show daily progress, just so they can talk more shit about them. "Ah, he's behind, he's gonna be fat," or "He's overdieted, he's gonna come in too small!" If the pro doesn't cater to the fans and post pictures and videos and daily accounts of what he is eating and how he is feeling (tired and miserable, you can bet), then he is labeled an asshole who doesn't care about the fans!

To this type of fan I say: **Get a fucking life**! Stop trying to live vicariously through these guys and give them a break. Let them do their job, because believe me, this is a job. It's a job they give their hearts and souls to. Not only is it how they make their living as professional athletes, but they know if they don't look their absolute best, you the fan will say he should hang it up. He's done. And why the fuck did he do all those interviews and workout videos, knowing he had to get ready for the Mr. Olympia?

PHOTOGRAPHY BY PER BERNAL

THE GOSPEL—ACCORDING TO LEE

Injury Knocks Cathy Out of Ms. Olympia

I was really looking forward to seeing my ex-wife **Cathy LeFrancois** compete in this year's Ms. Olympia. She just won her second New York Pro show in a row back in May, so this was looking to be probably her best showing ever at the Olympia. But I was speaking with her a few weeks before the big show and she gave me the sad news that a training injury was forcing her to withdraw.

This is sad news for all fans of female bodybuilding. Cathy is always a fan favorite. She has managed to keep her feminine looks, but at the same time has plenty of quality muscle and brings sharp conditioning to the stage every time she competes. I think she gets overlooked a lot, as the judges pay more attention to the bigger girls. I respect them for all the hard work they do, but if you want female bodybuilding to grow, then you have to start placing women who look like women at the top.

I'm not being rude or disrespectful and you all know exactly what I'm talking about. I appreciate all types of physiques. But if you want to get more women involved in the sport, which is the only way it can grow, you need to have athletes who women can look at and say, "Hey, I want to look like her!"



In the old days, millions of women all over the world were inspired to start training after they had seen physiques like **Rachel McLish**, **Tonya Knight**, **Anja Langer**, and **Sharon Bruneau**. Back in those days, the shows were packed, and they weren't held with men's shows either, they did fine all on their own. They used to sell out venues like the Shriner's Auditorium in L.A. and the Beacon Theater in New York all the time. You could buy posters of the women, and they were on magazine covers along with the male pros—sometimes even on their own. There were pictures and posters of them on gym walls everywhere.

How many gyms these days will you see your current Ms. Olympia competitors in? You could probably count them all on one hand. Oddly enough, I still see photos of women like Rachel and **Cory Everson,** neither of whom has competed since the 1980s. Like I said, I love women's bodybuilding and I respect them all, big or small. But if they want their sport to grow and be what it once was, they need to tone it all down. It's fine to still have a decent amount of muscle, but keep it feminine. I know that's a tough line to balance for some. But the rewards are well worth it – more money, more coverage, more shows, more sponsors!

When was the last time a female bodybuilder was on the cover of a magazine or in a supplement ad? It's been years and years. Most of the women out there already have all the muscle mass they will ever need. So just lower the dosage! That was sort of a joke, but you know what I mean. Toning down a physique means scaling back on some of that stuff.

MD is making a solid effort to bring female bodybuilding back into the spotlight and Cheri Owen is doing a bang-up job covering women's bodybuilding. But they can't do it alone. The athletes and the fans need to help. I think athletes like **Cathy** are great role models to follow, and it sucks that she won't be in the biggest women's pro show of the year. You'll get 'em next year, Cathy!

Even the President Thinks Kanye West is a Douchebag!

It seems that President Obama finally had a thought entirely his own that was not scripted by a team of writers or that came from his chief of staff. And immediately it spread all over the net. There was some footage of Obama before an interview with CNBC started and he didn't know the microphone was 'hot' and the camera was already rolling. Someone in the room asked him if his daughters listened to Kanye West and what he thought about Kanye's outburst the night before. This was in reference to Kanye West ruining the moment onstage for Taylor Swift at the MTV Video Music Awards by saying Beyonce's video should have won.

Obama candidly referred to Kanye as a 'jackass.' ABC was also listening to this banter, and it was their cameraman who caught the comment on tape. Thanks to modern technology and especially Twitter and YouTube, we all knew about his comment roughly three minutes later.

I don't think too much of Obama, but come on, have a little more respect and be aware that anything you say as President of the USA is ripe for dissemination. Now we all know that Obama thinks Kanye West is a jackass. Being the master politician that he is, Obama had tried to cover his ass immediately after this by asking us all to cut him some slack as he has a lot on his plate. I wish he had just owned the comment instead of acting like a pussy and backing out of what he said.

Thanks to ABC and the fact that they are not encumbered by morals or ethics and the meaning of the phrase 'off the record,' we all know that Obama shares the public opinion of Kanye West as a tool. Now there is a big brouhaha over what the networks can and can't do. Should they be allowed to Tweet? Should they have asked permission to Tweet Obama's private comment to the rest of the world? Is it OK to do something like that without the express written approval of the White House?

I say fuck yeah! I'm sick of listening to speeches written by someone else, or more likely a whole team of writers. It's time 'We The People' get to hear what our President *really* thinks, even if it's drivel like controversy at a stupid TV awards show. So Tweet on people, and be proud to call yourself a Twit.

THE GOSPEL—ACCORDING TO LEE

An Open Letter to President Obama on Health Care

Hi Barack Obama, I have a great idea for the USA that I would like you to consider. Why not give everyone in your country universal health care, or Medicare? This will enable people of every race, religion, the economically-deprived, and the elderly to have the health care they need. My advisors have already spent millions of dollars researching the pros and cons of such a system. Oh wait—what's that, you say? You're telling me that places like Australia, Canada, Cuba, France, and the United Kingdom already have universal, free health care for all their citizens? Oh fuck, why wasn't I alerted?



I laugh when I watch the news coming out of America and all the scare tactics the politicians try and dupe you with to make you think universal health care will fail. It works in all those other, 'lesser' countries with far less resources than the USA, so why is it so impossible to succeed in America? And no, the system isn't perfect in those other countries. Nothing is perfect, so putting that expectation on it in the first place is ridiculous. But an imperfect universal health care system still beats the shit out of the current system, where vast numbers of Americans have no health insurance and are totally fucked if they get seriously sick.

Since I've been back living in Australia for a year now, it's funny to me how inaccurately the U.S. politicians have portrayed health care in my country. The government does not dictate which doctor I see. I can go see any doctor I choose. I might pay $75 for a visit— and then get $55 back. You can get gastric bypass surgery here for $16,000 if you're overweight, and the government will reimburse you for $14,000 of it. We still have private medical insurance as well, but there is Medicare for anyone who can't afford it.

When I finally went to see the specialist for my biceps tendon tear, I saw him on a Monday and I was operated on that Wednesday! So much for the argument that you would have to wait untold months for a procedure with universal health care. And I didn't get this specialist from some random government allocation, either. A friend of mine recommended him, so I told my general practitioner I wanted to see him. My doctor wrote me a referral, and I was off and running.

Care to guess how much money I was out-of-pocket for my surgery— a procedure that repaired a deformed-looking biceps so I could get back on the competition stage? A whopping $356! It's true that sometimes there are waiting lists for surgeries, but only in cases where there is no urgent need to have it done. Let's say you need a hip replacement, but you can still walk fine. There is no real rush, so you might be scheduled to have it done in about two months. But if the procedure is deemed urgent, it gets scheduled straight away.

The USA should have sent some of its top people around to Australia and these other countries with universal health care, to get an idea of how they make their systems work! That way, they could have noted what was working well, and what wasn't, and formulated an improved system as the new model for the USA. It's disgusting that an impoverished little island like Cuba actually has better health care for more of its residents than the USA does.

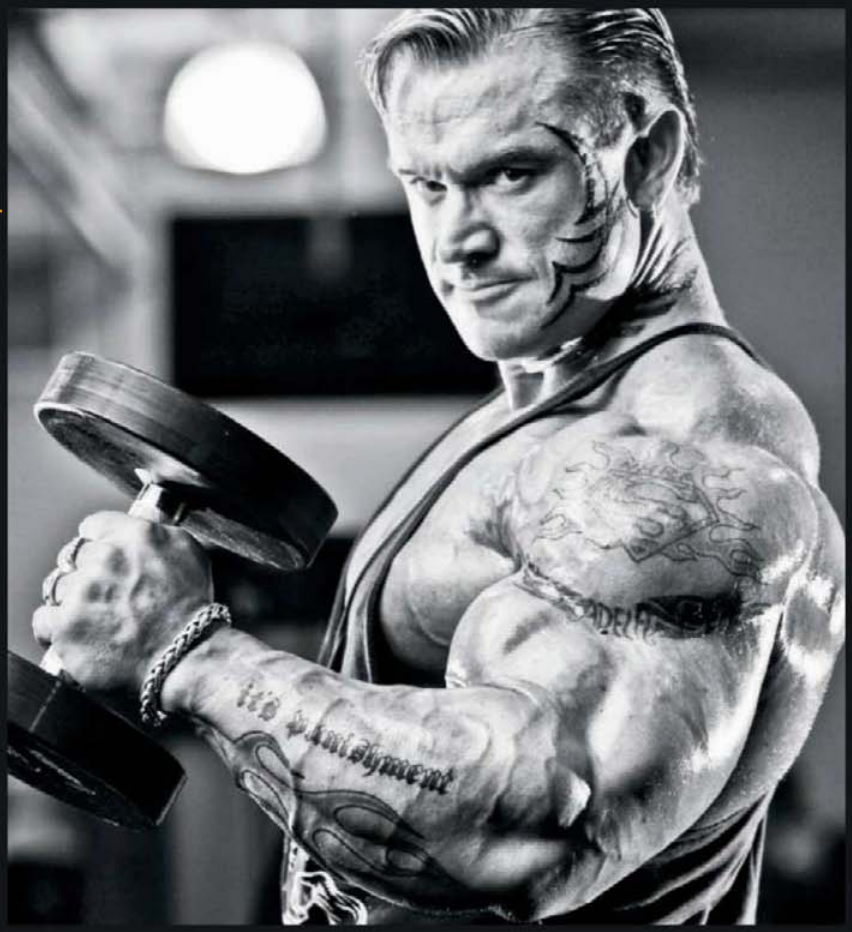
If you haven't watched the Michael Moore documentary "Sicko," it's definitely worth your time to check it out. I know some people don't like the guy and he does have a political agenda, but the health care issue isn't about Republicans versus Democrats. The film doesn't get into any of that. All it does is compare the health care system in the USA to the ones in some other countries. I think this movie explains the whole issue much better than any journalist or politician could. Once you watch it, you can make a more informed opinion about what's best for the future of the U.S. health care system. And if you think your country needs to adopt a similar system, you need to let your representatives in Washington D.C. know it!

Stupid Question of the Month!

Hey Lee, I need some business advice. I just won a big show up here in Canada and now I am looking for a sponsor or sponsors. About a hundred grand a year would probably be OK for now, as it would allow me to focus on my training and nutrition 100 percent while I work toward the pro card I know I am capable of. The hundred thousand could be combined from a magazine and a supplement company or all from one; it doesn't really matter to me. But please hook a brother up!

Can you give me some names to contact, and put in a good word for me? I'm a big fan of yours and I know I have what it takes to be a good pro if I have the right team backing me up.

Wow, a hundred thousand bucks, is that all you want? A lot of top pros don't even get that, so good luck to you! Where are your photos, anyway? How can I put in a good word for someone who may look like the next Mr. Universe or the next Mr. Punyverse? If you were really as good as you say you are, word gets around. Have you ever heard the saying, "The cream always rises to the top?" It's true. When a bodybuilder has that rare type of phenomenal potential, sooner or later the magazines come to you.





I'll tell you what, though. I'll put in a good word to Willy Wonka, Mickey Mouse, and Bugs Bunny. You know them all, because they all live in the same place you inhabit— fantasyland! I'm not sure if you're stupid, delusional, incredibly arrogant, or all of the above.

Don't get me wrong, though. If you think you can be a top pro, go for it. Don't let the opinion of a bitter bastard Down Under squash your dreams. I've never seen you and for all I know, maybe you do have the potential to be The Next Big Thing. But based on how you talk about yourself and the things you're asking for, I think you might have a few loose kangaroos in your top paddock, mate!

A hundred thousand bucks a year would be OK for now to hold you over, eh? Why don't you do this? Send your best photos, a resume, and a cover letter out to a few different magazines and supplement companies. Have a decent website built and maintain a weekly or at least monthly blog to let people know what you're up to. Go to the bigger shows like the Arnold Classic and Mr. Olympia and try to meet as many people as you can.

If indeed you are as good as you say, someone is sure to notice and make you some type of offer. I really doubt it's going to be as much money as you're hoping for at this point, but something is better than nothing and at least you'll be getting your foot in the door. It just galls me to hear from guys who have yet to prove themselves, yet think they are entitled to the same type of lucrative endorsement contracts that only very few pros have. You need to walk before you can run, son! ■

Can't get enough of the outspoken Mr. Priest? Go to www.musculardevelopment.com Fo*rums, and check out The Lee Priest Zone, his very own section of the No Bull forum.*

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By Gregg Valentino

WOO-HOO, IT'S NOW THE END OF ***OCTOBER***, SO I JUST WANNA SAY >> ***In honor of Halloween, I'm about to perform an unspeakable pagan ritual. So please leave a message. Unless you're a young virgin, in which case, why don't you just stop by***... YEAH, LIKE THERE'S REALLY SUCH A THING AS ***A VIRGIN*** ANYMORE... ***Department of Redundancy Department: Against stupidity, the Gods themselves struggle in vain!!...*** OK, LET'S MAKE NO MISTAKE, WE ALL KNOW THAT THESE **INTERNET BOARDS** HAVE SOME REAL ***WHACK-JOBS*** ON THEM... I'M AMAZED AT HOW SOME GUYS POST ***ALL DAY*** AND ***ALL NIGHT...*** I MEAN REALLY YO, DO THEY *EVER* GO TO **WORK...** DO THEY HAVE A GIRLFRIEND... ***DO THEY EVER SLEEP???***... *ANYWAY,* ***WELCOME TO THE WORLD OF "MUSCULAR DEVELOPMENT,"*** THIS IS THE PLACE WHERE ***MUSCULAR DEVELOPMENT*** **MAGAZINE** & ***MuscularDevelopment.com*** JOIN FORCES AS **ONE ENTITY**... **Caution Warning: Contents under pressure!!!...** *OH YEAH BABE,* IF YOU'RE NOT A MEMBER OF **THE *MD FORUM,*** YOU'RE MISSING OUT ON TALKING TO **THE HOTTEST *BODYBUILDING STARS*** OF TODAY... ***OK OK OK*** ENOUGH BULLSHIT, LET'S SEE WHAT **THE PROS** ARE SAYING TO THE MEMBERS OF ***MuscularDevelopment.com... It's hard to get the big picture when you have such a small screen***... OK, EVERYONE ON OUR FORUM IS ASKING **THE PROS** *QUESTIONS,* AND THE ANSWERS ARE EXCLUSIVE TO ***MD*** MEMBERS ONLY... SO NOW HERE ARE MY LITTLE ***TEASERS*** FOR THIS MONTH... FIRST UP IS A QUESTION FOR ***IFBB PRO*** AND ONE **HUGE GUY** IN *PERSON* ***"THE RUSSIAN MASS MONSTER"*** HIMSELF, **EUGENE MISHIN**... *Hey Eugene! In the off-season you say you have 7-8 meals, so what's your macros of proteins/carbs/fats in grams? Do you do 1.5 grams of protein per pound of bodyweight? What is your ratio for everything???*... NOW HERE IS **EUGENE MISHIN's** *ANSWER*...



1. Protein 450 grams, carbs 600 grams, fats only in my salads
2. Add supplements, creatine, glutamine, bcaa, aminos
3.16 weeks out, I start my prep
4. I do carb cycle in contest-prep, cardio I start slowly, 30 minutes for starters, then I add if I need more to get lean
5. First I change diet, then I add cardio.

AND ***EUGENE*** ALSO SAID THAT HE CONCENTRATES ON **forearms 5-25 reps... abs 5-40 reps, calves 5-25-50 reps... I do abs and calves every other day <<** THOSE ARE HIS EXACT WORDS!!!

AND AS ALWAYS, THAT'S SOME ***GREAT ADVICE*** FROM A GREAT BODYBUILDER AND I GOTTA TELL YA **EUGENE MISHIN** HAS HELPED OUT A LOT OF FORUM MEMBERS WITH THEIR CONTEST PREP AND TRAINING... HE IS ANSWERING QUESTIONS EVERY SINGLE DAY ON **THE *MD* PROS FORUM**... PERSONALLY, I LIKE EUGENE A LOT... NOW LET'S SEE WHAT ONE OF ***MY FAVORITE*** BODYBUILDERS IS SAYING TO THE ***MD*** FORUM MEMBERS...

I NOW GIVE YOU THE MIND OF ***EVAN CENTOPANI*** >***"You need to CHALLENGE yourself, but weight is simply a means to an end. The weight is not the goal. If you are a powerlifter then obviously your goal is to move as much weight as possible. This is bodybuilding. Nobody gives a shit."*** YA GOTTA LOVE ***EVAN'S*** THINKING, I KNOW I DO!!!... NOW HERE IS MORE OF **EVAN'S** OPINION ON THE AMOUNT OF WEIGHT YOU NEED TO LIFT ***TO BUILD SIZE***... AGAIN FROM THE BRAIN OF **EVAN CENTOPANI**>.***"To be honest, I really don't make the weight my focus. I don't like lifting from the floor because I feel it puts my back in a compromised position. Johnny Jackson is definitely strong as hell and he has a great physique, but I don't think being able to deadlift all that weight really amounts to all that much on a bodybuilding stage. When you're onstage, no one gives a shit how much you deadlift, how much you bench, what your measurements are etc. etc.... you just look how you look and it's either good enough to win or it's not. But thanks for the advice. So far, I haven't felt like my back development has been dependent upon the weight I use. But if I ever hit a wall and my development slows down and I can't attribute it to anything else, then maybe I will make weight more of a focus."...*** GOD, I LOVE THE WAY ***EVAN*** THINKS



AND I PERSONALLY COULDN'T AGREE WITH HIM MORE!!!!... AND LET'S NOT FORGET THAT **EVAN** WON THE ***NY PRO*** IN HIS **VERY FIRST PRO SHOW!!!**... MEANING ***EVAN*** IS ON HIS WAY TO THE TOP... NOT TOO MANY GUYS *WIN* A ***BIG PRO SHOW*** AS THEIR **FIRST SHOW**...

SO NOW WITH THAT SAID, I WOULD LIKE TO GIVE YOU ***ANOTHER*** GREAT ***"PEARL OF WISDOM"*** FROM THIS FUTURE **SUPERSTAR** OF ***BODYBUILDING***... **EVAN CENTOPANI** SPEAKS AGAIN>>...

"First off, I don't believe anything is more for bulking or cutting... that's just dumb. All that exists is training that is effective and training that is bullshit. Our objective is ALWAYS to train to stimulate new muscle growth. Even when we diet and are calorie-restricted, we train the same way to keep the muscle there as we did to put it on. More reps will not give you more detail. More muscle and less body fat will give you more detail. You don't need some intricate training style. You just need to PUSH as hard as you can with progressively heavier weight. And after you do that, you eat. Simple."... GODDAMN, THAT'S SOME **GREAT ADVICE** RIGHT THERE... ***I FUCKING LOVE IT!!!!...***

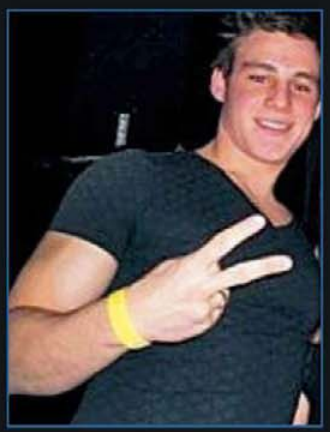
I WILL NOW FINISH UP THIS MONTH WITH YET ANOTHER ONE OF MY *NEW* **FAVORITE BODYBUILDERS**, A GUY WHO I LIKED VERY MUCH AS SOON AS I MET HIM... NEW ***MD*** **PRO** AND FUTURE STAR ***MARK ALVISI***... MY NEW PAL **MARK** IS ON THE FORUM EACH DAY AND HERE IS A POST HE MADE EXPLAINING HIS ***CONTEST PREP*** TO ONE OF THE FORUM MEMBERS***... "I depleted for a few days and started loading on Wed. before the show. I really never dropped my carbs lower then 100 gm a day. I prob did about 700 carbs a day Wed. & Thurs. and 500 on Fri. & 500 on Sat. Just ate every couple of hours. Mostly steak and potatoes... sorry guys, no tricks... just know what foods your body likes. As far as water goes, I did 2 gallons a day until Tues., then Wed. 1 gallon, Thurs. 1/2 gallon, then Friday maybe 1 liter and Sat. 3/4 of a liter and yes, I was thirsty!"***



OH YEAH BABE, I THINK I MADE ***MY POINT—*** IT PAYS TO BE A MEMBER & YOU CAN EVEN GET A CHANCE TO BE FEATURED IN **THE BEST DAMN *BODYBUILDING MAGAZINE* ON THE PLANET**... YO', IT'S JUST LIKE **LOTTO >> *"YA GOTTA BE IN IT TO WIN IT"***... OH SHIT, NOW EVEN I'M ANSWERING QUESTIONS ON THE ***MD*** **FORUM**... YO I GOTTA RUN, I GOTTA ANSWER THESE REQUESTS, YES I'M DONE NOW— SEE YOU ON THE FORUM... **OH HOW RUDE!!!** ***You all need to learn not to interrupt me when I'm talking to myself!!!***

WHAT??? DID SOMEONE SAY SOMETHING STUPID? OH, OK IT'S JUST YOU!!!!

Name: ***Adam Bronk***
MD* Forum member screen name:** ***Bronk
Hometown: ***Montreal***
High School Name: ***West Island college***
Age: ***18***
Sports / Activities / Hobbies: ***Bodybuilding, Hockey, Snowboarding***
Favorite TV Show: ***Anything on the food network***





Favorite Music: ***Hip Hop***
Biggest Influence: ***Victor Martinez***
Favorite Food: ***Steak***
Favorite Junk Food: ***Sushi***
Years Bodybuilding: ***2***
Goals for the Future: ***To compete and win of course***
Favorite Bodybuilders: ***Victor, Ronnie, Flex and Levrone***

While most consider bodybuilding a sport or a hobby, only the most hardcore of bodybuilders consider it a lifestyle. When I started working out four years ago, I went to the gym three times a week for a whole-body workout, did 10 minutes of cardio, and starved myself. At that point, I thought that my physique would be great in no time. I would be ripped. A few months passed and nothing. Two years later, I found a passion for this lifestyle. I now **live** bodybuilding. I revolve my days around eating, sleeping and training. Bodybuilding is the best sport in the world, because it is about being better than yourself, about pushing yourself to the limits and never looking back. It has given me strength and discipline that I use throughout my life. Bodybuilding, the greatest hobby, sport and lifestyle in this world. I hope to keep pursuing my goals until I am old and gray. Thanks MD! And Thanks GV!

Rosanne, can I have your picture so I can show Santa EXACTLY what I want for Christmas.

Name: Rosanne Chee— but I prefer being called Rosie

Forum name: Guejsn

Age: 25 (DOB: 29 May 1984)

Zodiac sign: Gemini

Hometown: Levin, Horowhenua, New Zealand. (This is where I grew up, but I do not consider it my home. I am now in Beloit, Wisconsin, United States.)

Height: 5'1.7" (156.6cm)



Chest: 34" (85cm)

Waist: 24" (60cm)

Hips: 34" (85cm)

Eyes: Brown

Off-season Weight/Competition Weight: I do not have an off-season and competition weight, but generally maintain between 107.8-114.4 pounds (i.e., 49-52 kg) all year-round. I stay between 8-10 percent BF all year long (weight is dependent upon body composition).

Favorite Food: I love food in general. My favourite 'non-cheat' foods are oatmeal, kumara, buttercup, tamarillos, and raspberries.

Favorite Junk Food: Spagalini's chicken and cranberry pizza, Kapiti's white chocolate and raspberry ice cream, and Coco's chocolate silk pie. I do not limit myself, and 'cheating' happens every other day.

Activities/Hobbies: I rarely do anything anymore (aside from some reading and watching movies) that is NOT related to sports, health and fitness. My passion is in this industry, as is my career, and fitness is my LIFESTYLE. Training, Boxing, Strength and Conditioning Coach, Sports Medic, Sports Strapper/Masseuse, Reading, Research.





Favorite Music: Rock (e.g., Cold, Nickelback, Rev Theory, The Exies, Theory of a Deadman, etc.).

Biggest Influence in your Life: Many people have helped mold me, but in the end I have always ended up doing my own thing and dancing to my own tune. When I was cycling, my coach Wayne Foster was a huge supporting influence. God has always been a big part of what I do; everything that I do gives Him glory and I would not be what and where I am today without Him.

Favorite Body Part to Train: I do not have a favorite body part to train. However, I have a few favorite exercises: barbell clean and press, pull-ups, and weighted dips.

Best Asset (Body part): My legs. They are my strongest body part re: muscle, and I gain muscle mass very quickly, regardless of what I do (e.g., I could do low weight/high reps or heavy weight/low reps and get the same results).

Future Plans/Goals: I want to have my own exercise physiology clinic, where I work with private clients. With my partner, we also want to develop our own supplement line.

I already do Personal Training, but want to make this bigger and different by expanding into online personal training. I intend to compete in the Natural Bodybuilding Federations in 2010, aiming to gain my pro Figure card. If you have made the decision to improve your health and fitness and are going to start training, then make sure that you go to a professional who KNOWS what they are doing, with a proven background/history in the industry (preferably with personal athletic experience AND lifestyle nutritional knowledge), to assess you and design your training program, so that you start out doing things the RIGHT way.

I see too many 'newbies' who have NO idea, just going into the gym and randomly doing exercises or copying others (who may or may not be training correctly). Sometimes you can see some small results in that individual, especially if they are not used to exercise and have done nothing like that before. However, more often than not, this just leads to frustration, because the individual lacks the appropriate knowledge and is only incorporating ONE piece of the puzzle necessary to achieve their goals, thereby not seeing results, and can end up injuring themselves, due to their poor exercise technique.

There is more to getting your 'dream' body than simply exercising; you need to learn about correct nutrition and follow an exercise plan specific for YOUR individual goals and needs. Your trainer should also explain WHY they have included everything that they have, and ensure that you are using correct form and technique for every exercise (don't sacrifice your form for weight). Find out what works for YOU, since what works for one is not always going to work for another! ■

500-Word Essay Contest

By David Burton

This month, we had an unprecedented event. For the first time in the contest's two-and-a-half-year history, we have a tie for the winner. Ron Harris was given the difficult task of deciding between two excellent articles and choosing the "official" winner. In the interest of fairness, we are going to print both essays; first up is Ron's choice.

Why Do People Do What They Do?

by Grandfather Oak

I have always tried to better myself, to become more enlightened, and to improve my health. But, as far back as second grade I weighed 150 pounds. Life as a fat kid was no fun.

Years passed and I fell into the wrong crowd and began smoking, drinking, and a few drugs, but I was having a blast! Or so I thought at the time. At the young age of 21, I had become a school dropout, I was unemployed, and I was still living at home with my mother.

I remember as if it was yesterday. My mother and I were watching T.V.; she looked over at me and said, "Robert, you look like shit." I was shocked to no end! But, that was also one of the best days of my life! Within a year, I had lost 150 pounds! I was looking good for the first time in my life! But, the weight loss left me with loose skin. This was the beginning of my love for weight training.

Then, my left knee blew out. I started smoking again and I wasn't watching my weight. During this time I hurt my back, which caused me to lose my job. Before long I was over 400 pounds. During this time I married a wonderful woman! She helped me in every way possible! She and my sister would help lift me from the car. I wasn't able to move under my own power. My wife would help me to undress, rub me down, helped me into the bed and held me as I cried myself to sleep.

That was nearly 19 years ago. My wife went to work and I became a house mom. In that time we raised 4 children. In that 19 years however, my health continued to decline. My sugar was high and I had congestive heart failure. I had to sleep with a mask on at night. The doctors told me to stay away from the gym or I would surely end up in a wheelchair. I listened and guess what? I ended up in a wheelchair anyways! But, it was only for a while.

In 2005, my doctor told me that my sugar was so out of control that I would have to go on the needle. I'm scared to death of needles! I told her to come up with another plan. In 2005 I got the Gastric Bypass (RNY). The day of surgery they took away all my meds. I no longer sleep with a mask. As my weight dropped and my health slowly returned, I kicked the wheelchair across the room and returned to the gym! It's taken me awhile to recover, but I'm once again in the gym! I'm 51 years old and my wife, my Earth Angel, has been by my side 21 of those years.

Why do I do what I do? I do it for the love of my family and myself.

Next up is the excellent article by another talented writer: FitAdina.

The Weights Will never be Conquered

by FitAdina

We all have defining moments. Things that stick with us.

I still remember something one of my best friends told me over a year ago.

After spending over a decade addicted to crack, he managed to break free. And now it's been another decade, and he has remained clean. A feat few people once addicted can say.

Truly, he is one of my own personal heroes. And aren't those the best kind? The ones you actually know, and not just read about?

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500-Word Essay Contest

We were comparing stories one day. It's funny. He views what I did as harder than what he did. Yet, I am totally in awe of what my friend has accomplished. So I said to him, "So few people do what you have done. You act like it is nothing, when really it is everything." And it is. I really believe that. The success rate for recovered addicts is almost non-existent.

He went on to tell me how he knows what he did is a big thing. About how many people come to meetings and don't stick around very long. Some only make one. There are very few people left at the five-year mark, and even fewer at the ten.

That's the moment. I had to stop and let it soak in. It's been over ten years, and he still goes to meetings. That is amazing dedication. And from talking to him, I can tell you, it's numerous times a week. That's how he stays clean. That's how he maintains.

As hard as it is for some to lose weight and some to build muscle, there are things in this world that are harder. There are things outside of the gym you have to work on just as hard.

And yes, he is a lifter. He won his class at the state show this year. So, in the midst of it all, he still makes it to the gym. While I work to maintain my loss, he works to maintain his life.

But the biggest lesson I learned from my friend? He told me, "I have to stay humble, or I go right back to hell. The minute I think I've conquered it, I've lost it."

So, let's see. The minute I think I've conquered my battle with the bulge, and go back to eating the way I used to eat, I've lost it. I will never conquer my weight loss or my desire to build muscle. The idea that either is conquered brings with it complacency. And complacency lets old habits seep in.

He goes to meetings to maintain, while I go to the gym and eat healthy for my maintenance.

And while we both focus on the ongoing battle, secretly we both know the other has won. We just don't tell each other that. We leave the other to fight the good fight.

And maybe that's what went through his mind when he won that state show this year… The weights will never be conquered. ■

By Steve Blechman and Thomas Fahey, EdD



Periodize Your Workouts For Faster Results

The great UCLA basketball coach John Wooden said "Don't mistake activity for excellence." He could have been talking about bodybuilding. Many athletes do mammoth training programs with little regard to their effects or benefits. It does little good to do 20 sets of 20 reps in the squat if you can't walk for a week or get injured. Smart athletes practice effective programs that bring results. More is not necessarily better. Inadequate recovery interferes with the force generating capacity of muscle and training adaptation.

Periodization of training uses different combinations of resistance, reps, rest intervals, and sets in the training program. It varies the training stimulus, allows adequate recovery between workouts, and systematically prepares athletes for intense training sessions.

Brazilian scientists found that a non-linear periodization model (varied high-intensity and high-volume workouts in the same cycle) was superior to linear periodization (high-volume and low-intensity, to low-volume and high-intensity over several weeks) or constant load training. The ideal combination of exercise and rest depends on the goal of the program and the adaptability of the athlete (i.e., the capacity to make gains from weight training).

Bodybuilders should use programs that make them work hard, provide adequate rest, and then make them work hard again. The best program is as much art as science. (*Journal Strength Conditioning Research*, 23: 1321-1326, 2009)

Squat Strength Predicts Sprint Speed in Football Players

Sprint speed is mainly determined by how hard athletes can push against the ground. Most studies show a moderate relationship between tests of strength (e.g., deadlifts) and sprint speed, particularly during the early phase of the race (first 10 to 20 meters). However, comparing skilled sprinters with other athletes shows the importance of skill in determining running speed. Stronger sprinters tend to run faster than weaker sprinters, but weaker sprinters often run faster than strong non-sprinters.

Jeffrey McBride and co-workers from Appalachian State University found a moderate relationship between squat strength and sprint speed in football players at distances between 10 and 40 yards. Squats and sprints are complicated neuromuscular skills. Increasing performance in one will not necessarily improve performance in the other.

The study showed that large muscle, lower body strength serves as an important foundation for sprinting speed. (*Journal Strength Conditioning Research* 23: 1633-1636, 2009)

Nutritional Periodization: Training When Glycogen Depleted

A cornerstone of sports nutrition since the 1960s is that athletes should maximize glycogen stores (stored carbohydrate) in their muscles and liver to ensure peak performance and decrease the risk of injury. The body uses carbohydrates as the principal fuel for exercise at intensities above 65 percent of maximum effort. Carbs are an extremely fast fuel and generate more ATP (an important cell fuel) per unit of time, compared to the fats.

Several recent studies found that training-induced enzyme changes were greater when the muscles were glycogen-depleted. We can infer from these studies that a portion of intense training, particularly during the off-season, should be performed in a glycogen-depleted state. This could be induced by high-intensity interval training and low-carbohydrate diets. During the competitive season athletes should maximize muscle and liver glycogen, so that they have plenty of this high-speed fuel for peak performance. (*Journal of Applied Physiology*, 105: 1462-1470, 2008)

Three Minutes Rest Between Sets Best For Maximizing Training Volume

The intensity of a weight training workout varies with the number of sets, reps, weight, and rest intervals. Manipulating one factor changes the others. For example, lifters can do more sets and reps if they use lighter weights. Conversely, short rest intervals prevent recovery and decrease the capacity to lift more weight and perform more sets and reps. Brazilian

By Steve Blechman and Thomas Fahey, EdD

researchers found that athletes achieved greater training volumes when they rested three minutes between sets rather than one minute during an upper body workout involving 3 sets of five exercises at a weight equal to 8 reps maximum. Training volume is only one measure of the effectiveness of a workout. Short rest periods sometimes cause greater increases in anabolic hormones, which might cause greater training gains. Longer rest intervals (e.g., five minutes) might be more appropriate when doing heavy singles or doubles. Judge the effectiveness of programs by gains in muscle mass and strength— not just the training volumes of individual workouts. (*Journal of Sports Science and Medicine*, 8: 388-392, 2009)

Upper Body but Not Lower Body Weight Training Increases Arterial Stiffness

Lifting weights can potentially damage cardiovascular health by stiffening blood vessel walls and decreasing their ability to stretch and contract as the heart pumps blood through them. Even a single weight workout increases blood vessel stiffness. Weight-trained athletes have stiffer arteries than people who don't lift weights. This can increase the load on the heart when it tries to pump blood. Heart experts worry that years of weight training could have long-lasting effects on the blood vessels and heart. High blood pressure from weight training might also interfere with blood vessel metabolism and increase the risk of deadly blood vessel wall tears called aneurisms.

Japanese researchers found that upper-body weight training exercises increased arterial stiffness, while lower-body exercises didn't. What do these studies mean? Not much! Stronger people live longer than weaker people. Also, a thorough review of the literature failed to render even a single case study of a middle-aged or older adult athlete who died from an aneurism during weight training. *(European Journal of Applied Physiology*, 107: 127-134, 2009)

IGF-I Deficiency Does Not Prevent Muscle Hypertrophy

IGF-I is a highly-potent growth factor that promotes muscle hypertrophy. It is produced in response to growth hormone levels. In fact, many of the effects of growth hormone are actually due to the actions of IGF-I. IGF-I deficiencies are linked to muscle-wasting conditions that occur with age, so many physicians who work with older adults routinely measure this hormone.

Researchers from the University of Texas Health Science Center at San Antonio, using IGF-I-deficient mice, found that the hormone is not necessary for muscle hypertrophy. These animals achieve the same degree of muscle growth in response to resistance exercise as animals with normal IGF-I levels. (*Experimental Biological Medicine,* 234: 164-170, 2009)

Two to Three Sets Best For Building Strength

People have been lifting weights for thousands of years, yet we still can't agree on the optimal number of sets and reps for building strength. Strength expert James Krieger performed a meta-regression that pooled the results of 30 treatment groups and 14 studies. He concluded that multiple sets (2-3 sets) per exercise produced greater increases in strength than single sets. Curiously, there were no differences between 1 set and 4-6 sets per exercise. He concluded that 2 to 3 sets per exercise caused a 46 percent greater increase in strength than one set in both trained and untrained people.

Training studies are extremely difficult. Typically, researchers use relatively untrained subjects who are minimally motivated. Genetic studies show that people vary widely in their response to exercise (i.e., there are responders and nonresponders). This study showed that 2 to 3 sets per exercise worked best for most people. Factors such as age, athleticism, motivation, adaptability, drugs, and supplements could influence the effectiveness of a training program. (*Journal Strength Conditioning* Research, 23: 1890-1901, 2009)

Strength Coaches and Researchers Use Inconsistent Terminology

Bodybuilding is a fairly straightforward sport involving increasing muscle size and symmetry, while minimizing fat. Training for high-intensity sports, such as football, track and field, and baseball can be a problem because training exercises do not automatically transfer to the playing field. Many of our assumptions regarding training for sports are either false or unproven.

Duane Knudson from Texas State University argued that inconsistent terminology by scientists and coaches lead to problems when measuring fitness and designing training programs. For example, the vertical jump is often used as a measure of power, even though it fails to predict performance in most high-intensity sports. Movement skills like pitching, discus throwing, or jump shots are highly specific and require a high degree of neuromuscular control that are not measured very well by so-called power tests. He concluded that sports scientists must establish firm associations between factors affecting muscle performance, training effects, and sports performance. (*Journal of Strength and Conditioning Research*, 23: 1902-1908, 2009)

MD RESEARCH

Fat Loss

By Steve Blechman and Thomas Fahey, EdD

Exercise Does Not Increase 24-Hour Fat Use

The holidays are here, and legions of people are hitting the gym to lose body fat. Is their hard work worth the effort? A review of literature by Edward Melanson and colleagues from the University of Colorado Denver, School of Medicine concluded that losing fat requires an altered energy balance so that fat oxidation (fat use) exceeds intake. Exercise increases caloric expenditure but does not increase total fat expenditure over a 24-hour period. Losing fat through exercise alone is extremely difficult. Effective fat loss requires reduced calorie intake as well as increased caloric expenditure.

They concluded that moderate exercise (less than one hour per day) prevents weight gain and weight regain after a period of weight loss, but is not very effective for weight loss without dieting. Lose fat by eating less and exercising more. (*Exercise And Sports Science Reviews*, 37: 93-101, 2009)

Beer Linked to Weight Gain, But Not Beer Gut

The classic 'beer gut' has little to do with drinking beer. In fact, moderate beer consumption is good for you and might help you live longer. An 8.5-year-long study from the German Institute of Human Nutrition in Potsdam-Rehbruecke found that people who drank more than 1 liter of beer per day had larger waist circumferences, but they also had more fat (gains in gut fat were proportional to total fat). In women, non-drinkers had the lowest waist circumferences. Fat guts are bad: they look terrible, ruin sexual capacity, increase the risk of heart attack, stroke, diabetes, erectile dysfunction, and high blood pressure— and they sap your energy level. Beer guts are bad news but beer doesn't cause them. (*European Journal of Clinical Nutrition*, 63, 1143-1149, 2009)

'Fatostatin' Might Be Miracle Weight-Loss Drug

Obesity is unsightly, increases the risk of heart attack and stroke, and decreases longevity. Also, it is linked with other dangerous metabolic problems such as high cholesterol and insulin resistance.

A study on mice from the Baylor College of Medicine in Texas found that a drug they called 'fatostatin' prevented fat formation and promoted the release of excess energy as heat. The drug also enhanced blood sugar metabolism, lowered cholesterol, and prevented fat accumulation in the liver.

Fatostatin might be a magic bullet that will take care of many cardiovascular risk factors at once. However, weight loss drugs that work in mice are often ineffective in humans, so we need much more research to determine if it can help stem the obesity epidemic. (*Reuters*, August 27, 2009)



Daylight Stimulates Brown Fat

BAT is a high-energy tissue that converts food energy directly into heat, while white fat stores energy. Energy metabolism works through a series of coupled reactions. This means that energy released by breaking down fats, carbohydrates, and proteins is captured in other reactions, such as ATP synthesis (a high-energy chemical) or storing fats and carbohydrates. Uncoupling occurs when the energy from food breakdown is released as heat instead of capturing it as ATP. Brown fat converts food energy directly into heat. It is so metabolically active that only 2 ounces of this tissue could burn 500 calories per day. BAT produces up to 300 times more heat per unit weight than other tissues.

Michael Symonds and co-workers from the University of Nottingham in the U.K. found that daylight was a major factor controlling BAT activity. Increasing daylight artificially in the winter might be a novel way of promoting weight loss. (*ScienceDaily*, August 25, 2009)

Qnexa Causes Spectacular Weight Loss

A new weight-loss drug called Qnexa that contains the stimulant phentermine and the anti-convulsive drug topiramate may soon be approved by the Food and Drug Administration (FDA) for weight loss. In clinical trials, patients lost an average of 37 pounds, which is much greater than weight loss from approved drugs such as sibutramine (Meridia) and orlistat (Xenical or Alli). The drug was also helpful for lowering blood fats and improving blood sugar metabolism. Side effects included increased blood pressure, jumpiness, drowsiness, and decreased short-term memory. If approved, this drug could provide a financial windfall for its maker Vivus, Inc., and it will be scrutinized closely by the FDA. (MedPage Today, September 9, 2009)

Illustrated by Jerry Beck/www.ironasylum.com

Fat Loss

By Steve Blechman and Thomas Fahey, EdD

Obesity Lowers Testosterone

Most women don't like fat guys, and excess adipose tissue interferes with metabolic health that controls erections and testosterone levels. Australian researchers, in a review of literature, concluded that obese men often have lower levels of testosterone and the biologically-active free testosterone. To make matters worse, age-linked declines in testosterone occur faster in overweight and obese men.

Obesity increases risk factors linked to low testosterone levels, such as obstructive sleep apnea, insulin resistance, and type 2 diabetes. Excess body fat, particularly in the abdomen, interferes with hormones that control the reproductive system and decreases sperm quality. Weight loss increases testosterone and free testosterone and improves reproductive health. The bottom line is that obesity is bad for your sex life. (*Molecular and Cellular Endocrinology,* in press; published online June 18, 2009)

Low-Carb, High-Protein Diets Cause Long-Term Blood Vessel Damage

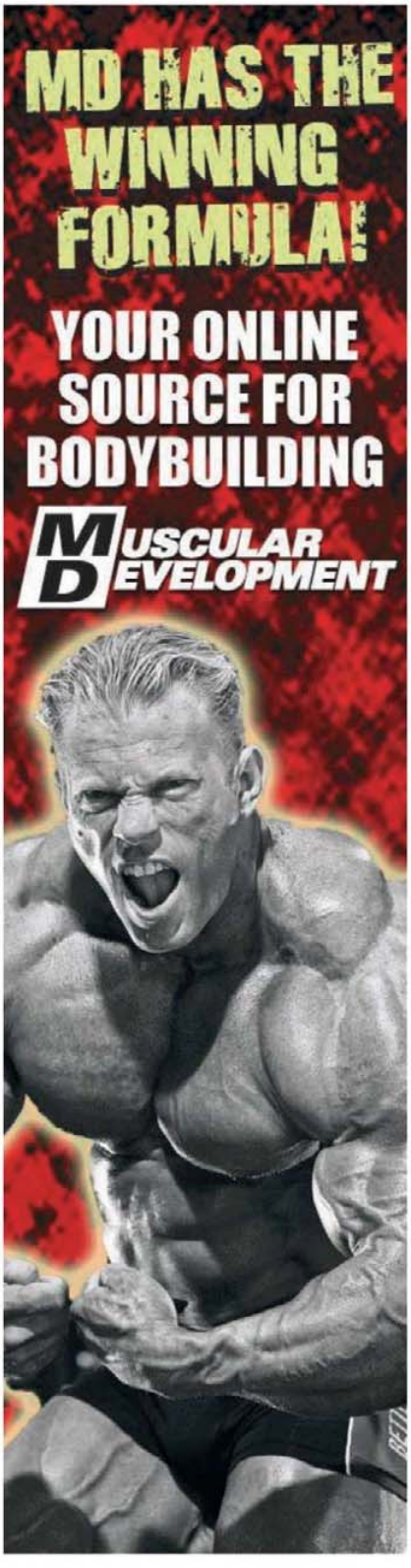
Low-carbohydrate, high-protein diets cause rapid weight loss during the first six months of dieting. After 12 months, the dietary composition makes little difference in long-term weight loss or weight maintenance. Weight loss linked to any low-calorie diet tends to reduce blood pressure, decrease abdominal fat, and improve blood fat profiles. Low-carbohydrate, high-protein diets are higher in cholesterol and saturated fats, so they might promote blood vessel disease, heart attack, and stroke.

A Harvard Medical School study on rats, led by Shi Yin Foo, showed that long-term exposure to low-carbohydrate diets caused blood vessel damage that could lead to heart disease and premature death. These changes were not linked to alterations in blood cholesterol, inflammation, or oxidative stress. Rather, the diet impaired the capacity of the endothelial cells (inner lining of the blood vessels) to regenerate and repair injuries. If these results apply to humans, long-term consumption of low carbohydrate diets causes blood vessel deterioration that promotes heart attacks, strokes, and premature death. (*Proceedings National Academy of Sciences*, in press; pnas.0907995106)

Low-and High-Carb Diets Produce Similar Weight Loss After 12 Months

Low-carbohydrate diets are effective for weight loss during the first six months of dieting, mainly because they prevent hunger more than mixed or high-carbohydrate diets. At 12 months, however, low-carbohydrate, high-carbohydrate, or mixed calorie-restricted diets result in similar weight loss. Also, low-carbohydrate diets might promote heart disease because they are higher in saturated fats than the other diets.

An Australian study found no difference in weight loss between low- and high-carbohydrate, calorie-restricted diets after 12 months. The study was carefully controlled so that caloric intake was the same in both groups. The low-carbohydrate group showed larger increases in LDL cholesterol (the bad cholesterol) but more favorable changes in triglycerides (blood fat) and HDL cholesterol (the good cholesterol). We need more research to assess the long-term health effects of weight-loss diets. (*American Journal Clinical Nutrition*, 90: 23-32, 2009)



By Steve Blechman and Thomas Fahey, EdD

Testosterone Supplements for Heart Failure

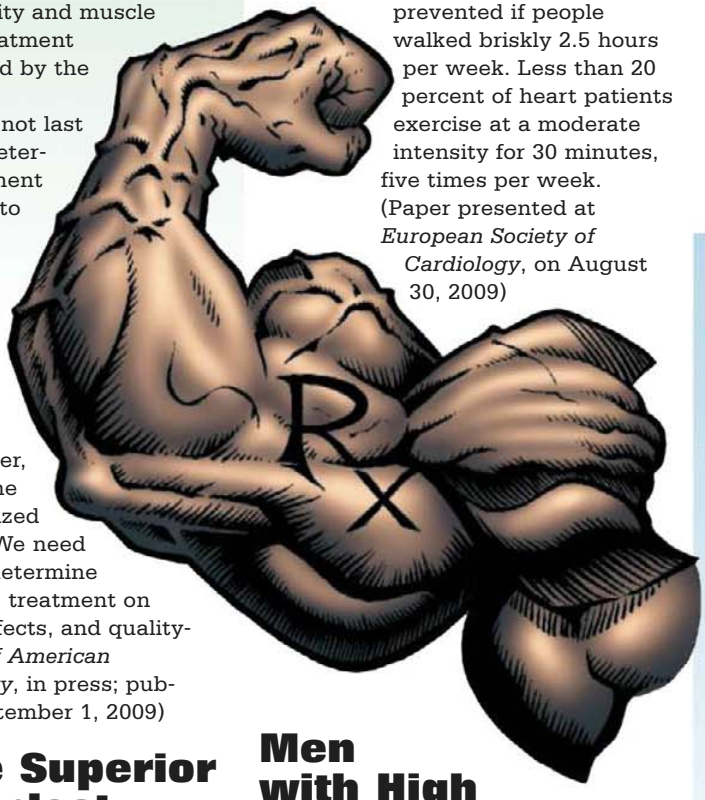
People who suffer from heart failure can't keep up with the circulatory demands of metabolism. Their hearts are not strong enough to pump the blood that returns to it from the circulation. Italian researchers found that testosterone supplements benefited heart failure patients with low or normal levels of blood testosterone. The 12-week study showed that heart failure patients given injections of testosterone showed improvements in exercise capacity and muscle strength. The treatment was well tolerated by the patients.

The study did not last long enough to determine if the treatment allowed patients to live longer. Many physicians are leery of prescribing testosterone supplements to these patients because the drug promotes fluid retention. However, newer forms of the drug have minimized the side effects. We need more studies to determine the effects of this treatment on longevity, side effects, and quality-of-life. (*Journal of American College Cardiology*, in press; published online September 1, 2009)

Exercise Superior to Angioplasty in Some Patients

Angioplasty is a surgery that clears obstructions in the coronary arteries— the blood vessels that supply the heart muscles. It is the most common surgical procedure for people having a heart attack or symptoms of coronary artery disease such as angina pectoris (chest pain). German researchers found that 90 percent of people who began a regular exercise program rather than having an angioplasty were free of symptoms within 12 months. Conversely, only 70 percent of angioplasty patients were symptom free after a year.

While angioplasty addresses only one problem linked to heart disease, exercise has a more systemic effect that improves the health of all the blood vessels. The researchers speculated that one-third of strokes and heart attacks could be prevented if people walked briskly 2.5 hours per week. Less than 20 percent of heart patients exercise at a moderate intensity for 30 minutes, five times per week. (Paper presented at *European Society of Cardiology*, on August 30, 2009)



Men with High Testosterone Levels are Less Family-Oriented

Testosterone is the masculine hormone. High levels of testosterone are linked to greater muscle mass, increased aggressiveness, and greater self-confidence. Psychological studies showed that testosterone levels increased after men won athletic contests and decreased when they lost. Testosterone might also influence family life.

French researchers from the University of Montpellier, France studied family interactions and testosterone levels in men living in Senegal, a West African country where many men have more than one wife. Single men had higher levels of testosterone than married men. In men with children, those with the highest levels of testosterone tended to spend less time with their wives and children. This study reported a relationship between male hormone levels and socialization and does not mean that high testosterone levels cause less family interaction. (*Hormones and Behavior*, in press; published online September 2009)

Tall Men At Greater Risk Of Most Deadly Form of Prostate Cancer

Prostate cancer is the second-leading cause of cancer–related death in men. Besides being male, risk factors include age (greater than 50 years), race (higher in African-Americans than whites but lower in native Africans and Japanese), high-fat diets, and possibly physical inactivity. U.S. and German researchers found that being tall increased the risk of aggressive, deadly prostate cancers but was not related to the overall risk of the disease.

The study involved cancer screening of nearly 35,000 men who were followed for nearly nine years. Men taller than 6'3" had a 39 percent higher risk for the aggressive form of prostate cancer. Height was not related to the risk of lung or colorectal

Illustrated by Jerry Beck/www.ironasylum.com

By Steve Blechman and Thomas Fahey, EdD

cancer. Other studies found that longevity is lower in taller, larger men. (*British Journal of Cancer,* 101: 522-525, 2009)

Higher Blood Insulin Levels Increase Prostate Cancer Risk

Obesity and lack of exercise contribute to insulin resistance and increased blood insulin levels, which also contribute to high blood pressure, high blood fats, blood-clotting problems, inflammation, diabetes, and abdominal fat deposition. Scientists call this problem The Metabolic Syndrome.

Demetrius Albanes from the National Cancer Institute in Bethesda, MD, and colleagues found a link between high blood insulin and prostate cancer in Finnish men studied for 12 years. Insulin is a highly anabolic hormone that promotes tissue growth throughout the body. Physical activity and healthy diet reduce levels of insulin, which suggests that lifestyle changes can help prevent prostate cancer.

Other studies found that men who gained weight between 25 and 40 years— particularly around the middle— increased their risk of prostate cancer by 200 percent, compared to men who maintained a stable weight. Abdominal fat deposition is linked to higher blood insulin levels and insulin resistance— both of which promote prostate cancer. (*Journal of the National Cancer Institute*, 101: 1272-1279, 2009)

Muscle Dysmorphia in Young Men and Women

Muscle dysmorphia is a psychological condition where people (mainly men) become overly obsessed with muscle mass and body composition and have a compulsive need to work out and diet. They will evade important social and work responsibilities to maintain their workout schedule. They often take drugs and supplements they know are unhealthy in order to attain their goal. It is similar to eating disorders such as anorexia nervosa and bulimia that are most common in women. However, some men have eating disorders and some women experience muscle dysmorphia.

Courtney Robert from the University of Windsor in Canada and co-workers, in a study of novice male and female weight trainers, found that some of their test subjects showed a tendency to develop this problem. While many people undoubtedly have unrealistic body images, extreme focus and dedication are required to reach championship levels. In champions, preoccupation and dedication are considered admirable, but are classified as psychological disturbances in less-accomplished people. (*Journal Strength Conditioning Research,* 23: 1656-1662, 2009)

Blood Pressure Threshold for Treating Hypertension?

High blood pressure is called hypertension. Normal blood pressure is 120 mmHg systolic and 80 mmHg diastolic. Systolic is the maximum pressure in the arteries triggered by the contraction of the left ventricle of the heart, while diastolic is the lowest pressure that occurs as the heart relaxes and fills. Hypertension is a significant risk factor for heart attack, stroke, erectile dysfunction, and kidney disease. Physicians typically treat it with medication when the systolic blood pressure increases above 140-150 mmHg.

A large meta-analysis (combination of many studies) of more than 1 million people showed that the risk of cardiovascular death increases at systolic blood pressures above 115 mmHg. A comment statement by Bo Carlberg from the University Hospital in Umea, Sweden suggested that guidelines should be lowered to treat systolic blood pressure above 130 mmHg because of the ready availability of inexpensive drugs to treat hypertension (high blood pressure). He said that more studies are needed to assess the effectiveness of this suggestion and the costs versus benefits. (*The Lancet*, 374: 503-504, 2009)

Small Thighs Linked to Premature Death

Are your legs suing you for non-support? You might be at risk of premature death if you have skinny legs. Body shape has a lot to do with life expectancy. Overly skinny or obese people tend to die prematurely, as do those who carry fat around their organs (i.e., visceral fat).

A study from the Copenhagen University Hospital in Denmark showed that men and women with a thigh circumference of less than 23 inches had an increased risk of premature death and heart disease. Larger thighs, however, provided no additional protection. The study examined nearly 3,000 men and women for 13 years. The results were independent of well-known heart disease risk factors such as smoking and high cholesterol.

The researchers speculated that people with small thighs had less muscle mass in their lower body, which made them more susceptible to type II diabetes and insulin resistance. Small thighs could be an early warning sign of cardiovascular disease. It's not known whether increasing leg muscle size would have a positive impact on health or longevity. (*ScienceDaily*, September 5, 2009)

By Steve Blechman and Thomas Fahey, EdD

Whey Protein Prevents Fatty Liver

Physical inactivity and high-fat diets promote steatohapatitis, a disease involving inflammation and fat accumulation in the liver. A study from India showed that patients with this disease benefited from whey protein supplements. Middle-aged men and women took 20 grams of whey protein isolate or a placebo for 12 weeks. People taking the supplement showed reduced levels of liver enzymes (ALT and AST) and increased levels of glutathione, an important antioxidant that protects the cells.

The study showed that oxidative stress promotes liver damage and whey protein protects liver cells. Whey protein might provide a protective effect to the liver in athletes taking large doses of anabolic steroids. (*Journal Gastroenterology Hepatology,* 24: 1045-1050, 2009)

High-Intensity Interval Training Plus Creatine Promotes Muscle Power

High-intensity interval training (HIIT) involves a series of short bouts of maximal intensity exercise followed by rest. Separate studies from Canada and Australia found that short bouts of maximal exercise create substantial changes in exercise capacity, muscle fuel stores, and maximal oxygen consumption.

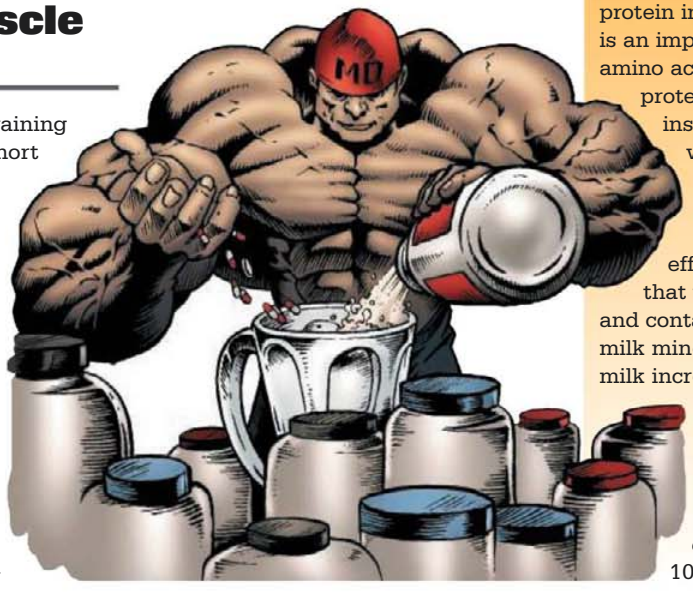
Kristina Kendall and colleagues from the University of Oklahoma, in a four-week study, found that combining creatine monohydrate supplements with maximal intensity interval training causes greater increases in power output and high-intensity exercise capacity than either treatment by itself. HIIT consisted of five sets of two-minute maximal exercise bouts with one-minute rest between intervals. HIIT is an effective technique for building fitness quickly and creatine monohydrate supplements increase its benefits. It's not a fun way to train, but it works. (*Journal Of Strength and Conditioning Research,* 23:1663-1669, 2009)

Creatine Increases Biologically Active Form of Testosterone

Creatine monohydrate increases muscle mass, strength, and power in many athletes. At first, scientists thought that it worked by increasing high-energy fuels in the muscle (i.e., creatine phosphate), which helps athletes train harder. More recent studies found that creatine supplements increase muscle satellite cells, which increase muscle size and improve the capacity for protein synthesis.

A South African study using college-aged rugby players showed that creatine monohydrate supplements increased dehydrotestosterone (DHT), which is the more biologically-active form of testosterone. DHT increased 56 percent after a seven-day creatine-loading phase (20 grams per day for seven days) and remained elevated at 40 percent above baseline during a 14-day maintenance phase (5 grams per day).

This study showed that creatine supplements might work by increasing the biological effectiveness of testosterone. (*Clinical Journal Sports Medicine*, 19: 399-404, 2009)



Illustrated by Jerry Beck/www.ironasylum.com

Milk Proteins Contribute To Growth In Children

Milk contains nutrients that promote growth in children, including whey protein, casein protein, calcium, and phosphorus. Researchers from the University of Copenhagen in Denmark found that whey and casein stimulated growth by different mechanisms. Whey protein increased blood insulin, which is an important hormone for moving amino acids into cells and stimulating protein synthesis. Casein increases insulin-like growth factor (IGF-I), which is a potent growth-promoting hormone that affects tissues throughout the body.

The study examined the effects of modified milk products that were high in whey or casein and contained high or low quantities of milk minerals. Whey and casein in milk increase growth-promoting hormones, while milk minerals have no effect on anabolic hormones. Your mother was right: drink milk if you want to get big. (*European Journal of Clinical Nutrition,* 63: 1076-1083, 2009)

MD RESEARCH Supplements

By Steve Blechman and Thomas Fahey, EdD

Vitamin C Prevents Prostate Enlargement

Enlargement of the prostate gland (benign prostatic hyperplasia, BPH) is common in aging men, affecting nearly 50 percent of 50-year-olds and 80 percent of men over 70. It causes restriction of the tube leading from the bladder to the outside (urethra), frequent urination, urine retention, urinary urgency, and urinary tract infections.

A study on rats from the Seoul national University College of medicine in Korea found that vitamin C helped alleviate urinary symptoms by inhibiting the action of a chemical called HIF-alpha. Vitamin C counteracted the effects of HIF-alpha on testosterone, which is important for limiting prostate gland growth. It is not known whether vitamin C supplements are helpful in humans with enlarged prostate glands. (*Journal Nutritional Biochemistry*, in press; published online July 2009)

Glutamine Supplements Protect Muscles From Inflammation

Glutamine is vital for a strong immune system and recovery from intense exercise. It also protects the muscles from inflammation because of its role in generating heat shock proteins (HSP) that help organize new proteins and speed the removal of injured cells and tissues. Stresses increasing HSPs include muscle cell damage from high tension, high cell temperature, reduced pH (cell acidity), inadequate blood flow, oxidative stress (free radical damage), and depleted energy stores.

Researchers from the University of Illinois, Urbana, in a study on mice, found that glutamine supplements preserved muscle strength in artificially-inflamed muscles. While controversial, we have some evidence that glutamine supplements boost immune function and protect tissues from inflammation. (*Muscle Nerve*, in press; published online September 2009)

Bicarbonate Prevents Muscle Loss In Older Adults

Bicarbonate (baking soda; sodium or potassium bicarbonate) improves high intensity exercise performance in events lasting less than two minutes, such as the 800-meter run. It works by increasing blood bicarbonate, which acts as a buffer against metabolic acids. Metabolic acids promote muscle loss in older adults.

Researchers from Tufts University in Boston found that bicarbonate supplements prevented protein breakdown and increased muscle performance in older adults. They reported no side effects. However, most studies reported that bicarbonate supplements caused gastrointestinal upset and diarrhea in most people. Bicarbonate might be a useful supplement for bodybuilders during intense weight training sessions and for athletes training for high-intensity sports. Don't take sodium bicarbonate before a competition without trying it in practice because about 50 percent of athletes have unpleasant gastrointestinal side effects! (*Osteoporosis International,* in press; published online September 2009)

Antioxidants Slow Recovery From Intense Exercise

Free radicals are highly-reactive chemicals produced naturally during metabolism that are linked to cell membrane damage, DNA destruction, and muscle soreness. Antioxidants, such as vitamin E and beta-carotene, react with free radicals and decrease their destructive effects.

A four-week study by Portuguese researchers showed that an antioxidant supplement containing vitamin E, vitamin C, beta carotene, lutein, selenium, zinc, and magnesium had no effect on measures of cell damage or inflammation following a 1,000-mile kayak race, and interfered with recovery and repair of exercise-induced muscle damage. Cell damage and inflammation are part of the adaptation process from exercise. Supplements and drugs that decrease post-exercise inflammation might reduce pain, but they could also prevent training gains and tissue repair. (*Medicine Science Sports Exercise*, 41: 1752-1760, 2009)



MD RESEARCH Nutrition

By Steve Blechman and Thomas Fahey, EdD



The Mediterranean Diet Cuts Abdominal Fat

The Mediterranean diet is high in vegetables and unsaturated fatty acids. Common foods include pasta, olive oil, fruits, vegetables, lean meats, fish, nuts, and wine. People living in Mediterranean countries have the lowest heart disease rates and greatest longevity in the world. Diet may play an important role in their excellent health.

A large study of nearly 500,000 men and women age 25 to 70 years living in 10 European countries found a reduced risk of abdominal obesity in people who followed the Mediterranean diet. The relationship was strongest in men from northern European countries. People living in France, Norway, and Sweden were the thinnest, while those living in Greece and Spain were the fattest. Europeans were considerably leaner than Americans. The Mediterranean diet has positive effects on metabolic health and preventing obesity. (*Journal Nutrition*, 139: 1-10, 2009)

Nuts and Olive Oil Promote Post-Meal Thermogenesis

Until recently, nutritionists recommended reduced fat intake to prevent weight gain, heart disease, and premature death. Not all fats are unhealthy. The Mediterranean diet is high in vegetable fats contained in foods such as nuts and olive oil and is thought to have significant health benefits and prevent obesity.

A Spanish study compared resting metabolic rate, post-meal energy expenditure, fat use, and satiety (feeling of fullness) following a meal high in monounsaturated fats (walnuts), polyunsaturated fats (olive oil), or saturated fats (fat-rich dairy foods). Meals rich in walnuts or olive oil cause greater increases in post-meal metabolism than meals rich in dairy foods (i.e., they were more thermogenic). However, the type of fat in the meal had no effect on post-meal fat use or satiety. We need more research to determine if dietary nuts and olive oil have health benefits. (*Clinical Nutrition*, 28: 39-45, 2009)

Glycemic Index or Glycemic Load Of Meals Have No Effect on Weight Gain

Glycemic index is the rate that food increases blood sugar, while glycemic load reflects its total carbohydrate content and its potential for increasing blood sugar. Several popular diets promote low-glycemic index foods for weight control. The thinking is that rapid increases in blood sugar stimulate insulin release, which causes a crash in blood sugar and increases hunger.

A large European study involving nearly 90,000 people aged 20 to 78 years old found that neither the glycemic index nor glycemic load of typical meals were related to weight gain during observation periods ranging from 2 to 12.5 years. There was a small relationship between glycemic index of the meals and gains in waist circumference. Increases in abdominal fat have been linked to coronary artery disease and premature death, so the glycemic index of meals might be marginally significant. (*International Journal of Obesity*, in press; published online August 25, 2009)

Whole Grains Help Reduce Blood Pressure

The U.S. government's Dietary Guidelines For Americans (2005) recommended that people eat 3 ounces or more of whole-grain products per day and that whole grains represent 50 percent or more of all grains consumed in the diet. A large study in women showed that those who ate the most whole-grain foods had the lowest blood pressure.

A 19-year-long study involving more than 50,000 men showed that those who consumed the most whole-grain foods in their diets reduced their risk of hypertension (high blood pressure) by 19 percent, compared to men who ate the least amount of these foods. Bran

By Steve Blechman and Thomas Fahey, EdD

intake was particularly related to a reduced incidence of high blood pressure. Whole grains are an important part of a well-balanced diet and help maintain metabolic health. (*American Journal of Clinical Nutrition*, 90: 493-498, 2009)

Low Vitamin D Levels Increase Prostate Cancer Risk

Prostate cancer kills 30,000 men in United States each year and is the second leading cause of cancer-related death. Risk factors include high-fat diets, risky sexual behavior, and cigarette smoking. Roughly 42 percent of prostate cancers are linked to genetic factors.

Researchers from the Cancer treatment Centers of America in Zion, Illinois concluded that low vitamin D levels and lack of sun exposure increases the risk of the disease. Higher levels of vitamin D prevent prostate cancer cell growth and the spread of cancer cells to other tissues. However, the studies are far from conclusive, and we need more research to determine the role of vitamin D in preventing this disease. *(Prostate Cancer and Prostatic Diseases,* 12: 215-226, 2009)

Does Sugar Feed Cancer Cells?

Cancer cells have an extremely fast metabolism that requires large amounts of fuels. Tissues such as skeletal muscle and nerves prefer to use sugar (glucose) because it generates energy (ATP) faster than fats.

Researchers from the Huntsman Cancer Institute at the University of Utah showed that glucose and glutamine (an amino acid) were essential for cancer cell growth. Cutting off glutamine impaired the capacity of the cancer cells to use glucose for fuel. Specific genes regulate a protein called MondoA that controls glutamine and glucose uptake in cancer cells. Drugs that could regulate these genes could influence fuel uptake and decrease cancer cell growth. *(ScienceDaily*, August 18, 2009)

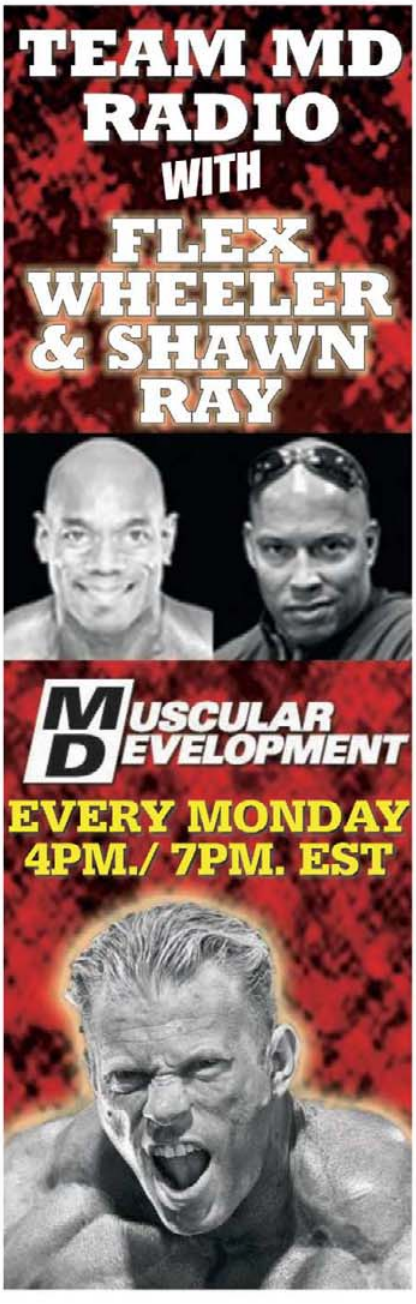
Zero Carbohydrate, High-Protein Diet Increases Energy Expenditure

High-protein, low-carbohydrate diets are highly effective for promoting short-term weight loss. The diets might work by suppressing appetite or by increasing metabolic rate. Carbohydrates are the preferred fuels for the nervous system and skeletal muscles exercising above 65 percent of maximum effort. High-protein diets quickly deplete carbohydrate stores (glycogen) in the liver and muscles. However, the body can make new blood sugar (glucose) in the liver through a process called gluconeogenesis, by converting fuels such as amino acids, pyruvate, or lactate. Does an increase in gluconeogenesis contribute to weight loss during high-protein, low-carbohydrate diets?

Dutch researchers found that metabolic rate increased by 81 calories per day when feeding people a meal containing zero carbohydrates and 70 percent protein versus a balanced meal containing 30 percent protein. Roughly 40 percent of the increase in metabolic rate was due to the increased energy cost of gluconeogenesis. The bottom line is that 81 calories isn't worth the misery of following such a bland, tasteless diet. (*American Journal Clinical Nutrition,* 90: 519-526, 2009)

Beer Increases Melatonin Levels

Drinking beer is good for you. Moderate beer drinkers live longer, have fewer heart attacks and strokes, and have a reduced risk of Alzheimer's disease and rheumatoid arthritis. Moderate beer drinking improves metabolic health by lowering insulin resistance, which influences sexual performance, abdominal fat deposition, blood pressure, blood fats (i.e., LDL and HDL cholesterol), and inflammation. A Spanish study showed that beer drinking increased blood melatonin levels. Melatonin is a hormone that promotes sleep and protects the body against highly-reactive chemicals called free radicals linked to cell damage, DNA destruction, aging, and muscle soreness. Melatonin present in the beer helps the body cope with free radicals and increases the capacity to deal with oxidative stress. (*Clinical Nutrition,* 28: 188-191, 2009)

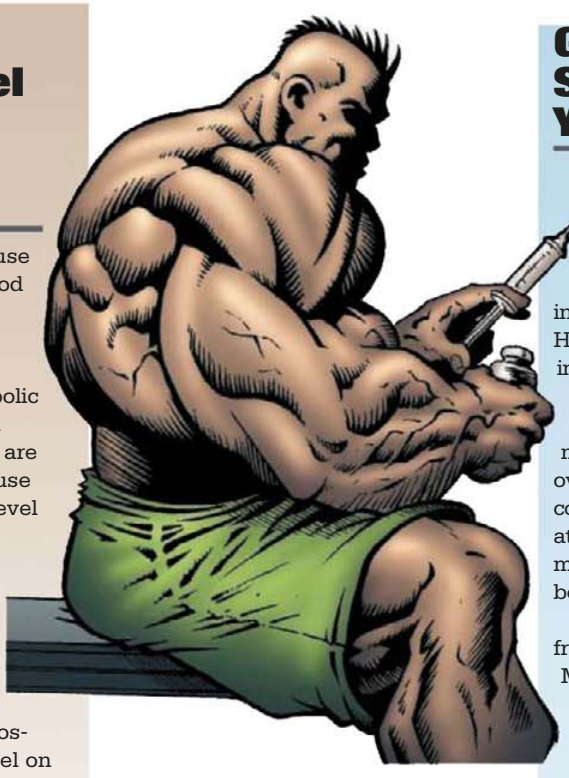


By Steve Blechman and Thomas Fahey, EdD

Apply Testosterone Gel to Shoulders and Arms for Best Results

Millions of middle-aged men use testosterone gels to increase blood testosterone levels. Hormone replacement therapy helps men maintain muscle and bone mass, improves mood, enhances metabolic health, prevents depression, and boosts sexual performance. Gels are often superior to injections because they provide a more consistent level of blood testosterone.

A study from the Center for Sexual Function/Endocrinology at the Leahy Clinic in Peabody, Massachusetts, showed that applying testosterone gel (Testim) to the arms and shoulders produced higher blood testosterone levels than rubbing the gel on the chest, abdomen, or legs. The study examined middle-aged men with low blood testosterone levels (less than 300 nanograms per 100 ml). Applying the gel to the arms and shoulders increased testosterone above 500 ng, which is within the normal range for adult men. Testosterone levels were 20 percent less after rubbing the gel on other areas. This is extremely important information for men who use supplemental testosterone gels or creams. (*Journal Sexual Medicine*, 6: 2601-2610, 2009)



IGF-I Activates Androgen Receptor Activity

Testosterone is a highly anabolic hormone that works by binding with androgen receptors. This signals the cell nucleus to increase the synthesis of new proteins. Until recently, scientists and physicians looked at the role of testosterone in muscle metabolism at a very superficial level. They assume that a normal blood testosterone level meant that the system was functioning normally and even optimally. Advances in cellular biochemistry showed that the system is much more complicated than that.

Activation of specific genes and hormone receptor sites are more important than circulating levels of hormones and chemical growth factors. Also, hormones such as testosterone, growth hormone, and IGF-I must work together to produce the optimal effect. A Korean study showed that androgen receptors in the gene controlling them were activated best in the presence of IGF-I. IGF-I is a potent growth factor that works in conjunction with growth hormone to promote muscle hypertrophy. Intense training can optimize growth hormone and IGF-I levels, which also promotes testosterone metabolism, particularly at the receptor level.

The study shows that anabolic hormones work together to promote increases in muscle growth and strength. (*Molecules and Cells, in press;* published online August 20, 2009)

Growth Hormone Supplements and Young Athletes

Tall stature is of obvious benefit in sports such as basketball, football, field events, and volleyball. Many adult athletes and older adults take growth hormone (GH) to increase muscle mass and decrease fat. However, the hormone is much more important and biologically-active during growth. The ready availability of growth hormone on the black market makes it almost inevitable that overzealous parents and unscrupulous coaches might try to improve children's athletic potential by using growth hormone supplements to increase height, body size, and strength.

An interesting article by Alan Rogol from the Indiana University School of Medicine speculated about the safety and effectiveness of growth hormone as a performance-enhancing supplement in young athletes. GH is used clinically to treat short stature in children, but we know almost nothing about its effect on growth or performance in normal children. GH increases height and lean body mass in children with growth hormone deficiency, but its effects are small.

Parents and physicians should also be aware that using GH to increase athletic performance is a felony punishable by up to 10 years in prison. With the extreme competitiveness of some athletic programs, it is likely that some young athletes take growth hormone to increase stature and performance. However, this practice will remain as part of the dark side of sports. (*Growth Hormone & IGF Research*, 19: 294-299, 2009)

Why Athletes Take Growth Hormone

Anabolic steroids were the performance-enhancing drug of choice for athletes during the 1960s through 1980s. The gradual introduction of random drug testing has drastically curtailed the use of steroids in most sports.

Illustrated by Jerry Beck/www.ironasylum.com

By Steve Blechman and Thomas Fahey, EdD

However, the word on the street is that the majority of athletes in power and speed sports use growth hormone (GH). This hormone is highly anabolic, promotes muscle protein synthesis, and speeds fat loss. Most importantly, it increases collagen synthesis, which prevents injury, promotes intense training, and speeds recuperation.

However, there is little objective evidence that it improves athletic performance. WADA, the organization that polices drug use in sports, claims to have a test to detect growth hormone, but its accuracy or effectiveness is unclear. (*Growth Hormone & IGF Research*, 19: 300-307, 2009)

How Growth Hormone Affects Athletes

Growth hormone is a potent anabolic hormone that promotes protein synthesis in tissues throughout the body and increases fat mobilization. GH has short-term and long-term effects, which is problematic for sports drug testing. Existing drug tests have a relatively small window of effectiveness, and taking the drug close to competition doesn't provide much benefit. However, periodic long-term use combined with sophisticated training programs probably results in greater physical changes than would be possible through training alone.

Limited studies showed that GH increased maximal oxygen consumption, maximal cardiac output, red cell mass and plasma volume, accelerated fat breakdown, boosted strength and muscle mass, and improved physical performance. People with acromegaly, a condition characterized by chronically high levels of growth hormone, have impaired levels of physical performance, so it is likely that athletes who take super-physiological doses of the hormone would not benefit. However, short periods of administration combined with effective training programs might improve athletic performance. (*Growth Hormone & IGF Research*, 19: 308-319, 2009)

Growth Hormone Comes in Many Varieties

Growth hormone (GH) is produced mainly in the pituitary gland in the brain and is critical for growth and tissue repair. It is also an anti-fat hormone that stimulates the release and breakdown of fat from the fat cells and helps maintain blood sugar. Scientists discovered more than 100 varieties of growth hormone, some of which trigger changes in muscle and fat more than others. Fitness programs that turn on these special types of growth hormone will promote changes in your body better than programs that don't. You can harness these 'super-growth hormones' to help you get better muscle tone, promote defined muscle mass, and melt fat.

Studies from the University of Connecticut at Storrs showed that varying the intensity in the weight program using periodized training methods stimulated increases in several kinds of growth hormone, which is important for achieving long-term gains in fat loss, improved muscle tone, and stronger bones. The variety of growth hormones will make it easier to develop drug tests that will separate natural from synthetic hormones in the body. (*Growth Hormone & IGF Research*, 19: 333-340, 2009)

Growth Hormone Supplements Treat Heart Failure

In heart failure, the heart can't pump the blood returned to it from the circulation. Physicians often use drugs such as digitalis to increase the contractile strength of the heart. About 40 percent of heart failure patients suffer from growth hormone deficiency, which contributes to the diminished strength and power of the heart.

Italian researchers found that giving heart failure patients growth hormone supplements every other day improved quality of life, maximal oxygen consumption, exercise endurance capacity, the pumping capacity of the left ventricle, and heart blood flow. Growth hormone is a beneficial treatment for heart failure patients. (*Journal of Clinical Endocrinology Metabolism*, 94: 3329-3336, 2009)

Blocking Growth Hormone Receptors Decreases Endurance Performance

Growth hormone is important for the metabolism of proteins, fats, and carbohydrates. The majority of studies show that growth hormone supplements have no effect on exercise performance in healthy young athletes. One way of studying growth hormone effects during exercise is to block the hormone's cell receptors with drugs such as pegvisomant, so that it is less biologically-active. Researchers from Japan and Denmark gave healthy males pegvisomant for 16 days and then measured performance and metabolic responses to endurance exercise. Blocking growth hormone decreased IGF-I levels by 20 percent. Growth hormone works largely by increasing IGF-I levels. The treatment did not decrease maximal oxygen consumption but reduced endurance capacity. Blocking growth hormone receptors had no effect on fat use during exercise. This study showed that growth hormone is important in determining endurance capacity. (*Journal Clinical Endocrinology and Metabolism*, 94: 3265-3272, 2009)



By Steve Blechman and Thomas Fahey, EdD

Sleep More Important Than Good Sex For Most Americans

Sex is the key to happiness— according to well-controlled scientific studies. If that's true, Americans have more to worry about than depressed real estate, sluggish stock prices, and unemployment.

A survey conducted in 12 countries by Westin Hotels & Resorts showed that over 50 percent of people in this country would rather have a good night's sleep than a passionate roll in the hay. Sex won by a large margin in a survey taken 10 years ago. President Obama must realize that improving the national mood will take a lot more than increasing house and car sales. Americans need to get laid! (*USA Today*, August 21, 2009)

Obesity and Physical Inactivity Cause ED

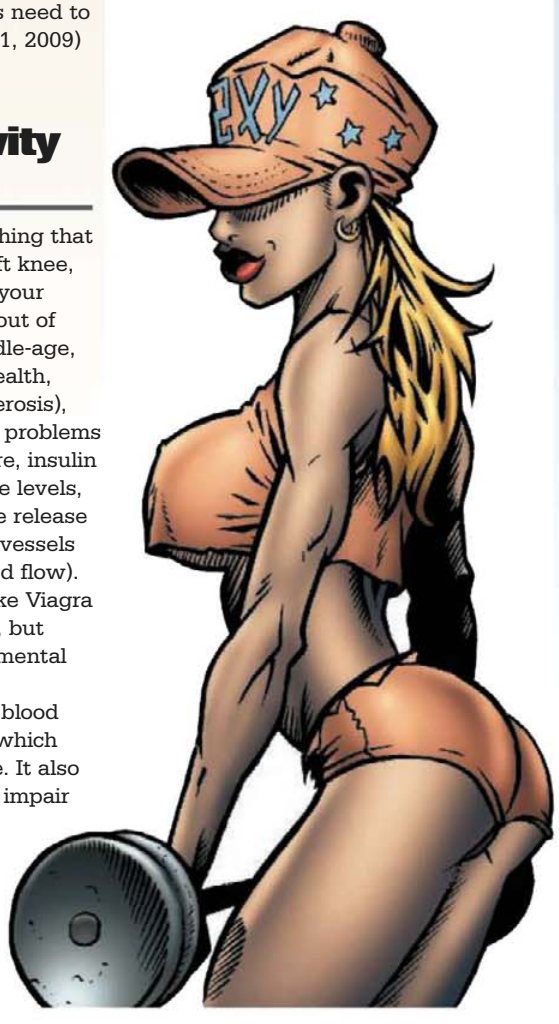
When you get old, the first thing that goes is your knees: first your left knee, then your right knee, and then your weenie. Most guys are fat and out of shape by the time they hit middle-age, which causes poor metabolic health, blood vessel disease (atherosclerosis), and erectile dysfunction. These problems are linked to high blood pressure, insulin resistance, and low testosterone levels, which interfere with nitric oxide release by the inner lining of the blood vessels (nitric oxide helps regulate blood flow).

Many men resort to drugs like Viagra and Cialis to promote erections, but unhealthy lifestyle is the fundamental cause of sexual problems. Atherosclerosis plugs up major blood vessels in the heart and brain, which leads to heart attack and stroke. It also affects small blood vessels that impair blood flow to the penis, which leads to ED. Most men can restore sexual function within six to 12 months by losing weight and becoming more physically active. (*ScienceDaily*, August 25, 2009)

Alternatives to ED Drugs

Drugs such as Viagra, Cialis, and Levitra have provided a sexual second wind for many aging Romeos. Unfortunately, many medical plans don't cover them, and the drugs don't work for many men. There are alternatives: weight loss and dietary restriction cause gradual improvements in blood flow control that can restore normal erectile function within six months to two years.

ED is an early warning sign of heart attack and stroke, so improving lifestyle will not only boost sexual performance but could save your life. Injections of alprotadil help increase blood flow to the penis and are effective alternatives to drugs such as Viagra. Penis pumps also help some men maintain erections, but these are inconvenient and can cause penile injury. The best approach appears to be maintaining a healthy lifestyle and using drugs like Viagra when you need a little extra help. (*The New York Times*, August 29, 2009)



Illustrated by Jerry Beck/www.ironasylum.com

ED Increases the Risk of Cardiovascular Death by 50 Percent

You've had a little bit too much to drink and are getting ready to have sex with a beautiful woman but can't get it up. You have a vision of the 'Grim Reaper' standing over your bed.

According to a study from the University of California at San Francisco Medical School, your vision might be a prophecy, rather than a hallucination. They found that erectile dysfunction (ED) increases the risk of premature cardiovascular death by 50 percent and the death rate from all causes by 26 percent. Erectile dysfunction (ED) affects nearly 50 percent of men over 50 years of age. ED is mainly caused by a disease of the small blood vessels in the penis, and is an early warning sign of blood vessel disease in the heart and brain.

Fortunately, men with ED can improve sexual function and overall metabolic health by changing lifestyle to promote weight loss and increased physical activity. (*Journal of Sexual Medicine*, 6: 2445-2454, 2009)

DHEA Supplements Do Not Boost Sexuality In Women

Dehydroepiandrosterone (DHEA) is the most plentiful sex hormone in women. It is released by the adrenal glands and broken down to produce testosterone and estrogens. DHEA

By Steve Blechman and Thomas Fahey, EdD

decreases with age and is an extremely popular supplement with older adults and bodybuilders. Many women take it to increase sex drive and promote sexual performance.

Australian researchers found that DHEA supplements did not improve sexual performance or sex drive in postmenopausal women. The women took 50 grams of DHEA per day or a placebo for one year. Other studies in bodybuilders showed that extremely high doses (1,500 mg per day) were required to produce even minimal effects on muscle mass or testosterone levels. The study concluded that DHEA was not effective for promoting libido or sexual performance in postmenopausal women with low sex drives. (*Journal Sexual Medicine*, 6: 2579-2590, 2009)

Antidepressants Interfere With Sexual Function In Men

Millions of Americans take antidepressants, such as Prozac and Zoloft, to treat depression, anxiety and personality disorders, and premature ejaculation.

A study from the University of Florence in Italy of more than 2,000 middle-aged men showed that these drugs interfere with the male sexual response cycle that includes sexual desire, arousal, excitement, and orgasm. The drugs interfered with both auto- (masturbation) and couple-based sexual performance. Men taking the drugs had lower sexual desire and an increased risk of erectile dysfunction. However, the drugs had no effect on blood flow to the penis.

The study showed large individual differences in responses to specific drugs, so men needing these medications should take those that help treat their psychological condition, while minimizing sexual side effects. (*Journal of Sexual Medicine*, 6: 1259-1269, 2009)

Herbal Supplement Promotes Erections

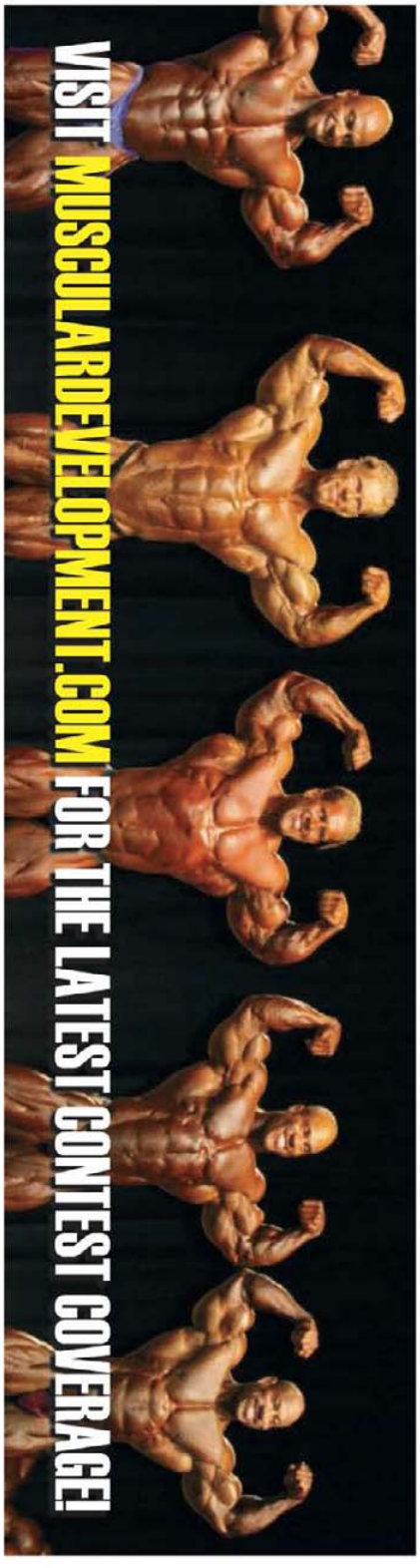
Many men use drugs like Viagra and Cialis to promote erections. Unfortunately, these drugs are relatively expensive and produce side effects such as headache, nausea, and sinus problems. Scientists from Petra University in Amman, Jordan, found that the combination of five herbal extracts containing ginseng, tongkat ali, horny goat weed, gotu kola (7.5 mg per kilogram) improved erectile capacity and sexual performance in rats. They found that the supplement is more effective than Viagra.

Similar supplements are sold in the United States to humans, but their safety or effectiveness has not been demonstrated in scientific studies. (*International Journal of Impotence Research*, 21: 315-320, 21: 315-320, 2009)

Women Have More One-Night Stands with Good-Looking Men

Casual sex is relatively common in men and women, but women have higher standards— according to British researchers from Brunel University. They asked nearly 1,000 male and female students from the U.S., Germany, and Italy to rate the likelihood of having a one-night stand with someone who was slightly unattractive, moderately attractive, or exceptionally attractive. Looks had no effect on a man's decision to have casual sex, while most women required that her potential sex partner be exceptionally attractive.

The study also found differences between countries. Italian and American men were not very picky, while German men were more selective. (*Medical News Today*, August 12, 2009)



By Dan Gwartney, M.D.

KETOGENIC DIETS: Possible Hidden Cardiovascular Risks?

A rhyme originating in the 1600s later appeared in the Mother Goose collection about the dietary habits of the Sprat household. The modern version reads, "Jack Sprat could eat no fat, his wife could eat no lean; and so, between the both, you see, they licked the platter clean."

Obviously not desirable dinner guests, the Sprats are fine examples of two extremes in dieting that have dominated the American weight loss and healthy eating mania. Low-fat diets have long held the accepted position of being the politically correct and clinically accepted diet. The low-fat approach was originally developed to treat and prevent atherosclerotic cardiovascular disease (ASCVD), commonly visualized by cholesterol-laden plaques within the walls of large and small arteries (blood vessels).[1] The assumption was that by reducing the dietary exposure to fat and cholesterol by discouraging the consumption of meat, eggs, and dairy, serum (blood) cholesterol and triglycerides (fat) would decrease and along with it, the risk of heart attack and stroke.

AAS-using bodybuilders and athletes should take note, as hidden damage to the cardiovascular system may make the AAS-using individual more susceptible to heart or brain damage, even sudden death.

Unfortunately, low-fat diets do not offer much benefit beyond what would be gained from weight loss by any method. Limiting dietary cholesterol does not address the *de novo* cholesterol produced by the body, which is the cause of high cholesterol in most people.

Along came the Atkins revolution, an antithetical approach that claims to promote weight loss by restricting carbohydrates rather than fat. Low-fat diets use the approach of reducing the caloric density of the diet to reduce calorie intake; low-carbohydrate diets make it easier for the body to break down and use stored fat for energy by reducing insulin release. Though many assumed the opposite, no evidence of unhealthy changes in cardiovascular markers has been noted. In fact, some components of the lipid profile (fats and cholesterol) improve on low-carbohydrate diets, suggesting they are at least as safe, and possibly safer diets for people at risk for heart attacks and stroke to follow.

The Atkins diet has phases, including the induction phase, which severely restricts carbohydrate consumption. When carbohydrate intake is below 20-30 grams per day, the body enters a state called ketosis.[2] Weight loss is dramatic and rapid when ketogenic dieting is followed; much of the early weight lost is water, as carbohydrate stores are depleted. Over the long term, weight loss is slower, particularly as people migrate to the more moderate parts of the diet. In time, there appears to be little difference between the various types of diets relative to the number of people who stay on the diet and the amount of weight they lose and keep off.[3-5]

Many people get discouraged by slow weight loss, while some people find the mental state associated with ketosis comforting, as a sign of ongoing fat reduction. The brain is highly dependent upon blood sugar and during ketosis, some people experience irritability and difficulty performing mental tasks. However, over time, some people claim they are sharper. Regardless, there is a definite subjective component to ketosis— some people become so committed (obsessive?) that they test their urine for ketones several times a day.

Ketogenic dieting can be followed long term. Many people do so voluntarily; others are directed to do so by their physicians for specific conditions, such as epilepsy.[6] Some have suggested that ketogenic dieting may not only be as effective as low-fat dieting for weight loss, but more effective and safer. This belief is certainly premature, as very few side-by-side studies have been done and none have followed the subjects long enough to state so definitely.

Bodybuilders and Cardiovascular Health

Cardiovascular health is important for bodybuilders and anabolic steroid-using athletes to consider, as certain anabolic-androgenic steroids (AAS) are associated with adverse changes in cholesterol, and heart attacks and heart failure are some of the most common causes of sudden death or serious injury in this group. Elite bodybuilders and many other AAS users have suffered heart problems. While it is not possible to directly assign AAS as a contributing cause to these cases, there is a strong base building due to several reasons:

- Use patterns of AAS— dose and duration of cycles— have changed.
- Polypharmacy (the use of multiple medications and/or the administration of more medications than are clinically indicated, representing unnecessary drug use) includes many other anabolic biologics (growth hormones and cytokines) and potent lipolytics (fat-reducers).
- The demographics of AAS users are aging.

'Cardiovascular' refers to the heart and the blood vessels. Heart damage is most commonly caused by ischemia (oxygen deprivation) but can also be electrical in nature, as the heartbeat is generated by an internal conduction system that accelerates and decelerates to meet the circulatory demand of the body. When the electrical signal is disrupted, the heart does not beat efficiently or if the disruption is severe enough, may not beat at all. Ischemic damage of the heart (and brain, as well as other tissues) is often due to a buildup of plaque in the arteries, but may also be due to inappropriate vasoconstriction (the blood vessel squeezing shut, as seen in the skin when exposed to cold) or not dilating (opening wider) when oxygen demand requires greater blood flow. Many abusers of cocaine suffered heart attacks due to coronary vasoconstriction, even though their arteries were perfectly healthy.[7]

When ischemia is mild-to-moderate and long-term, the body grows new blood vessels to shorten the distance between active cells and nearby capillaries (the smallest blood vessels and the site where oxygen and factors are diffuse back-and-forth to cells of the body).[8] A person who lives in the mountains likely has a higher capillary density (a measure of how branched the circulation is to provide oxygen) than a person who lives on the beach at sea level. Many endurance athletes sleep in special chambers that mimic living in the mountains. This increases their red blood cell supply (the cells that carry oxygen) by stimulating the hormone erythropoietin, and likely stimulates new blood vessel growth. Many cancer drugs kill tumors by shutting down blood vessel growth, starving the malignant tumors of oxygen and nutrients.[9]

This body of research is quite significant, even though it is from a mouse study and has not been duplicated in humans, let alone in a second mouse study.

One final mechanism that affects the buildup of plaque in artery walls is the ability of the blood vessel to maintain an intact lining. Major blood vessels are designed not to leak, and do so by having a lining that prevents red and white blood cells from escaping into the surrounding tissue. With the constant flow of blood rushing through the vessels, the lining wears away but is constantly replaced by new lining cells. If these replacement cells were not available, plaque can more easily build up under the lining in the artery walls.

Picture a pickup truck bed with a spray-on liner. If the liner gets gouged, rust can develop in the underlying metal— unless a new layer of spray-on lining covers the damage. If neglected, the rust spreads, potentially causing significant damage.

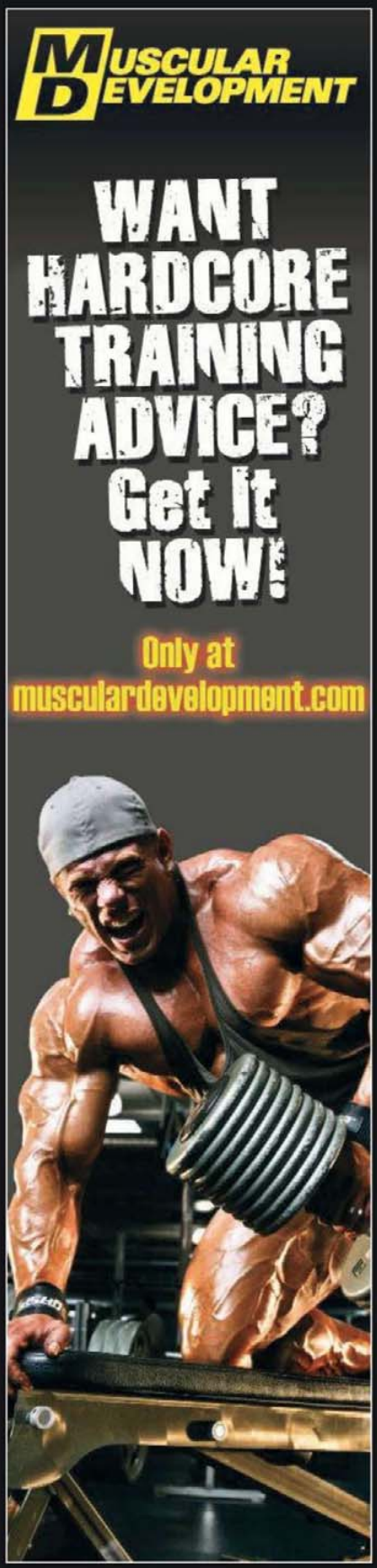
Low-Carb Mice and Ketogenic Diets

This background is provided to put into context the relevance of a newly-published study that unveils some heretofore-unrealized concerns about ketogenic diets. A group of researchers at Beth Israel Hospital and other facilities, all part of the Harvard Medical System, compared the cardiovascular effect of three types of diets— all containing the same amount of cholesterol— in mice bred to be capable of developing atherosclerosis (plaque buildup).[10] The standard chow was low in fat and protein, being 65 percent carbohydrate. The second group received a diet that mimics what most people in the United States consume, (43/15/42— carbohydrate/protein/fat); and the last group was provided with a low-carbohydrate diet of 12/45/43 (carbohydrate/protein/fat).

Mice do not develop atherosclerosis naturally, and the mice fed the standard 'mouse chow' had clean arteries after 12 weeks. Mice fed the Western diet had a significant amount of atherosclerosis and the low-carb mice had even more, nearly twice as much.

In looking at the typical lab markers to explain these findings, researchers discovered that there was no real difference in cholesterol, bad cholesterol, or oxidized cholesterol between mice fed the Western and low-carbohydrate diets. Both had a four-fold increase in serum (blood) cholesterol compared to the standard diet. The low-carbohydrate diet was not associated with any increase in oxidative damage (the molecular damage that is protected against by antioxidants). Oxidative damage is proposed to make blood vessels more susceptible to atherosclerosis.[11]

Another factor involved in atherosclerosis is inflammation. The study looked at two measures of inflammation and found the exact opposite of what would be expected. The low-carbohydrate diet resulted in lower measures of a specific marker for inflammation in the bloodstream— no different from measurements taken from mice



fed the standard diet who had essentially no atherosclerosis.[10]

The mice fed the low-carbohydrate diet experienced a dramatic decrease in the healing 'replacement cells' that normally repair the blood vessel lining. The degree of decrease was greater than 80 percent and also affected precursor cells in the bone marrow.[10] Ironically, one hormone that stimulates the production of the replacement cells, VEGF, actually increased in low-carbohydrate fed mice.[10,12] Failing to directly measure the replacement cells (called endothelial progenitor cells, or EPC) and measuring VEGF instead would misled a clinician to believe that low-carbohydrate dieting was safer for cardiovascular health. The increase in VEGF may be a sign of the body reacting to the EPC-lowering effect of the low-carbohydrate diet in the mice.

EPC plays a role in new blood vessel growth, and corresponding to the decrease seen with EPC, low-carbohydrate fed mice were unable to respond to ischemia (oxygen deprivation).[10,13] One of the factors known to stimulate EPC growth (pAkt) is a 'downstream' molecule in the insulin-signaling cascade. 'Downstream' means insulin turns on one molecule, which turns on another, which turns on pAkt. Statin drugs (Lipitor, for example), exercise, and estrogen have been shown to counteract impaired EPC production.[13] Low-carbohydrate fed mice had significantly lowered insulin concentrations compared to other diets, as would be expected. Type 2 diabetics who are insulin-resistant also demonstrated impaired EPC production.[14] Though this is not the entire reason EPC growth is impaired in low-carbohydrate diets, it likely plays a role.

Thus far, low-carbohydrate diets have been shown to markedly increase atherosclerosis, even compared to high-fat diets. This is in a setting that would not raise suspicion. In fact, many measures suggest that cardiovascular health is improved with low-carbohydrate dieting. Also, the ability of the circulatory system (blood vessels) to respond to oxygen deprivation is seriously impaired.

This study did not look at ketogenic dieting, as the carbohydrate content was high enough to prevent ketosis. Thus, it is difficult to determine whether the same concerns would be present during ketogenic dieting. However, another concerning observation has been noted during ketogenic dieting that adds another level of risk.

One study published last year showed that people on a ketogenic diet had impaired dilation, whereas those on a low-fat diet actually demonstrated improved flow-mediated dilation and response to a dilating drug. Similar impairment is again seen in people with insulin resistance.[15,16] This adverse effect may be exaggerated when saturated fat is high, but the balance of research appears to suggest that if mono- and polyunsaturated fats are consumed in sufficient quantities and saturated fats are moderated, blood vessels should respond more appropriately to dilating signals.[17] Research looking at non-ketogenic, low-carbohydrate diets do not demonstrate the same defect, suggesting there may be different risks present during ketosis.[18-20]

Moderation Is Sound Advice

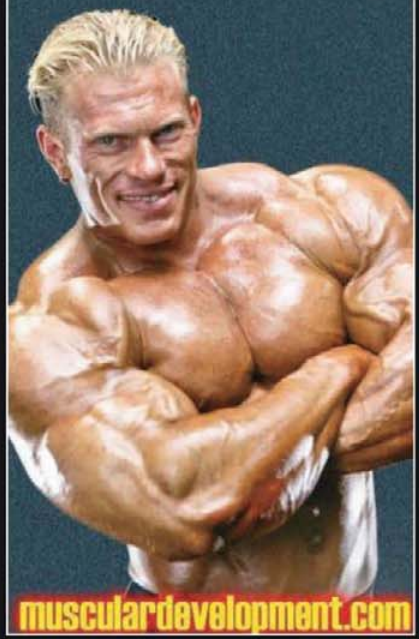
This body of research is quite significant, even though it is from a mouse study and has not been duplicated in humans, let alone in a second mouse study. Many people follow a low-carbohydrate diet to reduce their bodyweight, improve conditions associated with the Metabolic Syndrome (high cholesterol, high blood pressure, insulin resistance, etc.) and decrease cardiovascular risk. Further, some who are already at risk for cardiovascular disease or even those in rehab after a cardiovascular event may be following a low-carbohydrate diet, in the belief that it is more effective for weight loss and poses no more (or even less) of a risk to one's cardiovascular health. Indeed, the blood work performed during studies evaluating the various diets (including Atkins-like, low-carbohydrate diets) suggest that these diets are as safe or safer than the traditional low-fat diet.[21] Yet, reports of individuals developing cardiovascular disease while following an Atkins-type plan

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have been published.[22]

Given the findings in this study, it is impossible to recommend low-carbohydrate or ketogenic diets to those with a significant personal or family history of cardiovascular disease. In fact, this data supports the recommendation for moderate carbohydrate intake sufficient to maintain a baseline insulin presence. The exact recommendation for carbohydrates remains fuzzy at this time, but it appears that at least 60-100 grams per day of low-glycemic carbohydrates, along with an intake of mono- and polyunsaturated fats to counterbalance saturated fat intake, is the optimal diet plan. Excessive carbohydrate intake should be avoided as well, suggesting that the age-old adage of moderation in all things remains sound advice.

AAS-using bodybuilders and athletes should take note, as hidden damage to the cardiovascular system may make the AAS-using individual more susceptible to heart or brain damage, even sudden death. Certainly, the inability of the circulatory system to develop new blood vessels to feed working and growing muscle would be a detriment to the anabolic effects of training.

There are many approaches to fat loss. Science, the media, and policymakers have so long focused on the dangers of various weight-loss drugs that the hidden dangers of (physiologically) extreme diets may have been ignored. ■

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bodybuilding science

By Robbie Durand, M.A.
Senior Web Editor

Are You Sleeping Enough for Optimal *Testosterone Production?*

If you were to ask someone what's the best way to raise testosterone naturally, about 99 percent of people would say, "High-intensity exercise." This is true, but exercise is only part of the equation. It seems that sleep is more important for testosterone production than researchers thought.

Two studies recently correlated resting testosterone with the amount of sleep in men.[1,2] Researchers have speculated that using the Internet late at night, and watching late-night television have compromised the normal sleep rhythms of many young men. Americans are sleeping less than the recommended 8 hours each night.[3] Sleep also decreases with age. So researchers asked the question: does reduced sleep that occurs with aging have any impact on testosterone levels?

Does Reduced Sleep Impact Testosterone?

Researchers from China collected the blood from 531 Asian males between the ages of 29 and 70. The men also completed questionnaires about their sleep habits. The researchers found that many men above age 50 were sleeping less than 6 hours a night, compared to men in their 40s. So let's get down to the bottom line: does the amount of sleep you get impact testosterone levels? ***YES!***

The researchers found that the less men slept, the lower their serum testosterone tended to be. There was a direct correlation between sleep and testosterone levels; this finding was independent of age, total body fat, and exercise intensity.[7]

It was previously reported that men who slept between 4 and 6 hours had lower testosterone levels than men who slept more than 8 hours.[4,5] In the more recent study, the relationship between sleep loss and testosterone and free testosterone (bioavailable testosterone) was lower in men who slept between 4 and 6 hours, compared to men who slept more than 6 hours. This gives credence to the suggestion that men who sleep less than 6 hours a night have lower testosterone and free testosterone, compared to those who sleep more than 6 hours.

It's interesting that endocrinologists may want to look at sleep history as a contributor to low testosterone in older men when they perform blood tests for serum testosterone. In men with low concentrations of androgens who also have poor sleep habits, the promotion of better sleep hygiene may represent a non-drug intervention for improving their androgen concentrations.

An adequate nightly sleep is a key component of man's recuperation process following a day's work. This recuperation process is the engine for the regeneration of alertness required for optimal cognitive and physical functional capacities.

The latter study observed that total testosterone and bioavailable testosterone were highest in men who slept between 6 to 8 hours or more. These results solidify my support of an earlier study that found the optimal sleep duration is about 8 hours.[6]

Some bodybuilders may only sleep 6 hours a night, but based on the current study, men who slept less than 6 hours had less serum testosterone production than men who slept 8 hours a night. ■

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Supplement Performance

By Robbie Durand, M.A.
Senior Web Editor

PROTEASE SUPPLEMENTATION Enhances Muscle Recovery

In the last few years, non-steroidal anti-inflammatory drugs (NSAIDs) and acetaminophen have received a 'black eye' for their detrimental effect on muscle hypertrophy. Many studies have reported that the maximum dose of NSAIDs can inhibit muscle hypertrophy, while a minimum dose may not have the same detrimental effect. NSAIDS topped a recent poll of the most commonly-abused over-the-counter drugs for pain among athletes. Whether NSAIDs will inhibit muscle hypertrophy remains to be determined, as more research needs to be conducted, but one must also take into consideration the long-term effect that NSAIDs have on kidney health.

A new study was published in a peer-reviewed scientific journal that may give weightlifters an alternative to using NSAIDs. In September's *Medicine and Science in Sports and Exercise*, a new protease supplement was found to enhance muscle recovery after strenuous weightlifting. Proteases are by definition, enzymes that break down proteins. Proteases are involved in numerous physiological processes, such as digestion of food to highly-regulated bodily procedures such as blood clotting and immune function. Two previous studies found that the use of a protease supplement was able to reduce muscle soreness and enhance muscle recovery after a damaging bout of eccentric exercise. However, their exact role in reducing muscle soreness remains largely a mystery.

NSAIDs work by reducing muscle inflammation. Generally, after intense exercise, damage occurs to muscle tissue and there is an increase in inflammatory mediators such as leukocytes, macrophages, etc. The inflammatory response seems to be a necessary component of the muscle hypertrophy response.

Researchers from the University of Waco in the Exercise and Biochemistry Laboratory decided to revisit this concept, and study the role of protease supplementation and muscle recovery more closely. They had young men consume a protease supplement (44.7 grams of papain, 99.9 milligrams of bromelain, 5.593 grams of fungal enzymes with endopeptidase/exopeptidase activity, and 86.4 milligrams of calcium citrate) for 21 days. After that, they performed a grueling exercise bout of downhill running for 45 minutes, which is one of the most damaging forms of exercise one can perform. Subjects received either a protease supplement or a placebo during this time.

The results of protease supplementation were quite impressive. In the days after a bout of damaging exercise, the protease supplement was able to improve muscle function.

It has been suggested that protease supplementation can enhance muscle recovery via interaction with the immune system. In the placebo group, significantly higher levels of interleukin-6 and interleukin-12 were observed. But the protease group had blunted levels of the pro-inflammatory mediators IL-6 and IL-12.

Another interesting finding was that the protease group had blunted levels of COX-2 enzyme expression. Celebrex is a commonly-used COX-2 inhibitor for the relief of arthritis. The researchers speculated that the protease supplement, through inhibition of the inflammatory response, might enhance muscle recovery.

It seems there was an alteration in circulating inflammatory response, as noted by the reduced macrophage response to the damaged muscle. Blunted IL-6 and COX-2 expression were also observed after protease supplementation. As for inflammation and muscle hypertrophy, remember this is an intricate process. Too much inflammation can inhibit muscle growth, just as too little can be just as detrimental— so don't be overly concerned about the reductions in COX-2 and interleukin-6 production. Thus, protease supplementation may be a new way to enhance muscle recovery without the damaging effects of NSAIDs. ■

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Nutrition Performance

By Robbie Durand, M.A.
Senior Web Editor

DIETARY NITRATES:
A New Way of Increasing Nitric Oxide Production

Nothing beats getting a good pump in the gym. Traditionally, bodybuilders have resorted to using nitric oxide (NO) products to enhance NO production. Many bodybuilders know that nitric oxide can be increased via the synthesis of nitric oxide synthase, through the amino acid arginine. What many bodybuilders may not know is that NO can be produced via an alternative pathway without NO synthase.

Diet is a major provider of nitrates in the body. Nitrates can enhance the production of nitric oxide, independent of the arginine-dependent NO synthase pathway.[1] In 2004, it was demonstrated that inorganic nitrate from dietary sources could be a major source of circulating nitrite— which enhances nitric oxide production independent of the arginine-NOS pathway.[2]

In one experiment, healthy subjects who ingested a dietary nitrate experienced a four-to-fivefold increase in plasma nitrite. It turns out that much of the dietary nitrite from food entering the stomach from saliva survives intact and reaches the systemic circulation. This suggests that inorganic nitrate from food can be a substrate for NO formation in the body. Nevertheless, based on numerous studies, it seems clear that dietary nitrates are indeed bioactive in the body.



For those guys who are not eating fruits and vegetables, you may be missing out on getting better pumps in the gym.

Sources of Dietary Nitrates

Incorporating some fruits and vegetables into the diet in place of high protein can help facilitate greater production of nitric oxide production. A diet rich in fruits and vegetables is associated with a lower blood pressure and reduced risk of cardiovascular events. Despite extensive research, the active ingredient(s) responsible for this effect has not been pinpointed, and trials with single nutrients have been largely unsuccessful.

Remarkably, in a recent study of healthy volunteers,[3] the blood pressure-lowering effect of dietary nitrate supplementation was similar to what was seen in the healthy control group in the DASH project, a classic vegetable/fruit diet trial[4]— indicating that nitrate could be an important and active ingredient of this diet. This means taking a nitrate supplement could be just as effective as eating fruits and vegetables for increasing NO production.

It should be noted that the dosage of nitrate used in the study (0.1 mmol/kg/day) is readily achievable through a diet rich in vegetables. So for those guys who are not eating fruits and vegetables, you may be missing out on getting better pumps in the gym.

Beetroot Juice— A High Source of Nitrates

In a recent study, Webb and colleagues found that blood pressure decreases if healthy volunteers ingest a natural nitrate source (beetroot juice). Researchers demonstrated

that it was the nitrate in the juice that had the effect, and it occurred via the nitrate's chemical reduction to nitrite.[5] In the study, 0.5 L of fresh beetroot juice decreased systolic blood pressure as much as 10 mmHg, and blood pressure was still significantly reduced 24 hours later.[5] The researchers found that blood pressure was reduced within just one hour of ingesting beetroot juice, with a peak drop occurring three to four hours after ingestion. Some degree of reduction continued to be observed up to 24 hours after ingestion.

Researchers demonstrated that the decrease in blood pressure was due to the chemical formation of nitrite from the dietary nitrate in the juice. The nitrate in the juice is converted in saliva, by bacteria on the tongue, into nitrite. This nitrite-containing saliva is swallowed, and in the acidic environment of the stomach is either converted into nitric oxide or re-enters the circulation as nitrite. The peak time of reduction in blood pressure correlated with the appearance and peak levels of nitrite in the circulation— an effect that was absent in a second group of volunteers who refrained from swallowing their saliva during, and for three hours following, beetroot ingestion.

A reduction in blood pressure was also demonstrated in 2006, in healthy volunteers, after three days of dietary supplementation with inorganic nitrate.[6] In 2007, it was shown that dietary nitrate decreases whole-body oxygen consumption in humans during submaximal exercise.[7] This could be due to the vasodilatation of the blood vessel walls, causing less need for oxygen consumption by muscle. The nitrate-nitrite-NO pathway may be viewed as complementary to the classical arginine-NOS pathway. These pathways work partly parallel to each other, but when oxygen availability is reduced and NOS activity is decreased, nitrite reduction to NO becomes more pronounced.

In sum, consuming natural foods high in nitrates may enhance muscle pumps in the gym. Or you could try beetroot juice, which is naturally high in nitrates. ■

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MuscleGrowth Update

By Robbie Durand, M.A.
Senior Web Editor

The Role of pH and Muscle Mass

This month I spent some time with MD's Evan Centopani, filming his training session in his off-season. Besides noticing that Evan is looking like a beast, I walked into Evan's house and noticed this small apparatus next to the sink that had some blinking lights on the side and was filled with water.

I said, "Evan, what the hell is that?"

Evan explained it was a *water ionizer*, which adjusted the pH of water. By using a water ionizer, it helped to create a more basic pH in the body, and reduce blood acidity. Evan explained that he had been doing a lot of reading on the role of pH and health. He is correct that pH has a profound effect on health, but also on muscle mass.

Having an acidic pH not only causes lower muscle mass, but can also lower plasma levels of IGF-1. Having an acidic pH is not conducive to building muscle. In fact, researchers make the blood more basic to counteract losses in muscle mass.

Interestingly, a mild but progressive metabolic acidosis occurs in elderly individuals who are exposed to a continuous challenge from acid-producing diets (e.g., diets relatively rich in meat and cereal grains compared to the fruit and vegetable content).[1] Oral administration of bicarbonate increases blood pH (makes the blood more basic) in a dose-related manner in healthy adults, both at rest and during exercise.[2] Metabolic acidosis has long been known to promote protein breakdown and nitrogen excretion.[3,4]

In several studies, daily administration of bicarbonate—which acts as a blood buffer and reduces acidity— improved muscle power during intense exercise in healthy subjects.[4,5] However, the role of pH and muscle mass has never been clearly defined, so researchers set out to examine if blood pH has any effect on muscle mass.

Researchers from Tufts University examined 162 older adults and had them consume either a treatment with potassium bicarbonate, sodium bicarbonate, potassium



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chloride, or placebo. Remember that bicarbonates reduce blood acidity and promote a more alkaline environment. Interestingly, after three months of supplementation, only the bicarbonate altered the amount of acid production. The reduction in acid production resulted in less nitrogen excretion (greater protein retention) in men.[7]

In the men, the change in net acid excretion (the amount of acid being excreted from the body) was positively correlated with how much nitrogen was being lost. Although nitrogen excretion is not a specific indicator of muscle breakdown, in the setting of stable protein intake, exercise level, and bodyweight, a decrease in nitrogen excretion is consistent with decreased net muscle catabolism.

Treatment with bicarbonate significantly lowered nitrogen excretion. Therefore, using a blood buffer such as potassium bicarbonate may be a way of reducing muscle tissue breakdown.

Loss of muscle is associated with aging, but this occurs in conjunction with increased blood acidity. A possibility is that muscle wasting is influenced by the mild metabolic acidosis that occurs with aging. With muscle breakdown, amino acids released into the bloodstream provide substrate for the hepatic synthesis of glutamine. Glutamine is used by the kidneys to synthesize ammonia.[6] Glutamine acts as a blood buffer when pH is acidic by being removed from muscle.

So Evan may be on to something good. It seems that drinking alkaline water or eating fruits and vegetables or using a bicarbonate supplement may prevent muscle tissue breakdown. ■

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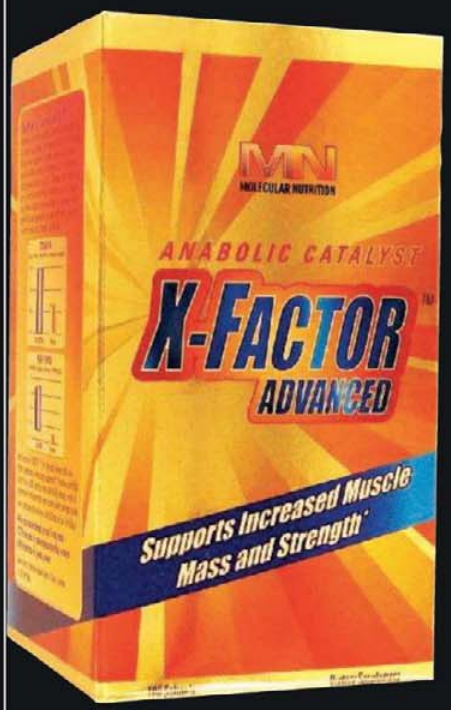
Sports Supplement Product Review

By Robbie Durand, M.A.
Senior Web Editor

X-FACTOR ADVANCED: Arachidonic Acid and Muscle Growth

X-Factor Advanced by **Molecular Nutrition** contains several ingredients, but at its core is an arachidonic acid supplement for bodybuilders and power athletes. Let's take a look at arachidonic acid and see why this supplement is sparking such interest.

Arachidonic acid is an omega-6 fatty-acid found in many foods including chicken and beef.[1] It is considered an essential fatty-acid because it has many necessary functions in the body. It is vital to such things as infant development, neurological activity, immunity, inflammation and healing, insulin sensitivity, and bone mineral density.[2,3,4] Arachidonic acid is also involved in muscle tissue growth.[5,6] In fact, it has a central and absolutely necessary role in the process.

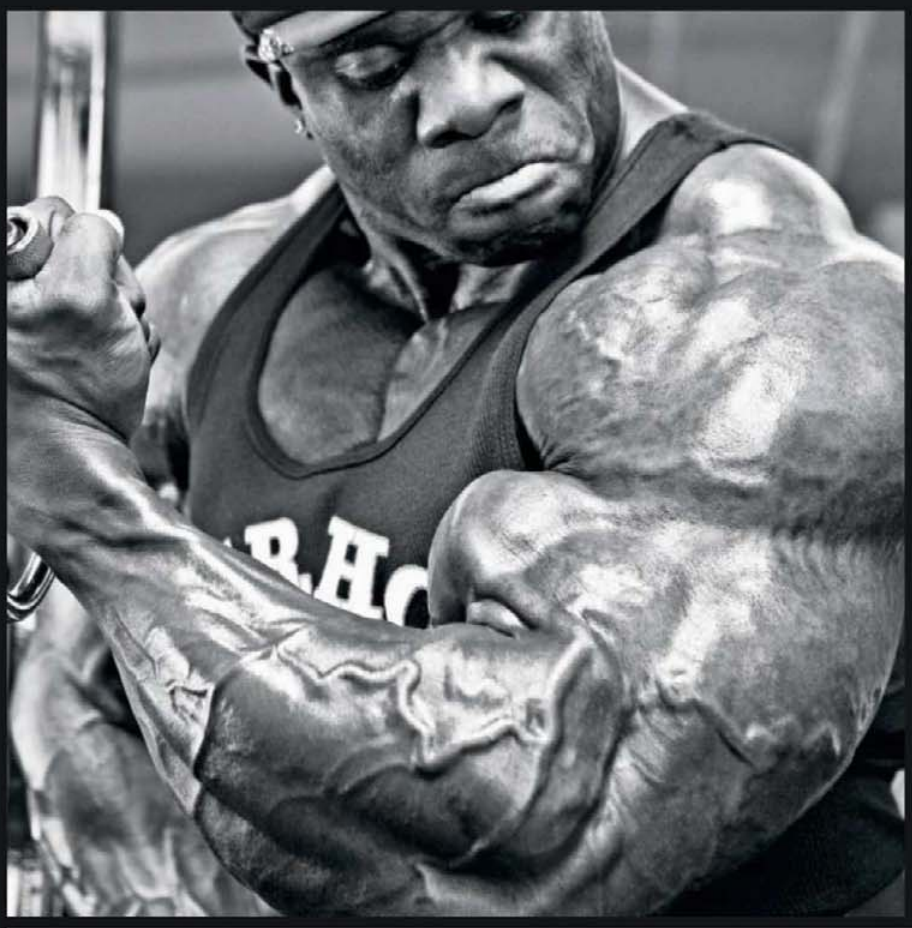


Arachidonic acid is normally stored on the outer membrane layer of your muscle cells.[7] It is released during exercise, as your muscle fibers are stretched and damaged.[8] It is then quickly converted to hormone-like compounds called prostaglandins, which stimulate muscle protein synthesis.[9] Exactly how this increase occurs is not clear, but may involve increased local sensitivity to anabolic hormones such as IGF-1,[10] testosterone,[11] and insulin.[12] Prostaglandins also help the body manufacture more satellite muscle cells, which donate nuclei to mature muscle cells during the process of hypertrophy.[13] The conversion of arachidonic acid to prostaglandins is so important to the muscles; if we inhibit this reaction we completely block protein synthesis after exercise.

No Pain, No Gain

Arachidonic acid essentially regulates the muscle repair process, which generally also involves some level of muscle soreness. Remember the saying, "No Pain, No Gain"? It became bodybuilding law decades ago, and seems to instinctively sum up a biological truth about muscle growth: workouts intense enough to trigger muscle soreness also tend to be those most effective for muscle growth. We push ourselves in the gym, looking for those days of 'productive soreness' that follow. But, of course, it isn't always there. Have you ever wondered why it gets harder and harder to trigger muscle soreness and growth the longer we consistently train? It may have to do with the amount of arachidonic acid we have in our muscles.

Regular exercise depletes arachidonic acid from muscle tissue.[14] This dampens the release of prostaglandins during training.[15] The logical result of this (you guessed it) is less protein synthesis and less muscle growth. This may be one of the body's inborn mechanisms to help limit total muscle growth. For many of us, this is just call to train harder. Occasionally we might even take a small break from weightlifting, hoping to bust through the plateau upon our fresh return. But maybe we can also take a supplement like *X-Factor Advanced* to replenish, even increase, muscle arachidonic acid levels, and support greater levels of muscle growth. If we take a look at the clinical and empirical results people are having with this nutrient, the concept seems extremely compelling.



Arachidonic Acid Clinical Study

A clinical study was published not long ago that examined the effects of arachidonic acid on exercise performance.[16] Experienced resistance-trained men took 1,000 mg per day or a placebo during 50 days of rigorous weight training. The men taking arachidonic acid noticed a highly-significant 600 percent greater increase in peak muscle power, compared to those taking the placebo. There were also strong trends of improvement in bench press 1-rep max strength (44 percent), average muscle power (223 percent), and muscle endurance (250 percent). There were no side effects.

This was the first exercise study on arachidonic acid, and we already have some very impressive results. The fact that the study involved experienced weight-training men, not inactive people new to training, also makes these results more compelling.

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Omega-6 Fats and Your Health

We often hear about limiting arachidonic acid in our diets because it promotes inflammation. Wouldn't arachidonic acid supplementation actually be bad for our health then? The answer, at least if you are a healthy person, is actually, *no*. An exhaustive review of the health effects of dietary arachidonic acid was recently published in the *British Journal of Nutrition*.[17] It examined numerous studies supplementing up to 1,500 mg of ARA per day to healthy men and women. Not a single one of these studies reported any side effects or changes in kidney or liver function,[18] serum cholesterol,[19] immunity,[20] or blood cell counts.[21] The authors concluded that rather than being harmful, arachidonic acid supplementation (in doses that exceed what is used in *X-Factor*) appears to be completely harmless in healthy individuals.

Targeted muscle inflammation is a part of the natural repair process. Generalized inflammation, on the other hand, is probably unhealthy. The good news is that arachidonic acid supplementation does not appear to trigger general inflammation. As it turns out, it is metabolized to both pro-inflammatory and anti-inflammatory compounds in the body.[22]

Studies administering up to 2,000 mg per day to healthy people have reported no increase in inflammation.[22,23,24,25,26] In fact, increased arachidonic acid levels are associated with lower levels of pro-inflammatory IL-6 and IL-1, and higher levels of anti-inflammatory tumor-necrosis factor-beta.[26] It may actually reduce inflammation under some conditions. Of course, if you have an inflammatory disease, your body may metabolize arachidonic acid very differently, and supplementing more might promote disease-related inflammation.

What about ARA and the heart? Supporters of low Omega-6 diets were probably speechless earlier this year when the American Heart Association published a study discounting the idea that Omega-6 fatty acids were harmful to your health.[22] In fact, the paper warned Americans against following diets such as "The Zone," which are purposefully low in Omega-6 fats/arachidonic acid.

Upon review of the large body of available data, the researchers found that a higher intake of Omega-6 fats were actually associated with a reduced risk of heart disease, not an increased risk. The American Heart Association now suggests that Americans get at least 5-10 percent of their daily calories from Omega-6 essential fatty acids! While there certainly are potential health benefits to Omega-3 fatty acids, the new message seems to be to take them *with* our Omega-6s— not *instead* of them.

In Conclusion

Arachidonic acid is an essential dietary nutrient, important to many things in the body, including muscle repair and growth following exercise. This essential fatty acid also appears to be a very promising anabolic supplement for bodybuilders and power athletes. Its use has been proven to improve exercise performance in experienced weight-training men in one University study. Many consumers are also reporting positive experiences with arachidonic acid supplements. While Omega-6s may have been the subject of much misunderstanding in the past, we now see that ARA is not something we would ever want to exclude from our diets. Furthermore, it looks like it is a very safe supplement, so long as you are healthy before using it.

Molecular Nutrition describes their new *X-Factor Advanced* as a more bioactive form of arachidonic acid supplement, promising a stronger effect on a lower dosage. Of course, this product is brand new, so we cannot say for sure how much **Molecular Nutrition** may have improved upon their previous arachidonic acid supplement. You may be happy to learn that by time this article is published, *X-Factor Advanced* should be in GNCs nationwide! ■

For more information about X-Factor Advanced, please visit: http://www.molecularnutrition.net

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Rookies Fouad Abiad and Ben Pakulski are Making Noise in the IFBB

CANADIAN INVASION

By Ron Harris, Photography by Per Bernal

With the exception of Paul Dillett in the 1990s, Canada has not produced a whole lot of top pro bodybuilders. More often, their athletes have been the butts of jokes— you may recall the enormous Greg Kovacs, who unfortunately had all the aesthetics of a major appliance, or spunky old Jocelyn Pelletier, a guy with a physique that would be lucky to win a local novice Masters show, yet continues to pop up faithfully at a few pro shows every year.

But now, it seems Canada may have the last laugh, in the form of two excellent young rookies. Both turned pro by winning the Super-Heavyweight and Overall titles at the CBBF Canadian Championships, and both hail from Canada's largest province of Ontario. Aside from that, Fouad 'Hoss' Abiad and Ben Pakulski couldn't be more different.

Fouad has dark, Middle Eastern features, an awesome back, and needs a bit more weight in the wheels. Ben has more of a Scandinavian look, huge legs, and could stand to have a meatier back. But both distinguished themselves with honor at the recent Tampa Bay Pro, with Fouad taking a highly controversial second place to ***Dennis James****, and Ben right behind him in third. We decided to get the two best pro bodybuilders in Canada together to see just how similar— and different— they really are.*

QUICK STATS:

Ben Pakulski		**Fouad Abiad**	
Height:	5'10"	**Height:**	5'10"
Weight:	254-300	**Weight:**	248-285
Date of birth:	March 18, 1981	**Date of birth:**	October 15, 1978
Residence:	Toronto, Ontario Canada	**Residence:**	Windsor, Ontario Canada
Turned pro at:	2008 CBBF Canadian Championships Super-Heavyweight & Overall Champion	**Turned pro at:**	2006 CBBF Canadian Championships Super-Heavyweight & Overall Champion
Website:	www.benpakulski.com	**Website:**	www.fouadmuscle.com







How did you start training?

Fouad: "When I was 20, a friend of mine was competing at the Toronto Pro/Am and I went to watch him. I looked at him as well as the pros like **Orville Burke** and **Dexter Jackson** and decided right then and there that I wanted to do this. I started bodybuilding on May 21, 2000. I had bulked up for high school football, but since then I had been doing a lot of cardio and circuit training. But from that day on, I started training like a bodybuilder, plus eating more and taking protein shakes. I was already about 210 pounds in pretty decent shape."

Ben: "My dad and my uncle were both very serious weight trainers, and I wanted to lift too from the time I was a little kid. Dad was known for being very strong in his shoulders and legs, and my uncle had really big arms. I had been an athlete in football, baseball, and hockey, but my dad didn't let me start training until I was 15. He signed me up at Mack's Gym in Toronto, where there were a ton of good bodybuilders and powerlifters.

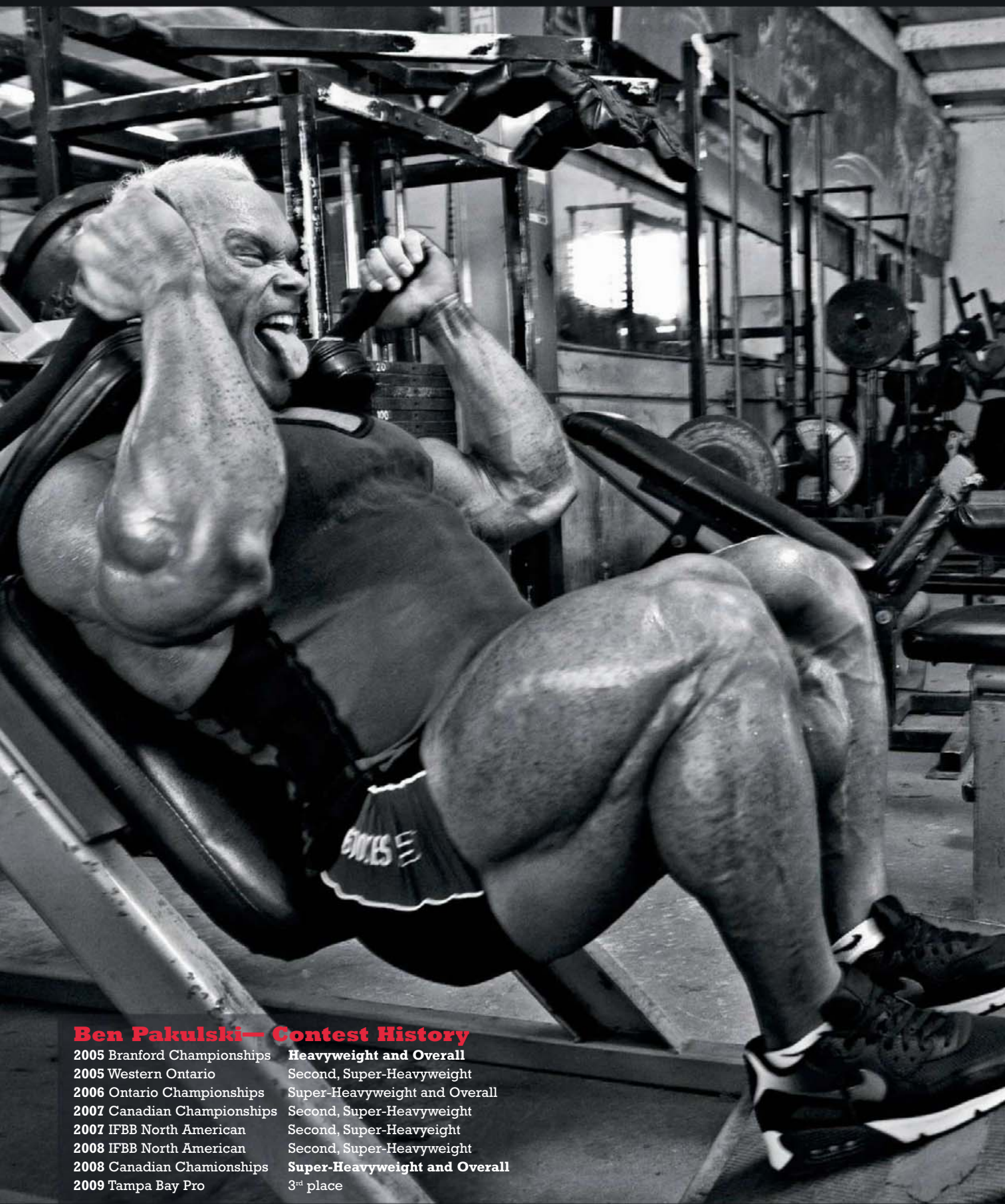
A man named Tom Hall, who actually got his pro card but unfortunately passed away before he ever competed in the IFBB, took me under his wing and taught me all about proper training and nutrition. He was also instrumental in getting me signed to MuscleTech, when I was only 18. A couple years later I also started working with Scott Abel, who also taught me a great deal."

Which pros did you look up to in your early years of bodybuilding?

Fouad: "I always looked up to **Dorian Yates** for his work ethic and his militant, Spartan attitude toward life. I liked **Chris Cormier** because he had a complete package with no weak body parts. And **Kevin Levrone** had a certain style and charisma that set him apart."

Ben: "The first guy I ever looked up to was **Lee Priest**— what a freak! I wanted to be just like him until I found out he was only 5'4". Dorian Yates was the man, too. Can't leave him out. And





Ben Pakulski— Contest History

2005 Branford Championships	**Heavyweight and Overall**
2005 Western Ontario	Second, Super-Heavyweight
2006 Ontario Championships	Super-Heavyweight and Overall
2007 Canadian Championships	Second, Super-Heavyweight
2007 IFBB North American	Second, Super-Heavyeight
2008 IFBB North American	Second, Super-Heavyweight
2008 Canadian Chamionships	**Super-Heavyweight and Overall**
2009 Tampa Bay Pro	3rd place



I also identified with **Jay Cutler** for some reason. My dad took me down to New York to see the Night of Champions in 1998 when I was 17. **Ronnie Coleman** won and Jay only placed 11th, but I knew he was going to be really good eventually. The structure and everything was there. Plus I knew he was one of the youngest guys in the pro ranks."

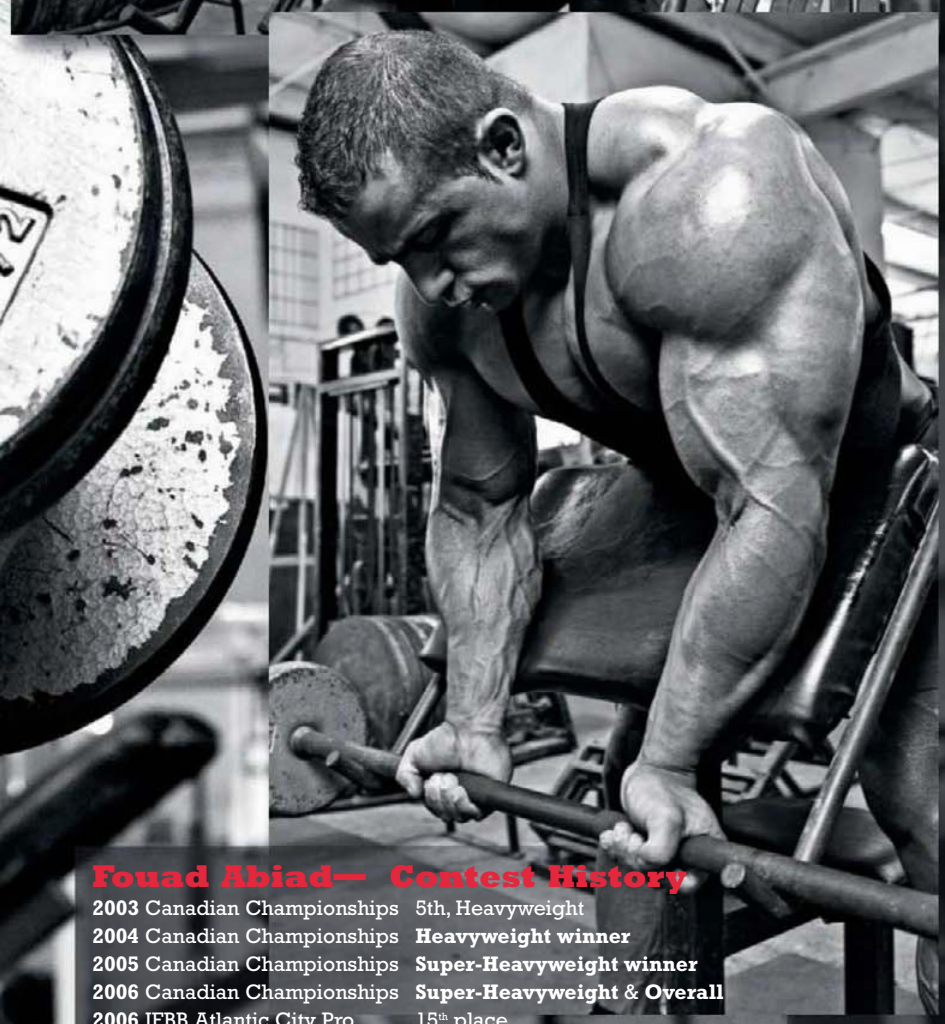
What are your strong points, and what do you still need work on?

Fouad: "My whole upper body is ahead of my legs at this point. My legs simply don't respond and grow quite as fast. I'd actually prefer to have legs that overpower my upper body than the other way around. My arms aren't quite where they need to be yet, either. I would like to add another half-inch to an inch to them. I'm pretty happy overall with my torso, though my lats look better from the back than they do the front. There's work to be done everywhere."

Ben: "Obviously a lot of people talk about my legs, but I don't consider anything to be as good as it needs to be yet. But my main focus now is improving my back thickness and upper chest. I work them both twice a week now."


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Fouad Abiad— Contest History

2003 Canadian Championships	5th, Heavyweight
2004 Canadian Championships	**Heavyweight winner**
2005 Canadian Championships	**Super-Heavyweight winner**
2006 Canadian Championships	**Super-Heavyweight & Overall**
2006 IFBB Atlantic City Pro	15th place
2007 IFBB Montreal Pro	5th place
2007 IFBB Atlantic City Pro	8th place
2008 IFBB Europa Super Show	3rd place
2008 IFBB Houston Pro	7th place
2008 IFBB Tampa Bay Pro	5th place
2008 IFBB Mr. Olympia	Did not place
2009 IFBB Tampa Bay Pro	2nd place
2009 IFBB Europa Super Show	4th place

What was it like competing in your first pro show?

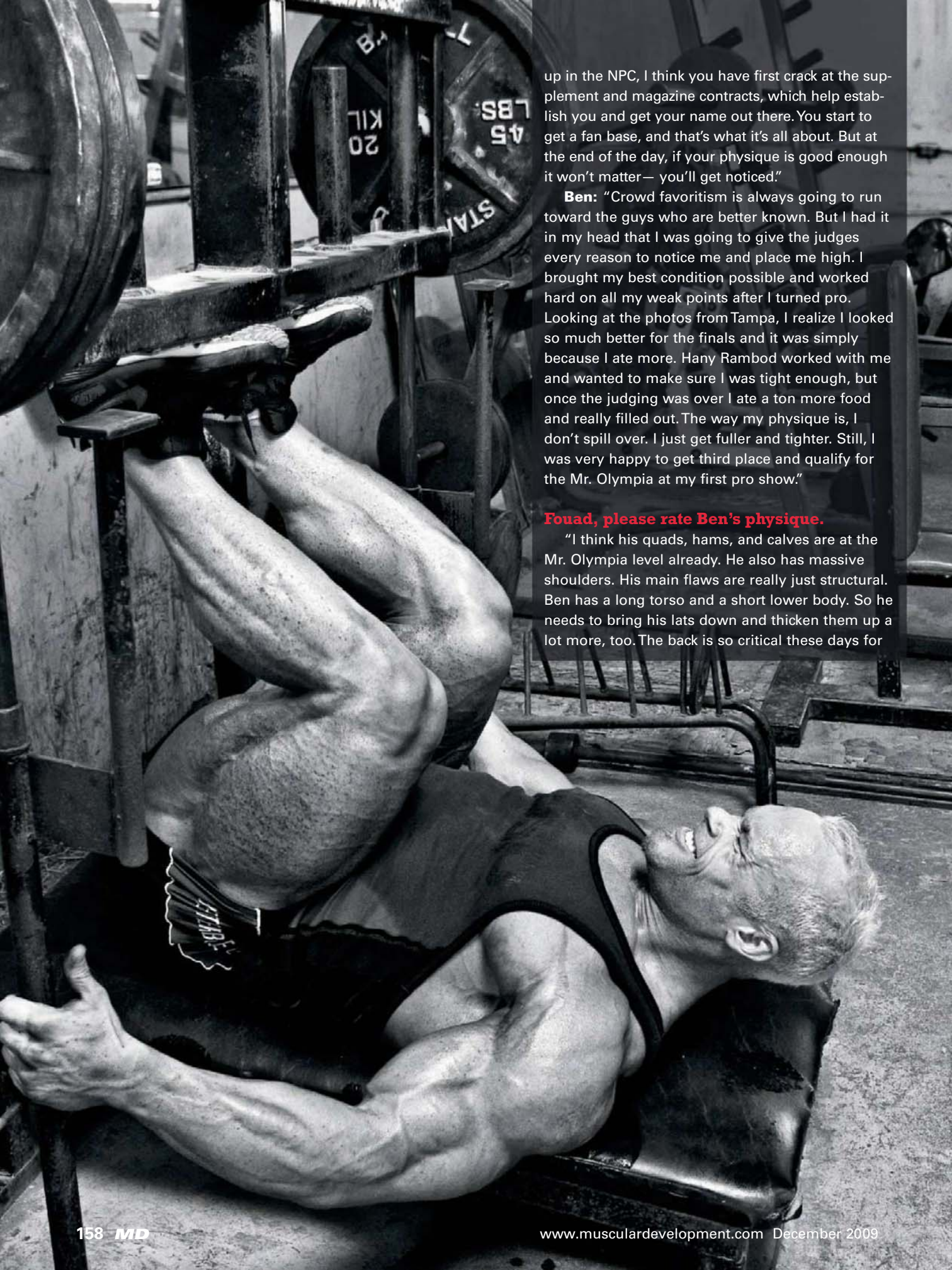
Fouad (2006 Atlantic City Pro): "It was overwhelming! I had just turned pro the week before at the Canadian Championships. To celebrate after the show, I had binged and put on close to 20 pounds in one night of eating junk. I was working with Chad Nicholls at the time, and he suggested that I do the Atlantic City Pro show to get my feet wet and see what the pro shows were all about. He also said to get my ass on a StepMill right away! I had to flatten out to get the weight off in time, but I did it.

"The first thing that hit me when I got there was that I needed a lot more size. The pros seemed huge to me then! I was terrified onstage—absolutely no confidence. I got 15th place, which in retrospect wasn't terrible. But it was a good thing that I did that show. It was one thing to see the guys in the magazines, and a whole other experience to be right there with them next to you. It made me incredibly driven and focused for the off-season that followed."

Ben (2009 Tampa Bay Pro): "All the guys were very nice and hospitable to me. They also offered a lot of good feedback after the judging, which I appreciated. The biggest thrill was being compared in the callouts to **Dennis James**. Dennis has been one of my idols since I started bodybuilding. It was also cool to be compared to Fouad, because there has been this rivalry the fans in Canada created between us. We laugh about it, but at the same time I think we both wanted to see how we finally stacked up against the other on a pro stage."

Is it a little tougher for a Canadian to get noticed on a pro stage?

Fouad: "I think the American guys do tend to get noticed faster, simply because they came up through the NPC and they've typically had some good exposure in the magazines. I didn't have any publicity as an amateur other than what I created by posting on various websites. When you come



up in the NPC, I think you have first crack at the supplement and magazine contracts, which help establish you and get your name out there. You start to get a fan base, and that's what it's all about. But at the end of the day, if your physique is good enough it won't matter— you'll get noticed."

Ben: "Crowd favoritism is always going to run toward the guys who are better known. But I had it in my head that I was going to give the judges every reason to notice me and place me high. I brought my best condition possible and worked hard on all my weak points after I turned pro. Looking at the photos from Tampa, I realize I looked so much better for the finals and it was simply because I ate more. Hany Rambod worked with me and wanted to make sure I was tight enough, but once the judging was over I ate a ton more food and really filled out. The way my physique is, I don't spill over. I just get fuller and tighter. Still, I was very happy to get third place and qualify for the Mr. Olympia at my first pro show."

Fouad, please rate Ben's physique.

"I think his quads, hams, and calves are at the Mr. Olympia level already. He also has massive shoulders. His main flaws are really just structural. Ben has a long torso and a short lower body. So he needs to bring his lats down and thicken them up a lot more, too. The back is so critical these days for


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the pros. But overall, he's really good and I'm sure he'll be getting much better from here on in."

Ben, please rate Fouad's physique.

"Amazing back and shoulders. His legs could be bigger, but they aren't a glaring weakness or anything. Fouad already looks much better than when he turned pro three years ago."

Where did you get your nickname?

Fouad 'Hoss' Abiad: "A friend of mine back in high school started calling me Hoss after the character on an old TV Western called "Bonanza." Hoss was one of the brothers in this family, and he was a big, strong lummox of a guy. It's hilarious to me that the nickname stuck, because it sounds like something you would call a redneck from the Deep South— and I'm a Lebanese guy from Canada. But once I realized that nobody could pronounce my name— *FOO-ADD*— I just went with Hoss."

Ben 'Pak-Man' Pakulski: "People have been calling me Pak-Man since I was a kid, because of the video game and my last name. 'Big Ben' seemed to be catching on for a while, but I didn't like that because **Ben White** was already using it. I'm not crazy about Pak-Man, but it doesn't bother me."

What's next for you?

Fouad: "I definitely want to do the Arnold Classic in 2011. For 2010, not really sure yet. I need time to bring my legs up, and I don't think it makes sense for me to compete until I do that. I might do the Atlantic City Pro and then the Olympia next year. But it all comes down to putting on the size I need first, another eight to 10 pounds mainly in the legs. If somehow I can do that faster than planned, I would love to do the New York Pro next May. And please let people know I am available for nutritional consultation and appearances, contact me at fouadabiad@gmail.com."

Ben: "Until I bring my back up to where it needs to be, I'm not even thinking about my next show. I have laid off squatting for a while to let my upper body catch up, but now I'm squatting again. I guess I'll just have to train everything in my upper body that much harder!" ■



Breaking News! Canadian Muscle Joins Team MD!

Just before going to press, Fouad Abiad and Ben Pakulski signed on the dotted line to become part of the industry powerhouse that is Team MD. These two new additions to the most stellar group of star athletes represent everything MD stands for: intensity, a hardcore attitude, blue-collar work ethic, and a love of the game. Here's what they had to say about coming onboard to join a team that includes superstars like **Kai Greene**, **Victor Martinez**, **Dennis Wolf**, and **Branch Warren**:

Fouad: "I am very excited to be part of the MD team. In my opinion, they are the only magazine left that really cares about what the fans want and really try to get the fans involved with the pros. It gives everyone a chance to stay connected and I think that's very important for the future of bodybuilding."

Ben: "I'm so happy and grateful to join TEAM MD! It's been a dream of mine since I began bodybuilding to be part of the best, no BS, hardcore bodybuilding magazine in the world! I would like to extend my sincere thank you to Mr. Blechman, Per Bernal and the entire MD staff for giving me this opportunity and allowing me to progress in my journey to the top of sport!

"To the MD fans: first off, thank you for your constant support and continuous positive feedback! Be ready for a bigger and more importantly, BETTER physique in the 2010 season! Strive for the top! FOCUS, INTENSITY, DESIRE, PERSISTENCE! Keep working harder than the next guy."

MD is proud to have you, guys!



Ben's Training Split

Monday:	Back and rear delts	
Tuesday:	a.m. Hamstrings	p.m. Chest, front & side delts
Wednesday:	Arms	
Thursday:	OFF	
Friday:	a.m. Back	p.m. Upper chest & rear delts
Saturday:	Quads & hams	
Sunday:	OFF	

Fouad's Training Split

Monday:	a.m. Quads	p.m. Hams & Calves
Tuesday:	Chest and triceps	
Wednesday:	Back and biceps	
Thursday:	OFF	
Friday:	a.m. Quads	p.m. Hams & calves
Saturday:	a.m. Shoulders & traps	p.m. Biceps & triceps
Sunday:	OFF	

"I've never trained on Sundays. It's not a religious thing—my family always gets together for dinner, plus during football season I have to watch the games."

FLEX CRITIQUE

By Flex Wheeler, Photography by Per Bernal

BATTLE IN FORT LAUDERDALE!

2009 NPC NATIONALS PREVIEW

It's almost here, the last and biggest pro qualifier of the 2009 NPC season— the Nationals. The prestige of winning this event goes back to former champions like **Lee Haney**, **Shawn Ray**, **Kevin Levrone**, **Jay Cutler**, **Toney Freeman**, **Branch Warren**, **Victor Martinez** and **Evan Centopani**, all of whom went on to stellar careers in the IFBB. It's also the only pro qualifier where each and every one of the now seven weight classes qualifies for pro status, so as you might imagine, that incentive brings out the very best amateurs in the United States— who all hunger for that coveted card.

This month, I'll focus on the three heaviest weight classes— light-heavyweight, heavyweight and super-heavyweight, simply because they typically generate the most hype and excitement. As you read, and I know some of the guys I'll be talking about will be going through this, please keep in mind that all assessments about the physiques in question are 100 percent opinion on my part. Muscular Development pays me to express my opinion, and I try to do it in a way that's fair yet honest. I can't pull punches and be a cheerleader for every single competitor, or else I would be taking the coward's way out. Got it? OK then, let's roll and talk about these guys.



Branden Ray

Light-Heavyweights

Branden Ray

There aren't too many amateurs out there right now who you can honestly say possess all the tools to make a top pro already. 'B-Ray' is one of the few. He just lost his job at CNN, which I think could make for an added ingredient toward his success this time. Without that comfy paycheck from them, there's a little more pressure to make a real living in bodybuilding now. It's all or nothing!

I feel the keys for Branden are to come in with crisp condition and also closer to the top of the weight class limit of 198¼. In Las Vegas, he arrived a few days before with that weight and fullness but lost it by the time he



Tamer El Guindy

got onstage, to the tune of about 10 pounds. When I saw him at the USA and didn't know what happened, I advised him to skip the Nationals and just put that size on. 'B-Ray' informed me about the whole mishap of flattening out like a damn pancake.

He also needs to be more careful with his stage color. As a dark-skinned brother, you can't go overboard and be much darker. The light won't reflect off your skin if you do— it gets absorbed and makes you look washed out. I know if this guy brings the condition and comes into the Nationals thicker and rounder, he will be the man to beat. He's taken second place two years in a row at the USA, and hopefully the Nationals will be a whole other story.

Tamer El Guindy

Speaking of the man to beat, you can't utter that phrase without mentioning the man who did beat Branden and is going to Florida with the momentum of being the current USA Light-Heavyweight Champion pushing him. They call Tamer 'Razor' and it's not hard to figure out why— the guy has more splits and striations than a ragged Cliffside. But I also feel that he won his class at the USA mainly on that condition, not necessarily for having the best overall physique.

Tamer needs to fill out a lot more in the chest and arms, and I really see him having to move up to a heavyweight and competing at around 205-210 before he has that needed mass. I know this whole weight class issue drives guys crazy and leads them to do some weird things. My feeling is that if you're very close to the bottom of the weight class, it might make sense to suck down to the next lower division. At a show like the Nationals where every class winner turns pro, I can see the wisdom behind that strategy. But here's the thing. Theoretically, your goal is to turn pro and be in the mix with the best of those guys. Unless we're talking about the 202 class, there are no weight classes in the pro ranks. So you can't be dodging anybody. What I mean is, your goal if you intend to be a good pro is to win the Overall so decisively at your pro qualifier that you make all the other guys look like amateurs compared to you. You wouldn't care about dropping down a class or staying in another class to avoid anybody, because you should beat anybody else regardless. That's just my little rant based on how I feel about it.

When I won the USA back in 1992, anything over 198¼ pounds was basically an unlimited class. I was only about 215 pounds, and some of the guys I was up against had a good 20-30 pounds or more on me. But there was no way in hell I was going to drop down to light-heavy to avoid them. My physique looked much better at 215, so that's where I competed at— and it's also about what I weighed when I won the Iron Man and Arnold Classic the following spring. This hasn't all been about Tamer El Guindy specifically, but looking at him does make me think he would be a lot closer to being ready for the pro ranks if he filled out to heavyweight and still brought his trademark 'Razor' cuts.

Seth Feroce

It's pretty rare that we would be talking about a guy who has only done two regional NPC shows in a preview like this, among all these other seasoned veterans who are basically proven commodities. But Seth Feroce clearly has that special something that sets him apart from your average regional competitor. The kid is thick and has nice shape, with monster wheels and an overall level of mass you don't see too often. Congrats to Seth on signing an MD contract without ever competing at the national level. That's a lot of expectations put on you now, kid! When you're part of the biggest and best bodybuilding magazine in the world, people expect you to handle your business.

I know Seth only started working with Hany Rambod a few days before his win at the NPC Pittsburgh, so with the seven months since then I'm sure Feroce has made some real improvements. If he pulls off a win his first


Seth Feroce


Al Auguste


Darron "Hollywood" Glenn


Jon Delarosa


Lee Banks


Neil Champagnie

time out in a light-heavy class this stacked, Seth would instantly earn the respect of a lot of fans who right now are probably wondering why he's getting so much hype.

Al Auguste

Al seems to be best known as the man who lost not once but twice to **Peter Putnam**, first at the 2007 USA and then the next year at the Nationals. Personally, I thought he should have bested Putnam at least one of those times, as his back development as well as the conditioning of his hams and glutes was far superior. Al was probably wondering, "What the hell more do I need to do to get my pro card?" I can answer that for you, bro— not a damn thing!

Show up again in excellent condition and you could take it this time. Auguste has a very complete physique, and I could see him moving right into the pro 202 class and doing damage. But it is a really competitive group of light-heavies heading into the Nationals this year, so Al had better bring not just his A-game, but his 'A-plus' game!

Darron 'Hollywood' Glenn

Man, I don't know which nickname is starting to get overused more, 'Flex' or 'Hollywood!' When Darron won the Junior USA Overall earlier this season, I noticed a certain resemblance to one of my favorite ballers, and said he looked like a buffed **Kobe Bryant**. Darron has amazing shape and lines, and they easily carried him at the junior level. But now that he's stepping up to the big league where pro cards are at stake, he's gonna need a lot more than pretty shape to get by. The condition he was in for the Junior USA was probably about 90 percent of what's expected at the Nationals. I'm sure Darron is aware of this and will rise to the occasion. If not, this first attempt at a pro card could wind up being a learning experience.

Jon Delarosa

Last but not least in our discussion of what is probably the best group of light-heavies to attack the Nationals stage in years, we have New York City's Jon Delarosa, the reigning Junior Nationals champ. That's a nice title to go into a pro qualifier with— just ask **Lee Haney**, **Rich Gaspari**, **Phil Heath**, or **Evan Centopani**. Jon is Dominican and a protégé of MD's own **Victor Martinez**, so obviously he has some solid advice in his corner. He's got a nice combination of size and shape, but I would like to see him dial it all in crisper for a show like this.

Heavyweights

Lee Banks

Now let's get into the bigger guys. I feel bad for Lee Banks, because the last two times he's competed he was good enough to win. He took second to **Marc Lavoie** at the 2008 North American and just a couple months ago **Mark Alvisi** barely edged him out at the USA. Sometimes you have two guys who are so close you could basically flip a coin, and unfortunately for Lee he's come up on the short end of a couple of those coin tosses. Banks has a great structure with a tiny waist, super-wide back and shoulders, and nice flaring thighs. He's another guy who could stand to fill out a few more pounds to thicken up to the very top of his weight class, and rumor has it he will definitely be pushing the boundaries of that 225 1/5 cut-off. Considering he was 218 at the USA in July, 7 pounds of quality muscle in that short a time would be damned impressive— and could be what Lee needs to finally put him over the top.

Neil Champagnie

In the tradition of Brooklyn bombers like MD's own **Kai Greene** and **Branden Ray** comes another great bodybuilder: Anthoneil Champagnie. I confess that until last year I had never heard of Neil, but then he won the Overall at the Eastern USA, a very tough regional

show out there, and jumped right into fourth place at the Nationals. That was up from sixth the year before, so I am detecting an upward trend! Champagnie is one of the thickest Heavies out there— the dude can't be more than 5'7" or 5'8" and just *loaded* with muscle! His shape is killer too, so all he needs is to dial in his condition and he might be the one to walk away from this class with the pro card.

Fred Smalls

Ain't it funny how so many guys named 'Smalls' actually take up so much space? You had the late rapper Biggie Smalls, and now one of the USA's best heavyweights, Fred Smalls. I'm a big fan of Fred's physique. The dude has plenty of mass, pretty shape, and he also happens to be a devoted family man. I got to meet Fred with his family back at the USA and it was touching how supportive they all are of him, and how attentive he was of his family even with all the madness of the show still going on. All I have to say for advice to Fred, who took third at the USA, is sharpen up, my brother! Shred that shit up, lose the water, and this thing could be yours.

Super-Heavyweights

Keith Williams

Now we get into the real heavy hitters. I'm including my good friend Keith Williams here basically just to break the news that he will not be doing the Nationals. We've been talking it over since he took second at the USA, and we both agree that he would be better off refining his physique and coming back to the 2010 USA with that "Oh my God!" factor I know he is capable of. Keith has some areas he needs to improve on, which I won't list here because there's no need to draw any further attention to them. I want Keith to show up next year at the USA and totally dominate the show, so he will be immediately ready to jump into a show and qualify for the Mr. Olympia soon afterward. His goal is to be a good pro, so that's the right strategy. I feel that with the type of overwhelming mass that Keith has, he is capable of beating a lot of pros the same way **Ronnie** and **Jay** did— show up in condition and make them all look small next to him.

Trey Brewer

Trey is another guy I feel sympathy for. A lot of weight was put on this kid's shoulders too soon. Trey does have phenomenal potential, which is why they call him 'The Phenom,' but people in his camp were puffing him up to be more than what he was at the time. Brewer was put in a difficult position of having to live up to an ungodly amount of hype and predictions of greatness. For anyone else, fourth place at your first Nationals would have been looked at as a triumph, but due to the way this kid was built up, it came off like a colossal failure.

Now, people are starting to expect him to fail instead of succeed. That's why it's important that Trey shows up with plenty of size as well as some granite-hard condition. I've talked to Trey several times, and one thing I try to impress on him is to stay a little leaner in the off-season. He was getting up to around 330 pounds before, and that's way too heavy. You can't see what's going on with your physique with that much body fat and water obscuring the muscles, and you run a huge risk of losing far too much mass when you diet down. I know this young cat is fully capable of surprising us all and looking the way we all expected him to way back when the magazines and the BSN ads were blowing him up as the 'Next Big Thing'— so let's see if he does.

Abbas Khatami

Abbas is coming off a super class win at the North American, which is the second time he's done that. He's also been up in the top five at the USA and Nationals on various other occasions. Khatami has a great back, wide round delts, and some of the best quads in the amateur ranks today. He still needs to upgrade the caliber of his guns and fill in his chest, though.

One thing I will say about Abbas is


Fred Smalls


Keith Williams


Trey Brewer


Abbas Khatami


Malcolm Marshall


Robert Burneika

that he is one of the NPC's true masters of presentation. He takes command of the stage when he's up there, and as a dedicated student of the sport, Abbas has the rare ability to perfectly showcase his strong points when he poses while doing a great job of making you look past his weak points. I do think he needs sharper condition, also. When we spoke right after the North American, Abbas seemed to think his condition was the best in the whole show, and I didn't agree with that. Set a higher standard for yourself, dial that shit in just a little tighter, and you can do very well.

Malcolm Marshall

Speaking of condition, that's the one area that seems to be the Achilles' heel for big Malcolm Marshall, a giant of a man who reminds me a little bit of pro **Joel Stubbs**, but with better legs. The size and shape are there, Malcolm just needs to shred it up and come in ripped up and dry.

We had a conversation back at Morton's restaurant after the judging at the USA that was more like a confrontation. Malcolm didn't feel he was going to do very well based on the call-outs, and he challenged me as to why— which was pretty strange, since I have nothing at all to do with the judging. But I was straight-up with him and let him know his condition wasn't good enough to be a threat to win. And I was right. He had been fourth and fifth in this class at the 2008 USA and Nationals, but this year he didn't make top 15. That's not to say Malcolm doesn't have a pro-caliber physique worthy of winning. He does, if he shows up shredded.

So my advice is to take some of that anger and frustration and apply it to your diet and cardio to dial in that condition.

Robert Burneika

This big Russian dude is a true freak. The arms and calves on him are just ridiculous, and in terms of overall mass, Burneika is up there with guys like **Jay Cutler** and **Branch Warren**. In other words, one thick mofo. He doesn't have the prettiest shape or the smallest midsection, so his best bet to do well is to out-condition the other supers. Guys in that class are notorious for not being in the best shape as compared to the lighter weight divisions, so any super who shows up peeled usually has a huge advantage.

Sean Allan

Big Sean Allan (aka BSA), what can I say? I admire the man's tenacity. He rarely places as well as he wants to, but he keeps coming back. Sean is also the type of guy who wears his heart on his sleeve, so if he's angry up there when they don't call him out for comparisons, it's easy to see.

My best suggestion for Sean would be to stop competing until he brings those wheels up to match his huge upper body, which does have very nice shape and symmetry. He gets very defensive about this subject because he does train his legs hard and they have been getting better. But they're still not good enough. I gotta be honest. If Sean ever does get those wheels just as thick, full, and freaky as his upper body, and nails his condition too, his dream of many years to be a pro will come true.

I also feel he switches around with too many different coaches and never gives anyone a chance to really follow through for him. I say pick one person to listen to, get a plan together, and drive that shit all the way until the wheels fall off. Then if you're not happy with the results, at least you will know what did and didn't work. Just my two cents for one of the hardest-working brothers in the game.





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Steve Kuclo

This big kid from Michigan has a world of potential. He was third place last year at his first Nationals, and I have no doubt he's grown and matured quite a bit more over that time. He has some areas he needs to fill in, but I wouldn't doubt he's brought up a lot since last year.

Cedric McMillan

Last but not least, we have the 2008 Junior USA Champion. Cedric has very nice overall shape, but to me he appears a little lanky. I'm not sure what he weighed last year, but I would estimate he needs a good 10-15 pounds, minimum, to really fill out and be a threat to win the supers at a pro qualifier.

New Pros, Coming Right Up!

When I heard that the Sacramento Pro was coming back for 2009 and that it would be held in November, I thought it could be an excellent opportunity for some of the guys from Nationals to jump right in and prove themselves worthy of that IFBB card. But it turns out the Sacramento show is actually a couple weeks before the Nationals! Oh well, it was a good idea.

I want to wish all the guys I've talked about the best of luck, and also apologize to anybody I may have unintentionally left out. There are plenty more guys out there now who have the tools to win their class at the Nationals, and I've only focused on some of the ones who've made a name for themselves. Then again, the nature of our sport is such that some of the winners could easily be guys we haven't even heard of yet. Either they just started competing, or they've been around a while, but this will be the year they finally put it all together. Regardless, the NPC Nationals is always an exciting way to end the amateur season and see who the final pro cards of 2009 go to.

See you there! ■



Sean Allan



Steve Kuclo



Cedric McMillan

FEROCIOUS ROAD TO THE NATIONALS

NEWCOMER SETH FEROCE IS TRAINING TO WIN!

By Ron Harris, Photography by Per Bernal



Beginner's Luck?

Seth Feroce, who never competed until spring of this year, is preparing for the NPC Nationals. He's had to endure plenty of comments that he needs to compete longer and 'pay his dues' before he can expect to win a show of that caliber. It is fairly common to hear about winners who have reached that goal only after many years and many tries at a pro card. But then again, there is no shortage of examples pointing to the fact that if you're good enough, you can indeed win your pro card quickly— maybe even on your first try.

In recent years, we've seen men like **Phil Heath**, **Evan Centopani**, **Rich Jones**, **Mike Liberatore**, **Ben White**, **Brandon Curry**, **Peter Putnam**, **Desmond Miller**, and **Mark Dugdale** take the 'fast track' to the IFBB. Seth would never be so bold as to make a similar prediction for his own Nationals debut, but he *does* remain optimistic.

"I am confident about the package I will be bringing as a light-heavyweight," he says. "I don't listen to negative people who insist that Tamer or Branden Ray or whoever has the win already locked up. Anything can happen, and it all comes down to who looks the best that day on that stage."

Seth has also recently relocated to his native Pittsburgh, along with his wife and baby daughter, and now his training and prep are going better than ever. "I feel renewed, and I still wonder why we waited so long to come home," he says. This month, I went in-depth with Seth to break down everything you would ever want to know about his training. Just a couple weeks after this issue hits the newsstands, Seth Feroce will unveil the results of his ferocious workouts onstage in Miami— and don't be too shocked if the new kid pulls off a win his first time out!

Chest:

Was it an easy or hard body part for you to build?

"It was relatively easy for me to build my chest, because it's always been my favorite body part to train. I've always done it on Sunday, Monday, or Tuesday; earlier in the week when I'm fresher. I always look forward to hammering chest."

Did you make any major mistakes in training it?

"In the beginning, I had no idea what I was doing. It was just about moving weight, with terrible form and zero mind-muscle connection. I also was very much into going super-heavy all the time until two years ago, when I slightly tore my pec. That scared me and made me realize there was absolutely no reason for a bodybuilder to be going so heavy that you can only get a couple reps."

What have been the most productive exercises for you?

"Incline dumbbell and barbell presses, incline dumbbell flyes, weighted dips, and dumbbell pullovers."

Have you found any exercises to be a waste of time for it?

"Decline presses. I started getting too much development in the lower pecs, and that droopy look to a chest is ugly.


Gold's Gym

Upper chest is challenging enough for almost everybody, so there's no reason to do declines and let the lower pecs grow even further ahead."

What are your future goals for it?

"I still need more of a shelf on the upper chest, and better overall separation."

THE WORKOUT:

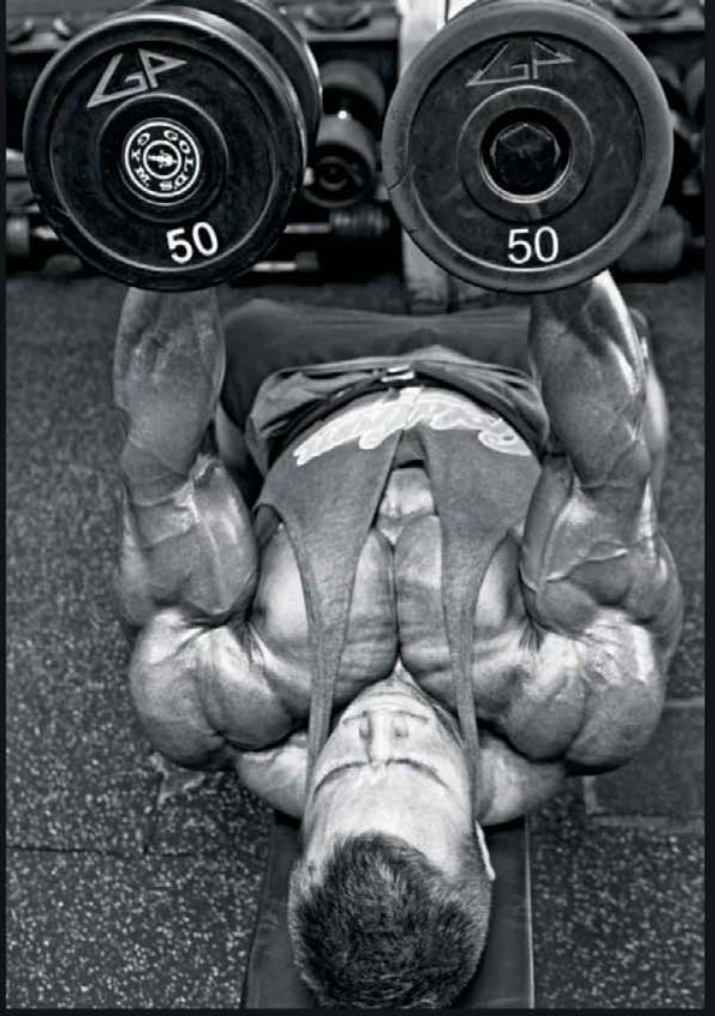
Incline Barbell Press		4 x 8-12
	Last set, Drop set	365 pounds x 10-5 (failure) 225 pounds x 10-20 (failure) 135 pounds x 10-20 (failure)
Flat Dumbbell Flyes		4 x 8-12
	Last set, Drop set	Half the weight, twice the reps 100 pounds DB x 8-12 50 pounds DB x 16-24
Incline Hammer Strength Machine		3 x 8-12
Weighted Dips or Dumbbell Pullovers		
	Super-setted with	3 x 10-15 (failure each set)
Pec Deck or Cable Crossovers		
Incline Dumbbell Flyes	——FST-7——	6-10 rep range

Back:

Was it an easy or hard body part for you to build?

"I thought I was doing OK with it. I wanted a big, thick back like **Dorian Yates** had, so I sort of modeled my workouts after his and did a lot of heavy barbell rows and deadlifts. Once I started working with Hany, he had me stop doing deadlifts so I wouldn't get my waist any thicker. My focus now is on width and detail."







Did you make any major mistakes in training it?

"Hany pointed out to me that I should have been doing pull-ups all along, instead of lat pulldowns. It's the same movement, but you get better results pulling your own bodyweight."

What have been the most productive exercises for you?

"I think everything I've done for my back has helped in its own way— barbell and dumbbell rows, deadlifts, various machine and cable movements."

Have you found any exercises to be a waste of time for it?

"No, even the cable movements did work the back from various angles that are hard to duplicate with free weights."

What are your future goals for it?

"More width, more hang to the lower lats, and way more detail and separation."




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THE WORKOUT:

Wide-Grip Pull-ups	5 x 10-15
Reverse-Grip Barbell Rows	4 x 6-12
Last set, Drop set	315 pounds x 6-12
	225 pounds x 10-15
	135 pounds x 10-20
Close-Grip Pull-ups	4 x 10-15
Wide-Grip Cable Rows	3 x 8-15 (SQUEEZE! each rep)
Reverse-Grip Pulldowns	3 x 8-12
One-Arm Dumbbell Rows —-FST-7—6-10 Rep Range	

Hyperextensions done with abs 2 to 3 times a week

Quads:

Was it an easy or hard body part for you to build?

"Once I figured out what the hell I was doing, they grew. My mom was a track athlete and had very big, muscular legs,

so I got some great genetics from her in that department. I'm grateful they respond so well, because I know how tough legs are to build for a lot of guys."

Did you make any major mistakes in training it?

"I was 15 when I started working legs, and my form was just atrocious. I trained quads and hams together, and I was going so heavy that I started to have knee problems.

What have been the most productive exercises for you?

"Squats, leg presses, front squats, hack squats, and leg extensions. Those are really all you need. I was doing lunges for a while, but after **Victor Martinez** blew out his knee, I got spooked and stopped. Now I do step-ups instead. They seem to hit the glutes and the hams better anyway."

Have you found any exercises to be a waste of time for it?

"No, legs are pretty basic. You don't need to get too fancy."

What are your future goals for it?

"I'm happy with the size of my quads, but I need to get deeper separations, and just get them a lot harder and more conditioned in general. I look at pictures from the Pittsburgh show and my lower body was nowhere near the condition of my upper."

THE WORKOUT:

Leg Presses	5 x 10-25
Last Set, Drop Set	12 plates a side x 15 (failure)
	8 plates a side x 20 + (failure)
	6 plates a side x 20 + (failure)
	4 plates a side x 20 + (failure)
	4 plates a side x 20 + (failure)
Front Squats	4 x 6-15
	225 x 10
	275 x 10
	315 x 10
	365 x 6 + (failure)
	- 225 x 10 + (failure)
	- 225 x 10 + (failure)
	- 135 x 10 + (failure)
Wide-Legged Squats	4 x 6-12
Super-setted	
Step-ups on Flat Bench	4 x 15 each leg
Leg Extentions or **Hack Squats**	——FST-7—— 6-10 rep range





Hamstrings:

Was it an easy or hard body part for you to build?

"They have been pretty difficult, compared to my quads, for sure."

Did you make any major mistakes in training it?

"That's why they weren't growing— I never gave them a fighting chance. I always did them after quads and the workouts for them were so-so, never anything great. I was spent from all the squats, leg presses, hacks, and so on. Only three months ago I started doing them on their own, and the results have been amazing. I'm kicking myself for not doing this from the start— my hams would be so much better by now."

What have been the most productive exercises for you?

"Pretty much everything— lying, seated, standing leg curls, and stiff-leg deadlifts, using both a barbell and dumbbells. I've also started incorporating things I saw **Kai Greene** doing in his MDTV videos, like the Jefferson Lift and just all the squeezing he does in general. It makes a big difference."

Have you found any exercises to be a waste of time for it?

"I was wasting my time training them with so little energy left, but there was never an issue with the actual exercises."

What are your future goals for it?

"Bigger, more of a sweep, and much harder and more separated."

THE WORKOUT:

1. Seated Leg Curls	4 x 8-15
2. Barbell Stiff-Legged Deadlifts	4 x 8-15 (Failure each set)
3. Jeffersons	4 x 10-15 (SQUEEZE! Each rep)
4. Lying Leg Curls	4 x 10-15
5. Dumbbell Stiff Legged Deadlifts	— FST-7—6-10 rep range



and with my tri's, more cross-striations. I want more size and better separation overall— my arms are nowhere near where I want them to be yet."

THE WORKOUT:

Dumbbell Hammer Curls		4 x 6-12
	Last set, Drop set	75 pounds x 6 + (failure) 40 pounds x 12 + (failure)
	S/S	
Close-Grip Pushdowns		4 x 6-12
	Last set, Drop set	Half the weight, twice the reps
Preacher Curls (free or machine)		4 x 8-12
	Last set, Drop set	Half the weight, twice the reps
	S/S	
Close-Grip Bench		4 x 6-12
Incline Dumbbell Curls		3 x 8-12
	S/S	
Wide-Grip Pressdowns		3 x 8 x 12
One-Arm Cable Concentration Curls		3 x 10-15
	S/S	
Reverse-Grip Pressdowns (either one-handed or two)		3 x 10-15
Barbell Hammer Curls ——FST-7——6-10 rep range		
Rope Pressdowns or Skull-Crushers——FST-7——6-10 rep range		

Arms— Biceps and Triceps

Were they an easy or hard body part for you to build?

"They weren't easy. I did have to work for them, especially my biceps. My triceps grow 10 times faster than my biceps."

Did you make any major mistakes in training it?

"I never did anything for the forearms or brachialis. One exercise I hated from day one and never did was hammer curls. When I started working with Hany, he had me doing those first in my workout to emphasize that area and I saw a difference in just a couple months. The FST-7 style of training has also been a godsend for my arms— they are bigger and rounder now than ever before."

What have been the most productive exercises for you?

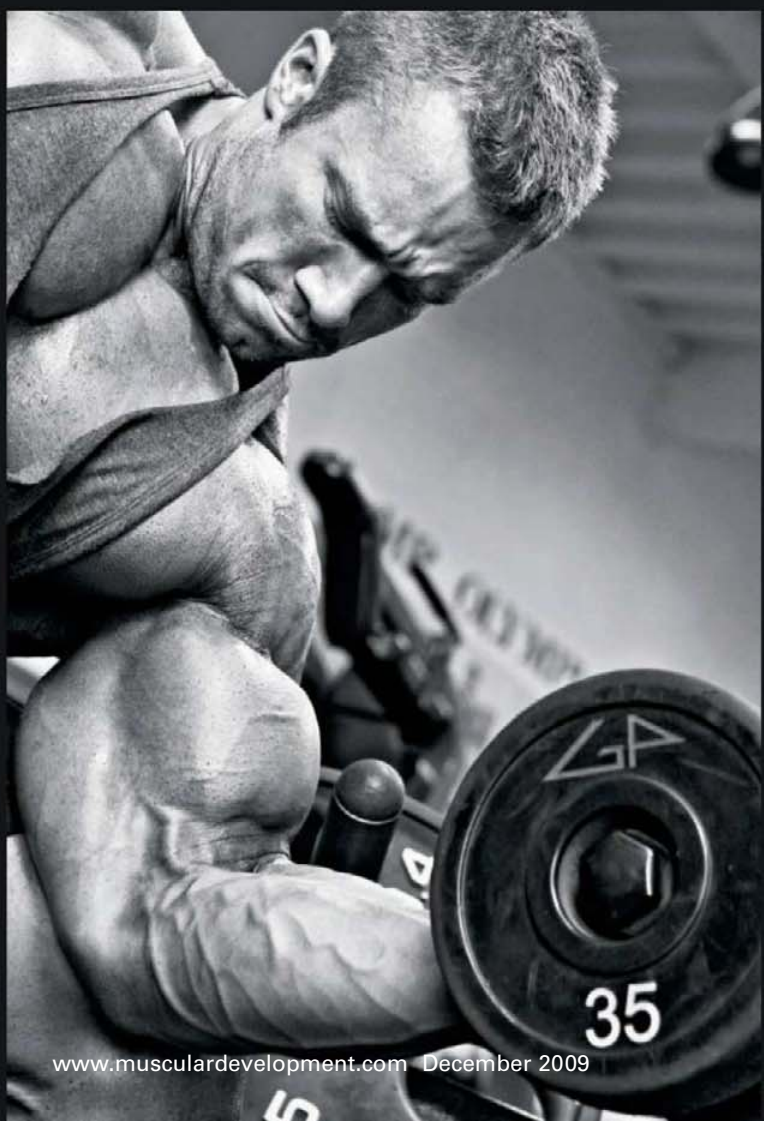
"For biceps, preacher curls have been the best movement. A couple years ago I read an arm-training article in MD about Victor where he named his favorite biceps exercises as being preacher curls, incline dumbbell curls, and concentration curls. I started doing all three regularly because he has awesome biceps and mine were nothing special, and I saw good results. For my triceps, skull-crushers and close-grip bench presses have always worked well."

Have you found any exercises to be a waste of time for it?

"I wouldn't say anything has been a waste of time, but I never got much out of machines for arms. Free weights and some cables always gave me a better feeling in the muscle."

What are your future goals for it?

"I want more thickness in my lower and outer biceps,











Shoulders:

Was it an easy or hard body part for you to build?

"Shoulders have been the most difficult muscle group of all for me! It wasn't long ago that I had big traps, decent arms, and very little meat between them— it was pathetic."

Did you make any major mistakes in training it?

"It was one of those vicious cycles where I wasn't seeing results, so I started to really hate training shoulders, and wasn't putting in the requisite effort. It all turned around when I was 20, and broke my hand and my wrist. I couldn't do jack shit in the gym for 20 weeks with that cast on my arm; at least I couldn't do most of the exercises I was used to.

So I was looking around the gym to see what I could do with that cast on, and I saw the seated lateral raise machine. Sure enough, I was able to use it, and I was shocked at how I could suddenly feel my medial deltoids working for the first time ever. So I would alternate days. One day I would come in the gym and do 10 to 15 sets of that, and on the other day I would do stuff like the leg press, leg extension, and leg curl. My shoulders actually caught up in that time, and now I love training them."

What have been the most productive exercises for you?

"Dumbbell lateral raises and barbell upright rows."

Have you found any exercises to be a waste of time for it?

"One-arm cable laterals. When I train shoulders, I like to keep a certain rhythm going. I move pretty quickly and like to keep a nice pump going the whole time. Doing those one-arm cable laterals just breaks my rhythm."

What are your future goals for it?

"I need to improve everything about them still. My front delts need the most work. But overall, my shoulders need to be bigger, rounder, and I need more striations."

THE WORKOUT:

Barbell or Dumbbell Shoulder Presses	4 x 6-12
	315 x 6 + (failure)
	225 x 10 + (failure)
	135 x 10 + (failure)
	4 x 6-15 +
Last set, Drop set	100 pounds x 6 + (failure)
	60 pounds x 12 + (failure)
	40 pounds x 12 + (failure)
Barbell Front Raises	4 x 6-15
Barbell Upright Rows	4 x 6-15
Bent-Over Dumbbell Rear Delt Raises	4 x 6-12
Barbell or Dumbbell Shrugs	5 x Failure each set
Close-Grip Machine Shoulder Presses	—FST-7—6-10 rep range



Calves:

Were they an easy or hard body part for you to build?

"About average."

Did you make any major mistakes in training it?

"I never, ever did seated raises until this year, so I wasn't stimulating the soleus much at all. Now I hit calves three times a week and do the seated raises every time."

What have been the most productive exercises for you?

"Standing calf raises on a machine as well as standing on a block under the Smith machine bar, raises on the leg press, and donkey calf raises."

Have you found any exercises to be a waste of time for it?

"Nope."

What are your future goals for it?

"I never really worried too much about my calves and I thought they were good enough, but once I really took a good look at the pictures from the Pittsburgh show I realized that compared to my quads, they suck. They need to be a lot bigger to match."



THE WORKOUT:

Seated Calf Raises	4 x Failure
Standing Calf Raises	4 x Failure
Donkey Calf Raises	4 x Failure

AB WORKOUT:

Stability Ball Crunches	4 x 25 +
Hanging Leg Raises	4 x 25 +
Lying Leg Raises	4 x 25 +




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Contest History

2009 NPC Northern Kentucky	**Heavyweight Winner**
2009 NPC Pittsburgh Championships	**Light-heavyweight & Overall**

Training Split

Monday:	Chest, light triceps, calves
Tuesday:	Back, light biceps, abs
Wednesday:	Quads
Thursday:	OFF
Friday:	Shoulders
Saturday:	a.m.: Heavy arms / p.m.: Hams
Sunday:	OFF



BANK ON IT!

Lee Banks May Be the Best Amateur Heavyweight in America

By Ron Harris, Photography by Per Bernal

Next in Line?

One thing can be said with certainty about Florida's Lee Banks. If you're going to beat him, you're gonna have to be damn good. Over the course of four pro qualifiers in the past two years, anybody who managed to get past Lee either turned pro at that show or shortly afterward. At the 2007 Nationals, Lee was third behind class winner **Adorthus Cherry** and **Brandon 'The Prodigy' Curry**. The next year at the USA, Banks took third in the Heavies once more to Overall champion Curry and **Mike Liberatore**, who won that class a few months later at the Nationals. Banks also finished runner-up a month later at the IFBB North American to **Marc Lavoie**, who also swept the Overall.

And you all know, or should know, that Lee gave MD's own **Mark Alvisi** the fight of his life in the Heavies at the recent USA, before Mark continued on to storm the Overall. You know all about Alvisi, Liberatore, and Curry— but what do you know about Lee Banks? Considering how good he is and how close he is to becoming a pro, it's surprising how little press the guy gets. MD to the rescue!





Jacked in Jacksonville—The Early Years

Lee Banks, Jr. was born on September 26, 1971 to Lee and Gloria Banks. Dad passed away when Lee was only two years old, but he did pass on some exceptional genetics. "My father actually competed in a couple local bodybuilding shows, and from the few photos I have I seen, I got my wide back and my big arms from him for sure," Banks tells us.

Gloria raised Lee Jr. and his older sister Terwyla as a single mom for a few years before remarrying, and ran her own child care business, Future Duck Early Learning and Preschool. Lee's first love was martial arts, which he studied from age 10 until he was 15. Just before he earned his black belt, his cousin was goofing around and caught him with a freak kick to the side of his knee that did enough damage to require surgery.

"I was in a cast that whole summer and couldn't walk, so I started doing some curls with my dad's old weight set out of boredom," he says. Not having a clue what he was doing, his reps were around 30-40 per set, but his arms still began to grow. As a skinny kid, the newly-buffed arms whet his appetite and he started experimenting with a few other exercises.

At 18, Lee enlisted in the U.S. Army and only a year later found himself shipped off to Iraq, when Operation Desert Storm began in the spring of 1991. Banks was there for nine months, driving an M1 Abrams tank and

seeing his share of active combat missions. He had continued lifting weights the whole time, and by the end of his three-year stint in the service Lee was seriously thinking about entering a contest.

Another local guy from Jacksonville was starting to do pretty well in regional events, a certain **Dexter Jackson**, and Lee thought he should put his growing physique up onstage, too. But life had other plans, as he went into the family business after returning home. He opened up Super Duck Daycare Center, which eventually grew to three locations, then married his girlfriend Michelle in 1994.

A few years later, their son Levy was born, and Lee's dream of competing in a bodybuilding contest was put on the shelf until 2002, when he was 30. "But it was always something I thought about," he asserts. "I used to be very inspired by pictures in the magazines of **Arnold**, **Shawn Ray**, and especially **Flex Wheeler**. I always thought if I put enough effort into it, I could be a pro bodybuilder someday— I just didn't know when I would have the time to really go for it."

Journey To The Pros— Almost There Now!

Though Lee got a relatively late start competing, it didn't take long for him to make up for lost time. Since winning the Overall for the second time at a regional event called the All-South Championships (first as a light-heavy in 2004, then again in '07 as a Heavy), Lee has been top three at two pro qualifiers and runner-up at two more. At the recent USA Championships, Mark Alvisi readily admits that Lee Banks was the only competitor he was concerned with beating, knowing that if he could get past Lee, then the Overall was probably not going to be a problem.

"I felt the same way about him," Banks reveals. "Alvisi looked incredible, and I also knew I had brought my best-ever package



Quality Over Quantity

Lee Banks is all about adding quality muscle to his frame— and the key word here is *quality.* Slapping on random mass wherever he is able to has never been Lee's aim. "I went to the pro show in Tampa a few weeks ago and it just reinforced what I already believed," he explains. "Looking at the lineup, it was very clear to me who was an artist or what I refer to as a *body shaper*, and who was simply a bodybuilder. Once you stop caring about where the mass goes and just slap it on any way you can, that's when you can easily ruin a physique," he notes.

It's why Banks has taken his time gradually adding mass in the areas he feels he needs most to balance out his physique, and why he keeps his off-season weight in reasonable striking distance. "I'm not comfortable being much heavier than 250 anyway, and I really like to be able to see what's going on in the off-season, rather than just hoping it's all going according to plan."



to Vegas. If I had beaten him, I think I would have won the Overall like he did." It was tough to swallow the close decision that didn't go his way— but Lee knows his time is coming very soon.

"I feel good about the Nationals, because as far as I know, I've already beaten all the other Heavies going in. Everybody who's beaten me in the last couple years is already a pro, so I just need to come into Fort Lauderdale at my best— and hopefully this time, that will be good enough."

Another Pro Creator Creation Coming Up Next

Just to make sure his chances of finishing up the 2009 season as a newly-minted pro are maximized, Lee enlisted the services of Hany Rambod immediately following



the USA. "I told Hany I want him to re-build me like Steve Austin in 'The Six-Million-Dollar Man,'" he laughs. (You younger readers who have no idea what he's talking about should Google the '70s show or check out some YouTube clips— it was a classic.)

Rambod made some dramatic changes to Banks' program, mainly related to his nutrition. "I remember reading an article not long ago about how he had **Phil Heath** eating and I thought to myself, this is ridiculous! That's way too much food. But now that I'm doing it and I see the results, I understand what the rationale behind it is— there is no substance in the world more anabolic than good food."

In fact, Lee's gains have been so surprising that it's not even certain he will be a heavyweight. "I'm 252 pounds now and I've never been anywhere near this lean at this weight in my life before. I could very well slip into the super-heavies," he says. "Considering I was only 218 at the USA, not even the top of the heavyweights, that would be pretty amazing in just a few months time."

Successful business owner, husband, father, and pro bodybuilder. That last one hasn't officially been added to the resume of Lee Banks just yet, but a few weeks from now it very well could be. Lee is going to be a pro one day soon, regardless— bank on it!

The Gym As An Escape Valve

Overseeing three businesses that take care of over 150 small children and dealing with almost 20 employees can be stressful, even though Lee's wife is a very capable partner. That's why the gym is a welcome respite, even when he's there three times a day while preparing for a contest.

"It's nice to be able to go there and just focus on the cardio or the workout and get away from all the responsibilities of the business for a while," he notes. But he also enjoys his time at home, where neither the business nor bodybuilding are up for discussion. "When I get home at night, that's my time to relax and spend with my son," he says. "We play the Wii or Playstation 3 together, and you won't find me reading bodybuilding magazines or posting on websites. Once I'm home from work with my wife and son, it's all about them and Lee Banks the bodybuilder is not in the building."

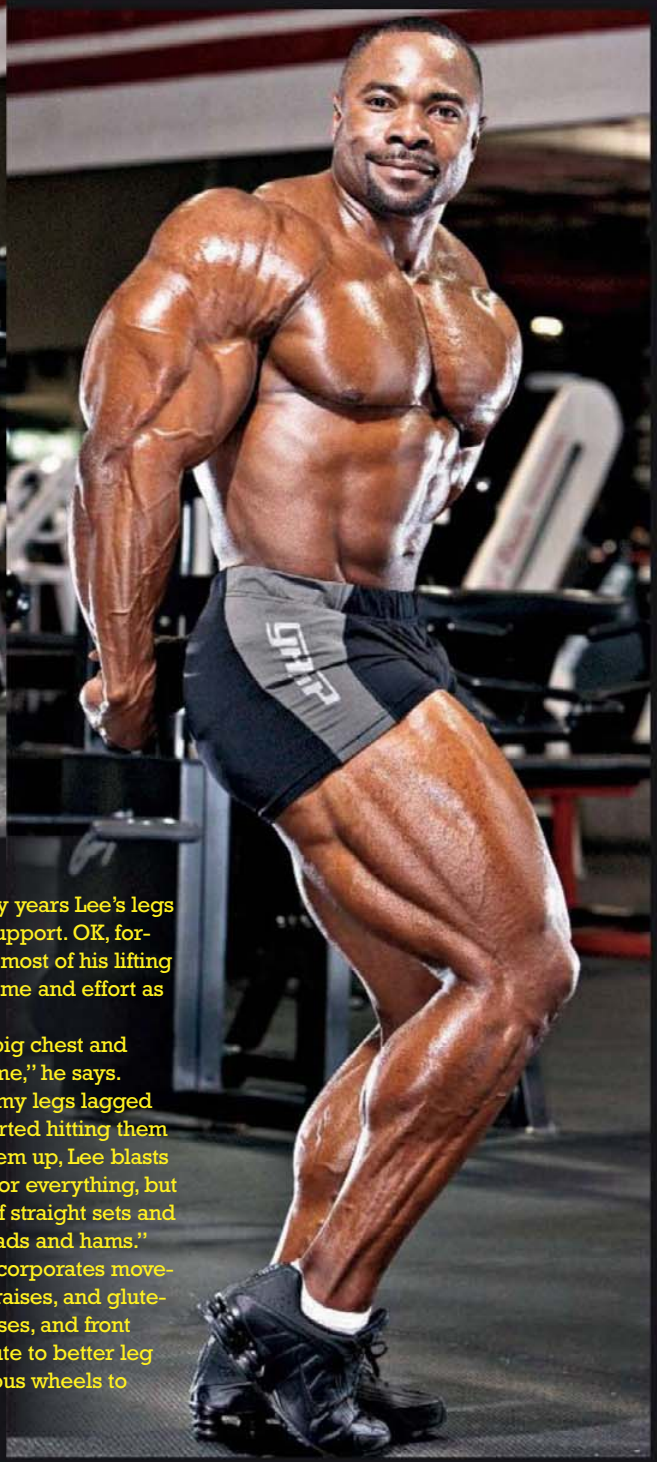
He also enjoys fishing, and can even occasionally be found dressing up as Super Duck, the mascot of his chain of daycare centers. "The kids go nuts when they see me in that costume," he laughs. "It's not every day you see a 250-pound superhero with a cartoon duck head." As for working with children all day, Banks feels blessed to be able to do it. "The kids keep me busy, and they keep me young," he says. "They have so much innocence, natural curiosity, and energy that it's like a Fountain of Youth being surrounded by them all day. But it's also nice to have a break and go train, too."


EGSP
WITH A CRAZY ATTITUDE!
IVANKO



Contest History

2002 All-Star Classic	2nd, Light-heavyweight
2002 All-South Championships	6th, Heavyweight
2004 All-South Championships	**Light-heavyweight & Overall**
2005 NPC Nationals	6th, Light-Heavyweight
2006 USA Championships	8th, Heavyweight
2006 NPC Nationals	6th, Heavyweight
2007 All-South Championships	**Heavyweight & Overall**
2007 NPC Nationals	3rd, Heavyweight
2008 USA Championships	3rd, Heavyweight
2008 IFBB North American	2nd, Heavyweight
2009 USA Championships	2nd, Heavyweight



Playing Catch-up with Legs

You wouldn't really know it to look at him now, but for many years Lee's legs were in danger of being sued by his upper body for lack of support. OK, forgive my lame-ass joke, but Lee does concede that it took him most of his lifting career before he finally began to give leg training the same time and effort as he did for his chest, shoulders, back, and arms.

"Like most guys, I got into bodybuilding really wanting a big chest and arms, and those were what I focused the most on for a long time," he says. "Once I started competing seven years ago, I saw how badly my legs lagged behind. But it wasn't until about four years ago that I really started hitting them as hard as they needed to be hit." Now, in an effort to catch them up, Lee blasts his legs twice every week. "I don't use Hany's FST-7 Training for everything, but I do use it faithfully for legs," he explains. "The combination of straight sets and the 7s has already stimulated some crazy new gains in my quads and hams."

Banks also goes beyond the typical basic exercises and incorporates movements like thigh abductor and adductor machines, cable hip raises, and glute-ham raises. "I also do the usual exercises like squats, leg presses, and front squats, but I'm not about to avoid anything that could contribute to better leg development— because I am really going to need some serious wheels to hang with the pros when that day comes."



Training Split

	a.m.	p.m.
Monday:	Shoulders & calves	
Tuesday:	Quads	Hams
Wednesday:	Chest	Triceps
Thursday:	Cardio only	
Friday:	Shoulders & calves	
Saturday:	Back	Biceps
Sunday:	OFF	

LITHUANIAN LEVIATHAN!

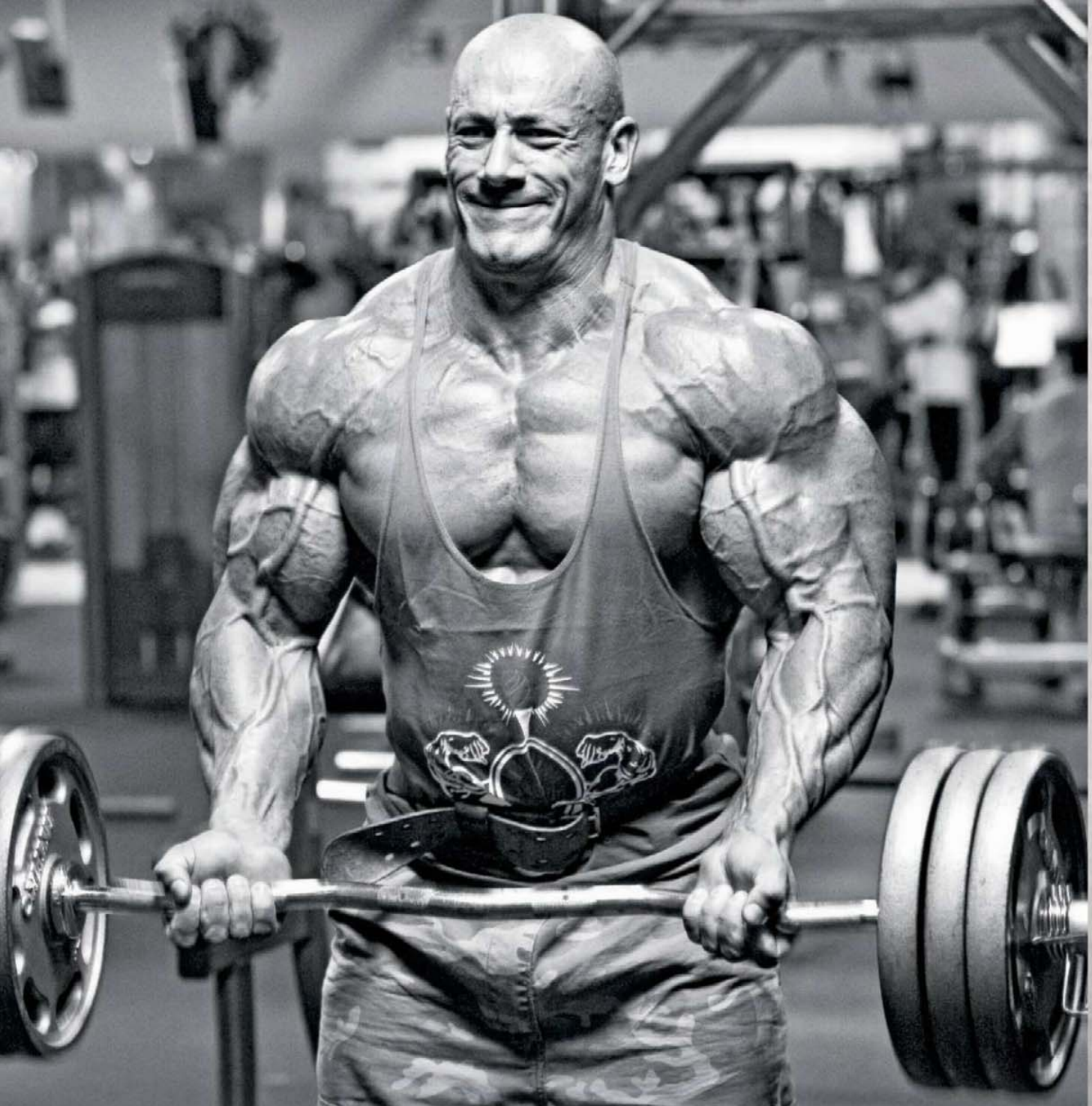
BIG ROBERT BURNEIKA IS ARMED & DANGEROUS AT THE NATIONALS

By Ron Harris,
Photography by Per Bernal

Prologue: A Big-ass Diamond in the Rough

Almost three years ago, I was up in Derry, New Hampshire to attend a regional show called the NPC Northeast Tournament of Champions. There were some pretty good bodybuilders competing that day, but nobody really outstanding, except for one guy— this gigantic bastard who was about the same size as Jay Cutler. His arms in particular were ridiculous. At 5'9" and 270 pounds, all I learned about him that day was that he was from Lithuania and had just made the transition from competing successfully in Strongman events. That wasn't too surprising, since several of the top men in that sport hail from the same former Soviet Republic. Those Russians do tend to big pretty big and powerful SOBs.





I found out the guy's name was Robert Burneika, and he lived a couple states away in Connecticut. Had Robert been anywhere near proper contest condition, he would have blown that show away so badly that it would have been comical. Because this particular event also featured the state shows for New Hampshire and Massachusetts, there was no Super-Heavyweight division. There wouldn't have been anyone over 225 to compete in it anyway, except for the freakishly large Lithuanian dude. So at the end of the night, smooth Robert placed second to a shredded guy who was almost 60 pounds lighter at the same height.

I knew I hadn't seen the last of this monster. Once he got his condition down, he would be dangerous. Though he didn't have the prettiest body around, Burneika was proportionate and carried the type of extreme mass that few men, even among the pros, rarely display. It was only a matter of time before I got the chance to finally get the story behind the giant, shortly after he took third place at the recent USA Championships in Las Vegas, the city he now calls home with his wife Katherine.

Early Lifting in Lithuania

Thirty-one-year-old Robert was raised in Lithuania, a nation on the Baltic Sea, which at one time was the largest country in Europe, and which was also the first Soviet republic to declare independence in 1990. In other



Biceps

Robert's biceps were just about the first thing to blow up in response to the iron back in the day, so he really doesn't train them anywhere near as heavy as he could. "I have done barbell curls with over 225 pounds before, but there is no need for that anymore," he says. He usually does no more than three exercises for 4 work sets.

Standing EZ-Curls

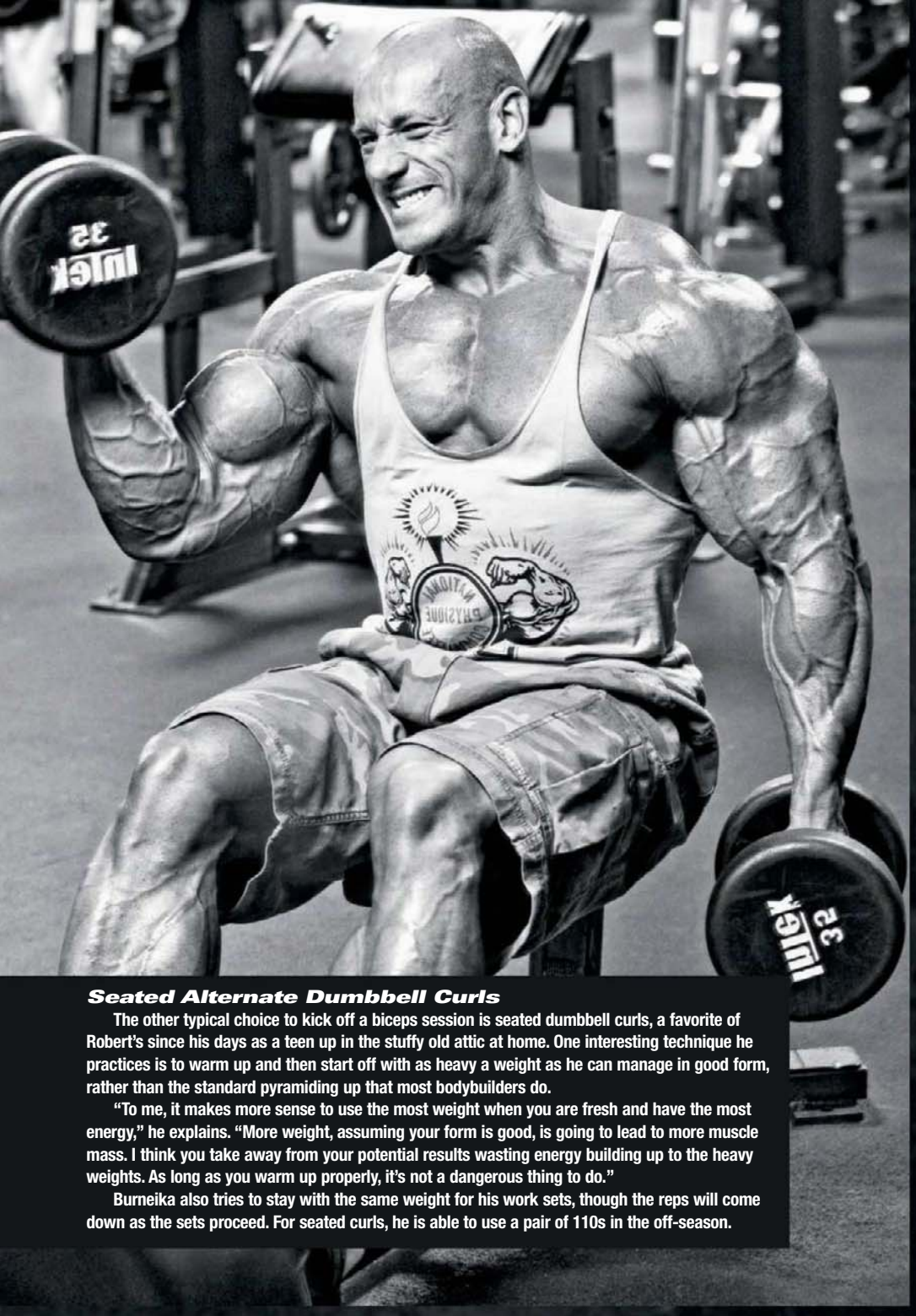
Burneika believes the best results for building muscle come from starting off with a heavy free weight mass-builder. On biceps day, that often comes in the form of EZ-bar curls. "I don't use a straight bar anymore as it puts a lot of strain on my wrists," he notes. He assured me that he didn't do anything crazy, warming up and then 'only' using three quarters, or 25-pound plates, on each side of the bar. Before adding the bar's weight, that's already 150 pounds.

words, don't call them Russians— they don't appreciate it. Robert learned a strong work ethic from his father, who owned and operated an auto body shop. But early on, Burneika discovered what would be his passion in life, the same way many of us did: by seeing former seven-time Mr. Olympia **Arnold Schwarzenegger** kicking ass on the silver screen.

"That's when I knew that I didn't want to work in auto-body repair, but instead to make my own body into something special," he says. Though he claims he was just an average-sized 14-year-old when he began pumping iron in his attic, Robert didn't remain that way for long. Gleaning as much information as he could from Eastern European bodybuilding magazines, he set to task in earnest and began seeing results almost immediately.

"Actually, I found I was naturally very strong," he explains. "That seemed to come before the size." At 18, he ventured down from his attic and started training at a gym in nearby Aludof. There, he was mentored by **Audrius Jegelevicius**, one of the nation's best bodybuilders. If the name sounds vaguely familiar, MD covered the 2009 NPC New York Metropolitan contest where he won the Super-Heavyweight and Overall titles. Also at the same gym was reigning IFBB Figure International champion **Zivile Raudoniene**.

"It's funny that we all came from the same gym in



Seated Alternate Dumbbell Curls

The other typical choice to kick off a biceps session is seated dumbbell curls, a favorite of Robert's since his days as a teen up in the stuffy old attic at home. One interesting technique he practices is to warm up and then start off with as heavy a weight as he can manage in good form, rather than the standard pyramiding up that most bodybuilders do.

"To me, it makes more sense to use the most weight when you are fresh and have the most energy," he explains. "More weight, assuming your form is good, is going to lead to more muscle mass. I think you take away from your potential results wasting energy building up to the heavy weights. As long as you warm up properly, it's not a dangerous thing to do."

Burneika also tries to stay with the same weight for his work sets, though the reps will come down as the sets proceed. For seated curls, he is able to use a pair of 110s in the off-season.

Lithuania, and we're all here in the USA doing well now," Robert notes. Burneika got his feet wet at age 19, competing in the national championships and taking fifth in his age division at about 175 pounds. He would not step on a bodybuilding stage again for nine more years, but the die was cast.

A Strongman in New England Evolves into a Vegas Muscleman

At age 21, a friend from Lithuania invited him to join him in Connecticut, where he would have greater opportunities to pursue his bodybuilding dreams. Though he spoke his native Lithuanian as well as fluent Russian and Polish, his English at the time was basic at best. Robert hired a private tutor to speed that process along, while at the same time accidentally falling into Strongman competition.

"My friend was doing these contests, and he suggested I give them a try because I was so strong." Robert did indeed do well at various regional contests over the next two years, specializing in events like the Atlas stones, the tire flip, and the log press. But his heart was never 100 percent into it, and deep down, he still envisioned himself as a pro bodybuilder.

"As I neared my late twen-

Sample Training Split*

Day One: Chest and triceps
Day Two: Quads and calves
Day Three: Back and biceps
Day Four: Shoulders, traps, and forearms
Day Five: Hams and calves

**Rest days are taken as needed. Robert may train two or three days before taking a day off, or he may train five days in a row at times. He changes his split approximately every two to three months as well.*

Don't Do This!

You will notice from the sample split shown that Robert often trains biceps after back. Unless you have the same 'problem' with your biceps that he does (and I hope you can read the sarcasm dripping between those quotation marks), namely that your biceps grow too easily and can easily overpower the rest of your torso if you're not careful, Burneika definitely does not recommend following his example.

"Most bodybuilders should either train biceps after a non-related muscle group like chest or shoulders, or on a separate day, only devoted to arms," he says. "Working them after back would be sabotage for most people, and especially anyone who finds his biceps are stubborn to growth."

ties, I realized that the clock was ticking," he says. "I had to make a decision to commit to bodybuilding if I was ever going to be really good at it, because you can't train for both Strongman and bodybuilding at the same time. They are two completely different sports."

After marrying a registered nurse (who just happens to be of Polish heritage), Katherine, Robert became a U.S. citizen and began competing in the NPC. After the initial contest, I happened to see him at where he hadn't yet figured out his diet ("I do it all on my own, no help from a nutritionist."). Burneika won his class at a couple regional events and qualified for national competition.

When he placed seventh at his first USA outing in Las Vegas last year, Robert and his wife immedi-





Preacher Curls

Preacher curls are another favorite of Robert's, though he won't do them first. "They do a better job of isolating the biceps because they take all the other muscle groups out of the movement," he states. "But in a power movement like barbell or dumbbell curls, that's not necessarily a good thing."



Dumbbell Hammer Curls

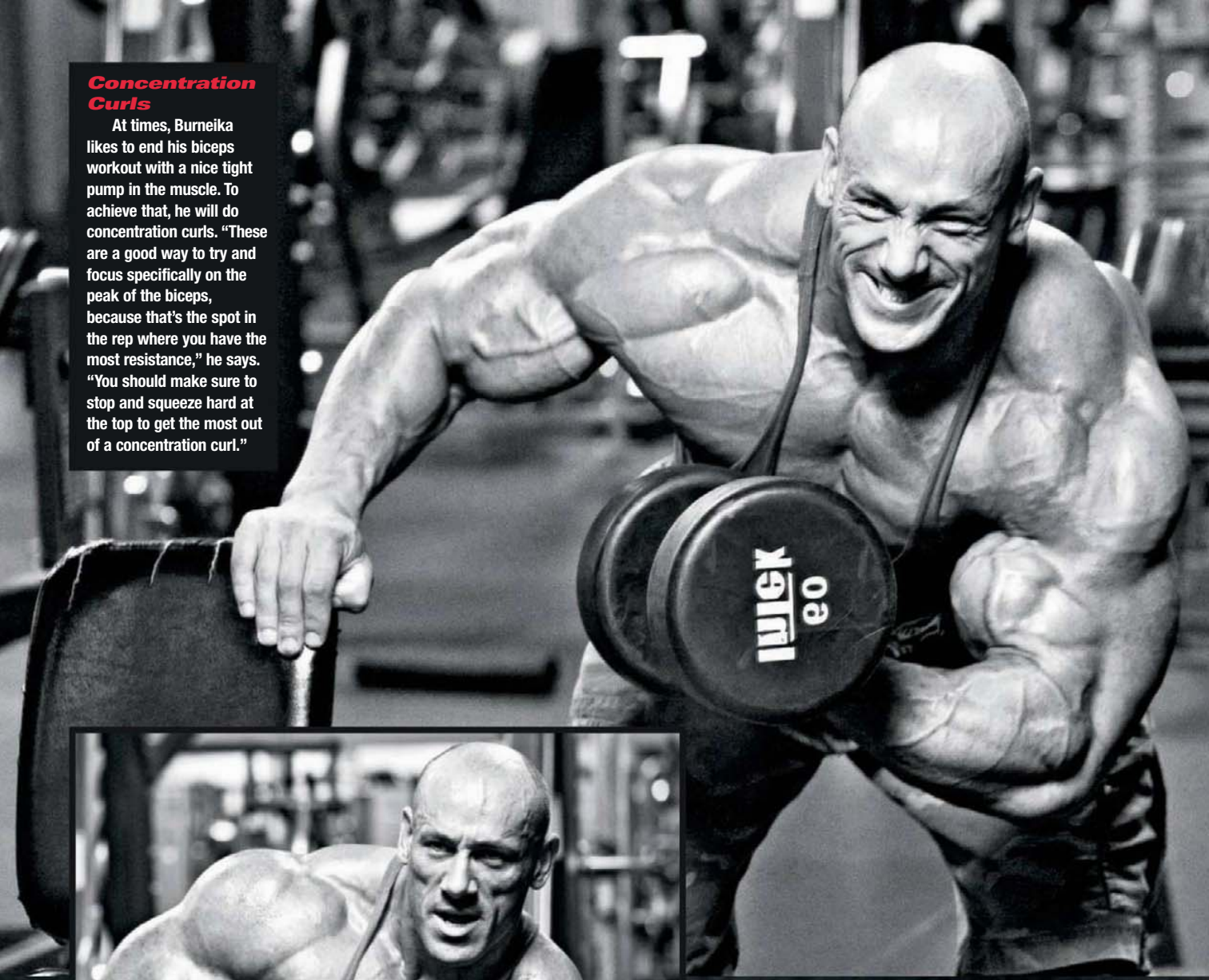
Robert doesn't do them all the time, but hammer curls have definitely played a major role in the sheer bulk of his biceps mass. A powerfully-developed brachialis muscle helps the biceps 'pop' and more importantly, gives it a thicker look when viewed from the front, as in the front relaxed or front lat spread poses. Burneika routinely uses dumbbells in the 100-110-pound range for hammers.

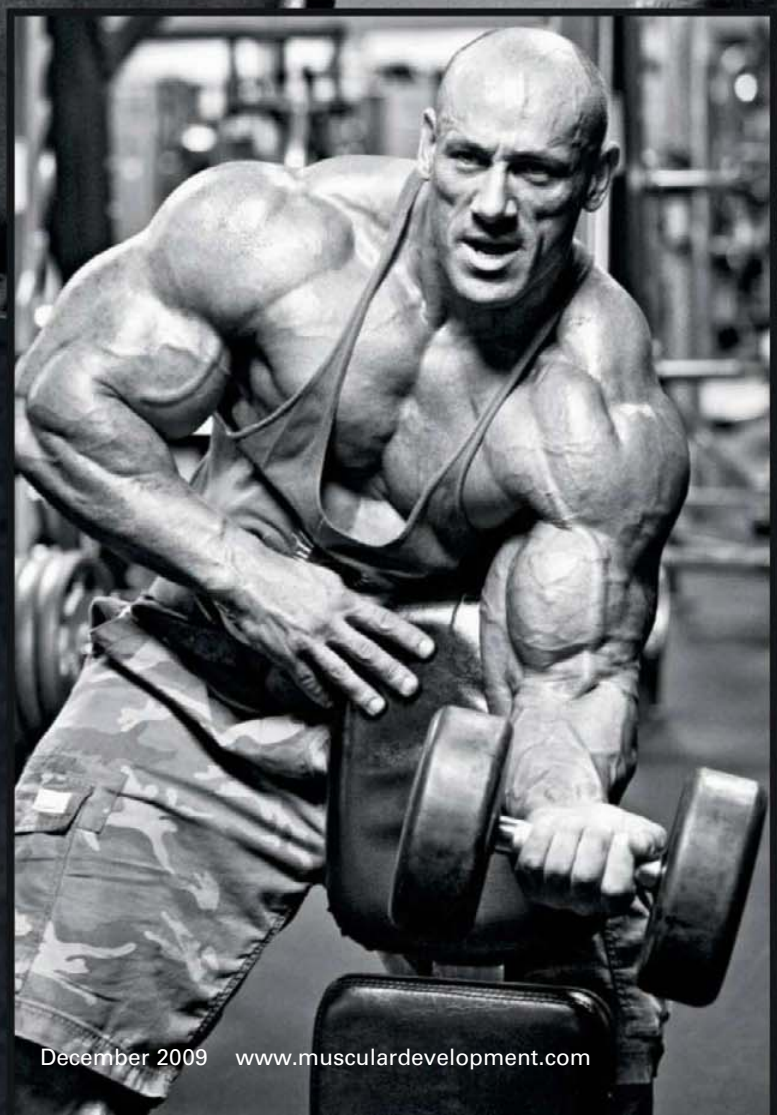
Typical Arm Workout

Biceps	
EZ-bar curls	4 x 8-12
Hammer dumbbell curls	4 x 8-12
1-arm dumbbell preacher curls	4 x 8-12
Triceps	
Close-grip bench presses	4 x 6-10
1-arm overhead dumbbell extensions	4 x 8-10
Dumbbell kickbacks	4 x 8-10
Cable pushdowns	4 x 15

Concentration Curls

At times, Burneika likes to end his biceps workout with a nice tight pump in the muscle. To achieve that, he will do concentration curls. "These are a good way to try and focus specifically on the peak of the biceps, because that's the spot in the rep where you have the most resistance," he says. "You should make sure to stop and squeeze hard at the top to get the most out of a concentration curl."



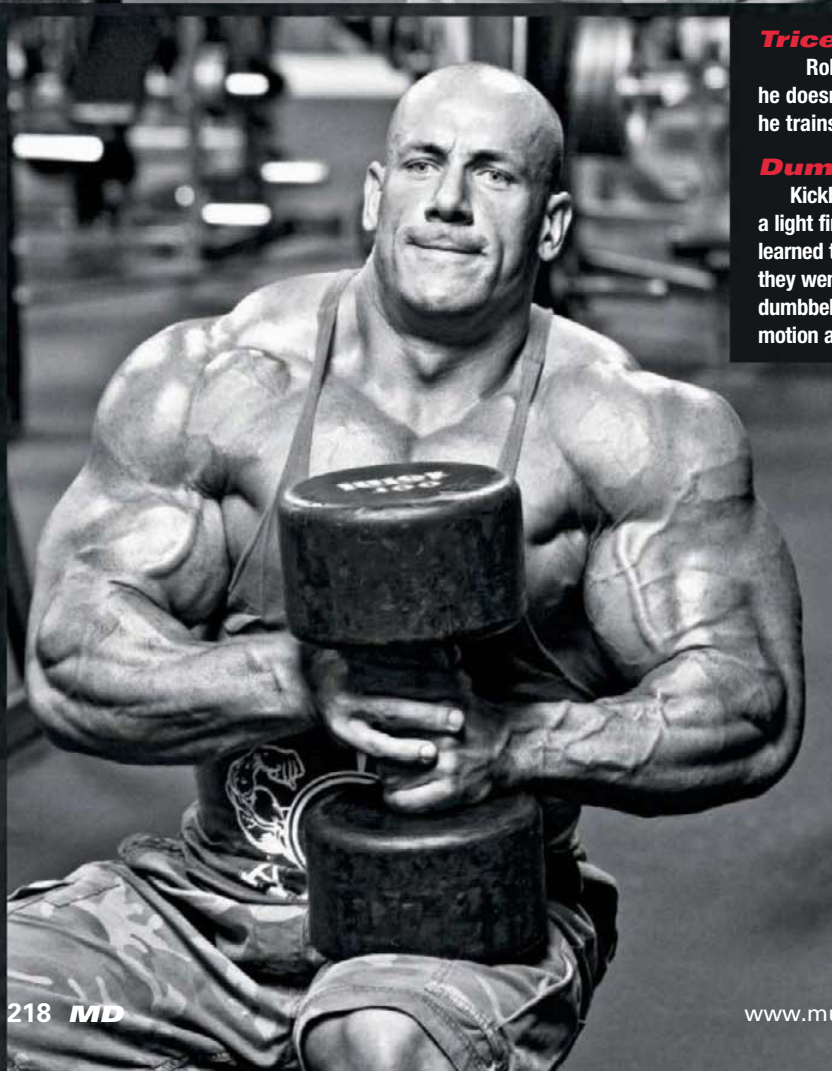


ately started to consider a move to the arid sunshine of Sin City. "By the end of the year, we were living here and it's been great," he tells us. "The weather is perfect, there are great gyms, I can work as a personal trainer, and I am friendly with guys I look up to like **Jay Cutler** and **Quincy Taylor**." The change of scenery and some helpful advice from Jay must have done Robert good, because he vaulted all the way to third place in the Super-Heavies this year.

Dumbbell Preacher Curls

He may use an EZ-bar once in a while for preacher curls, but far more often you will find him hauling a dumbbell over and doing the exercise one arm at a time. "It's a strict movement, and I go slow. I don't use too much weight on these." Again, it's all relative. The 85 or 90-pound dumbbell Robert handles here would be impossible for most bodybuilders to use in any semblance of the actual exercise.





Triceps

Robert's triceps are obviously very impressive, but he doesn't feel they quite match his biceps. To that end, he trains them heavier and with slightly more volume.

Dumbbell Kickbacks

Kickbacks are another triceps exercise widely held as a light finishing movement. Apparently when Robert learned the English language, he missed the part where they went over the word 'light.' He can handle a 90-pound dumbbell, and contrary to what you may suspect, the motion actually is that of a kickback.

Still Under Construction

That's what Robert does for his arms, which he freely admits don't need any more mass. "For them I want only more detail now," he tells us. "I am working most on building more shoulder and back width, plus more thickness in the upper chest." His goal is nothing less than to stand on the Mr. Olympia stage one day. "I know I can do it. Bodybuilding has made me so much more confident and disciplined, and now that I am moving up the ladder, I can see it happening for me as long as I keep trying my best and don't give up."



Seated One-Arm Overhead Dumbbell Extensions

After a heavy power movement to start things off, usually close-grip bench presses in which he regularly goes up to 455 pounds, Robert moves on to his favorite triceps exercise: single-arm overhead extensions. Most bodybuilders treat this as a light exercise, probably because few are very strong on it. This Lithuanian muscle man happens to be freakishly powerful. Would you believe he can do 8 reps with a 125-pound dumbbell? Just to be clear, that's with *one hand.* Holy Mother of God, that's a lot of frigging weight.

"I don't recommend that the readers attempt this," he cautions. "Because the weight is behind your head, you could tear your rotator cuff going very heavy if you're not careful." He also notes that he takes at least 2 warm-up sets to get to this weight.

Contest History

1997 Lithuanian Championships	5th, Juniors
2006 NPC Northeast Tournament of Champions	2nd, Heavyweights
2006 NPC East Coast	**Super-Heavyweight winner**
2006 NPC Eastern USA	**Super-Heavyweight winner**
2008 NPC USA	7th, Super-Heavyweights
2008 IFBB North American	6th, Super-Heavyweights
2009 NPC USA	3rd, Super-Heavyweights



V-Bar Cable Pushdowns

Burneika does like to finish triceps off with a swollen pump to stretch out the muscle fascia, and cables are the perfect tool for the job. "Here is where I will also increase the reps to as many as 15 per set," he notes. "Normally on triceps I like to stay around 8 to 10 reps to use heavier resistance." Just as he doesn't use a straight bar for curls, he prefers an angled bar attachment such as the V-Bar for triceps.

Rope Pushdowns

Another frequent choice for Robert's finishing cable movement for the triceps is pushdowns using a rope attachment. "The rope is very versatile," he says. "You can spread the ropes apart or keep them together, depending on how heavy you want to go and what part of the triceps you want to target more."



One More Party Member for the Russian Revolution!

Several of the most massive specimens in pro bodybuilding in recent years have hailed from the former Soviet Union. **Alexander Federov**, **Eugene Mishin**, and of course; MD's own Big Bad **Dennis Wolf** all came to our sport from Russia. At the rate he's going, Robert Burneika will be among this group of Slavic Supermen very soon.

It's true that the man never had the slightest trouble building his gigantic arms into the outrageous proportions they are today. So why do we feature an arm training article about him? Inspiration, my friends! Whose arms would you rather look at before heading to go blast bi's and tri's— some average slob with the same 18-19-inchers that you see at least a couple of in just about any gym? Or would you rather be shocked and awed by these monstrosities that are as big as a lot of guys' thighs? Personally, I vote for the monster guns. Right now, Robert Burneika is still terrorizing the amateur ranks with those weapons— but soon the pros will have to deal with a mass invasion, straight out of Mother Russia! ■



Weights and Measures

Height:	5'9"
Weight:	253-310
Chest:	56'
Arms:	24'
Quads:	32'
Calves:	21.5'
Neck:	21.5'
Waist:	36'
Bench presses:	495 x 8
Military presses:	405 x 4
Barbell curls:	250 x 8
Barbell rows:	495 x 8
Deadlifts:	650 x 8

(no longer deadlifts, due to lower back injury)

Classic Shape & Proportion

SHAWN "FLEXATRON" RHODEN's AMAZING COMEBACK

Exclusive Interview by Flex Wheeler, Photography by Per Bernal

Comebacks often don't go as planned for athletes, as we all know. Sometimes the spirit is willing, but the body simply won't do what you want it to anymore. When Shawn Rhoden decided to return to competition after nearly seven years away, not only from the stage but from training itself, few would have predicted his comeback would have a happy ending. Seven years out of the gym and away from eating healthy is a long time. But it didn't matter.

At the recent IFBB North American, Shawn Rhoden stormed to a Heavyweight and Overall victory with an amazing physique, showing the type of incredible shape and proportion that comes along only every few years. His story serves as an inspiration for anyone who might think it's too late to go after his dreams. Shawn Rhoden proves that it doesn't matter where you've been, only where you're at and where you plan to go.

FW: Okay bro, you know I have to get this out of the way first. What's up with that nickname, Flexatron? It wouldn't have anything to do with me, would it?

SR: (laughs) I'm afraid so! I was practicing my posing one day, and the song I was using was the theme from *The Terminator*. A friend of mine named Peter Cardona came up with it. He said I reminded him of a mix between you and a machine.





FW: I can live with that. At least you did your own variation on Flex, so that's cool. People don't know much about your background, so let's start there. You grew up in Jamaica but you came to live in the Washington D.C. area when you were 16. How did you get into weights, and bodybuilding?

SR: If I had stayed in Jamaica, I doubt I ever would have gotten involved in any of this. The big sports there are soccer, cricket, and track. I was actually a very good soccer player, and almost had a tryout with D.C. United when I got here. I was also a competitive swimmer. When I was 17, soccer season ended and I thought it would be good to try weight training to strengthen my upper body for swimming before that season started up.

I had a cousin named John Lancaster who had already competed in a couple teenage bodybuilding shows, and he offered to take me to the gym and show me what to do. It didn't seem like the workout was anything too tough, but the next day I woke up and everything was in pain! I was sore all over. John showed up to take me to the gym again and I told him to get lost.

FW: Obviously you did get back to the gym.

SR: I liked the way my body responded and started to change. I think the turning point that made me really want to stick with it was when John and I were on the way to the 1994 Natural Eastern Classic. I was still a teenager, and he dared me to try crossing over into the Open class, too. He said I didn't have the guts. Just to see how I would do, I tried it. I wound up winning the Teenage class, plus the Men's Open Middleweight and Overall. That's when I said you know, maybe I could be pretty good at this, if I'm 19 and I'm beating guys who have been training as long as I've been alive.

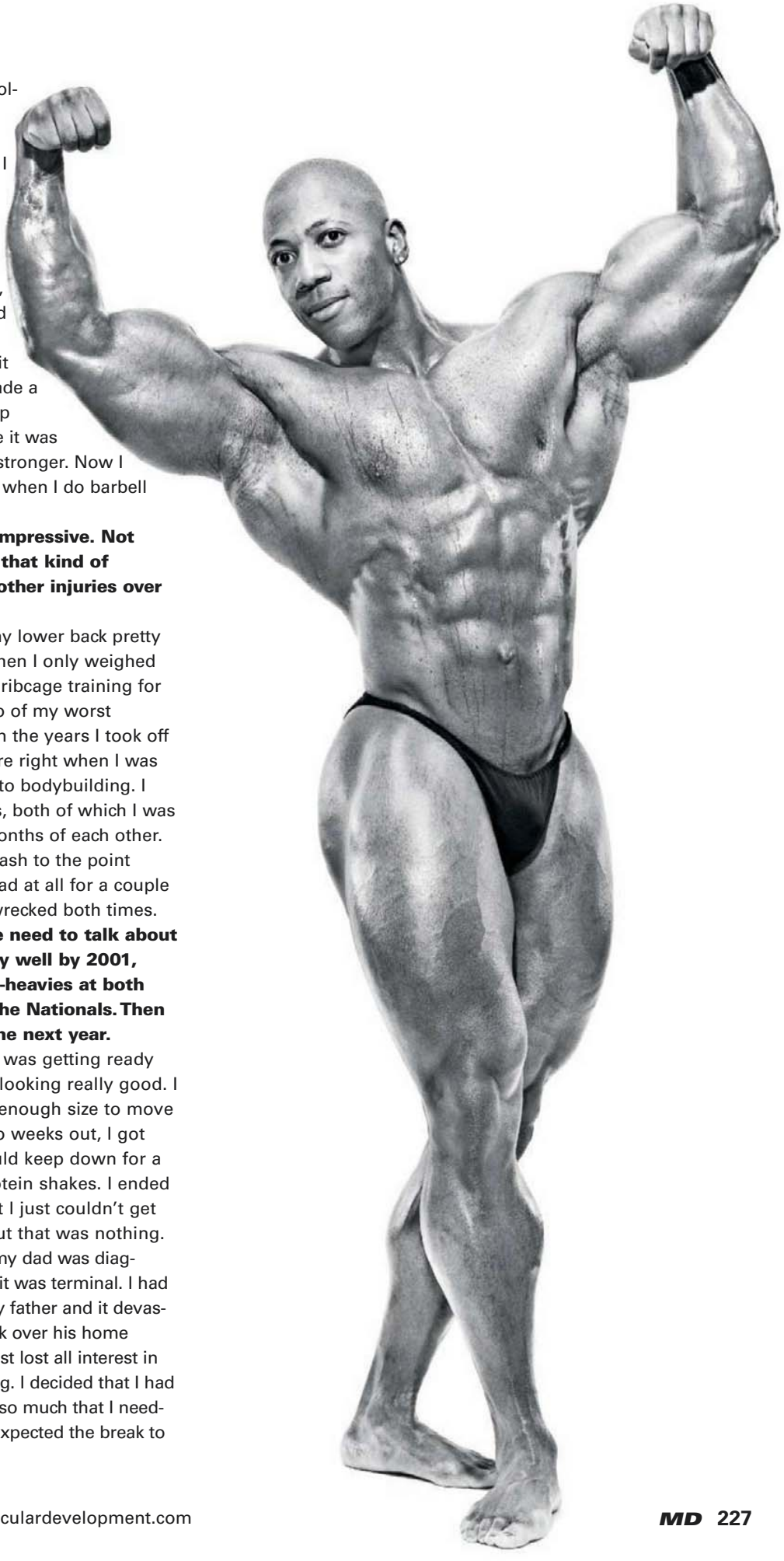
FW: I know you had a terrible hand injury—was that before or after this?

SR: That actually happened the year before. I put my hand through a glass window and severed nine tendons. It took them half a day just to get all the glass fragments out before they could re-attach the tendons. I was terrified I was going to lose the hand, that's how bad it looked— just a big bloody mess. I went through physical therapy for it, but after that the doctor still wasn't very optimistic. He told me I would never lift weights again with my right hand, never play the piano or the guitar.

FW: You play both of those?

SR: Nope, never. I think he was just trying to make a point about how serious the damage was. I

did end up losing my dual college scholarship for soccer and swimming, which was a blow. So after that, I figured I might as well keep bodybuilding. My grip was so weak with that hand that I had to strap in for everything— curls, bench presses, even squats. The hand would swell up with fluid every so often and I'd have to go get it drained. But eventually, I made a real effort to build up my grip strength— not only to where it was before the injury, but much stronger. Now I never use straps— not even when I do barbell rows with 405.



FW: Damn, bro, that's impressive. Not many guys can hold onto that kind of weight. You've had a few other injuries over the years too, right?

SR: Yeah, in 1996 I hurt my lower back pretty badly, squatting with 500 when I only weighed 205. I hurt my wrist and my ribcage training for the North American. But two of my worst injuries actually happened in the years I took off training, and both times were right when I was thinking about getting back to bodybuilding. I got in two bad car accidents, both of which I was rear-ended in, within two months of each other. One of them gave me whiplash to the point where I couldn't turn my head at all for a couple months, and my back was wrecked both times.

FW: OK, that's what we need to talk about next. You were doing really well by 2001, taking second in the light-heavies at both the North American and the Nationals. Then things went very wrong the next year.

SR: They sure did, Flex. I was getting ready for the Nationals and I was looking really good. I had worked hard to put on enough size to move up to the Heavies. Then, two weeks out, I got food poisoning and all I could keep down for a while was Benadryl and protein shakes. I ended up holding a lot of fluid that I just couldn't get rid of and took 14th place. But that was nothing.

Not long after the show, my dad was diagnosed with lung cancer, and it was terminal. I had always been very close to my father and it devastated me when he died. I took over his home remodeling business and I just lost all interest in training, much less competing. I decided that I had been dieting and competing so much that I needed a break, anyway. I never expected the break to last almost seven years.



FW: You didn't train at all that whole time?

SR: Nope. I was eating pure crap, too. Pizza was a very common dinner for me, and I used to keep those Little Debbie oatmeal crème pies right next to my bed so I could eat them watching TV. My weight fluctuated from as low as 205 to as high as 240, but when I was 240 it was *not* pretty.

FW: OK, so what got you back into our world again?

SR: My cousin John was part of it again, oddly enough. He asked me to go watch a local natural show put on by the OCB. We went, and I saw a few guys who I used to compete with back in the day. I would have expected them to have gotten a lot bigger or improved somehow, but they all looked the same as before. So I said, I could come back, I could beat those guys and I could be better than ever.

I told John I was going to get back to the gym and he just laughed at me and said, yeah right. Sure you are. I had said that a few times over the years and never followed through, but this was different. I just felt it was time. I called up my old training partner, a woman named Kina Elyassi who had been a bodybuilder, a professional boxer, and kickboxer. She was living in Florida and she had been away from the gym for a little while herself since she had placed at the 2007 Team Universe. Once I said I was getting back into bodybuilding and I wanted her to train with me again, she didn't hesitate. Not only was she in, she moved back up here.

FW: For real? She moved just to work out with you? That's crazy!

SR: Yep. That was right around Thanksgiving of last year. And let me tell you, the first couple weeks back in the gym were brutal. It was pathetic to see how weak I had become compared to before. I was struggling to squat 135, and my whole body was shaking when I tried to press 95 pounds behind my head for shoulders. The soreness I felt was just brutal. But my body responded well.

FW: That muscle memory sure kicks ass, don't it?

SR: Definitely. By the time I went to this year's Arnold Classic, I was up to an all-time high of 258 pounds. That was where I decided to compete again this year. Just being in that atmosphere around all the guys and girls from the magazines got me all fired up. I talked to **Dexter Jackson**, **Chris Cormier**, and **Eric Hillman** from Europa Sports, and they were all very sup-

Contest History:

1994 Natural Eastern Classic	**Teen Lightweight and Overall**
	Open Men's Middleweight and Overall
1997 Mid-Atlantic Natural	2nd, Light-heavyweight
1997 East Coast Tournament of Champions	**Light-heavyweight and Overall**
1999 Jan Tana Amateur	2nd, Light-heavyweight
1999 Team Universe	3rd, Light-heavyweight
2000 Team Universe	4th, Light-heavyweight
2001 IFBB North American	2nd, Light-heavyweight
2001 Team Universe	2nd, Light-heavyweight
2002 NPC Nationals	14th, Heavyweights
2009 IFBB North American	**Heavyweight and Overall**







portive and encouraging. They all agreed that I would do very well once I got in shape.

So the day I got home, I started dieting just to see how my body responded to eating super clean again. A friend of mine named Josh Beach, who was the 1999 Junior National Heavyweight winner, set me up with a solid diet plan. I also talked again with IFBB pro **Yohnnie Shambourger**, who has been a mentor of mine since I was a teenager.

My friend **Fred Smalls** also was very helpful. I went up to Delaware to see him while he was getting ready for the USA, and he took a look at me. Fred has always been brutally honest, and I knew he would tell me if I was being delusional about my goal to come back and turn pro this year. But Fred said Shawn, you're really gonna put it together this time. I feel it.

FW: From what I understand though, the North American wasn't in your original plans.

SR: It wasn't at all. I had always done well at the Team Universe, and that seemed like the most logical show for me to attempt an Overall win and get my pro card at. Then, I was looking pretty lean and there was a local NPC show called the Delaware Open happening. Even though I was only in about 80 percent of my best condition, I decided to just jump in and see how I did— no carb-depleting or loading, I didn't drop my water, just literally showed up with my trunks on and won the Heavyweight class.

That was at four weeks out from the North American. I met a woman at the show named Gretchen Ross who had prepped a few girls for the show, and she sent some of my photos to Hany Rambod and Kim Oddo. Kim was the one who contacted me and gave me some good ideas for tweaking my diet. He had me bump up my meals from five a day to seven, and add in a lot of red meat.

The transformation my body went though just from that was like night and day. I started to think, you know what? I was second at the North American the last time I did that show and it's coming up, why don't I try that? If I get my ass kicked there, I can still just do Team Universe anyway.

FW: So that was it, you decided to do it?

SR: Not really. I started studying the photos of the heavyweights from the past couple years at that show and comparing myself to them, and that did bring back my competitive fire quite a bit. I used them as motivation at every workout, like a mental slideshow, if you

will. I didn't send in my entry form until the last possible minute, though.

FW: So you get to the show, and the heavies turned out to be a pretty big class— almost 30 guys.

SR: To be honest, I got very intimidated for a little while at the weigh-ins. Some of them looked so big that I began to second-guess myself and wondered what the hell I had been thinking. But I wasn't going to give up. A lot of guys get onstage and they're already beaten mentally. I have the attitude that if I worked hard to get in shape, I'm gonna fight and give it my best no matter who I have to stand next to. I don't care if it's **Ronnie Coleman** onstage with me. If someone beats me, he's gonna have to work for it—I'm not handing it over to him.



FW: Once the judging started, did you know you were going to do well, maybe even win?

SR: It's funny, because for a while I thought I was not going to even make the top five. I was in the first callout, which obviously is a great thing. Then we got back in line, and I stepped off for a minute to towel off some sweat and oil and have a sip of water. The head judge called the other four guys back, plus a new guy and I was like, hey! What about me? I started to worry that because I had stepped away for a minute, they forgot about me and it had been a big mistake on my part.

There were a few more callouts, and then the judge said thank you, we'll see you back tomorrow night. I was beside myself, but as we were all leaving, the other guys were congratulating me ahead of time for winning the class. I thought they were joking, but they assured me they were serious. Trust me, they each said, you got this one in the bag.



So after that, I went to watch the Supers and took mental notes. Immediately I was thinking that I would have to beat whoever won that class if I wanted the Overall and the pro card. Over the next day, I stuck to my steak and sweet potatoes, and only drank a total of 16 ounces of water and four ounces of coffee. I didn't want to take any chances.

FW: Now at 5'10" and 220, you're not what most people would consider a mass monster. But with your small joints and your shape, you create an illusion and you look just as big as the heavier guys.

SR: Yeah, you know, obviously I have that genetic muscle shape and the small joints that makes the mass I have seem to be greater. In contest condition, my waist is down to 27 inches.

FW: Come on, seriously?

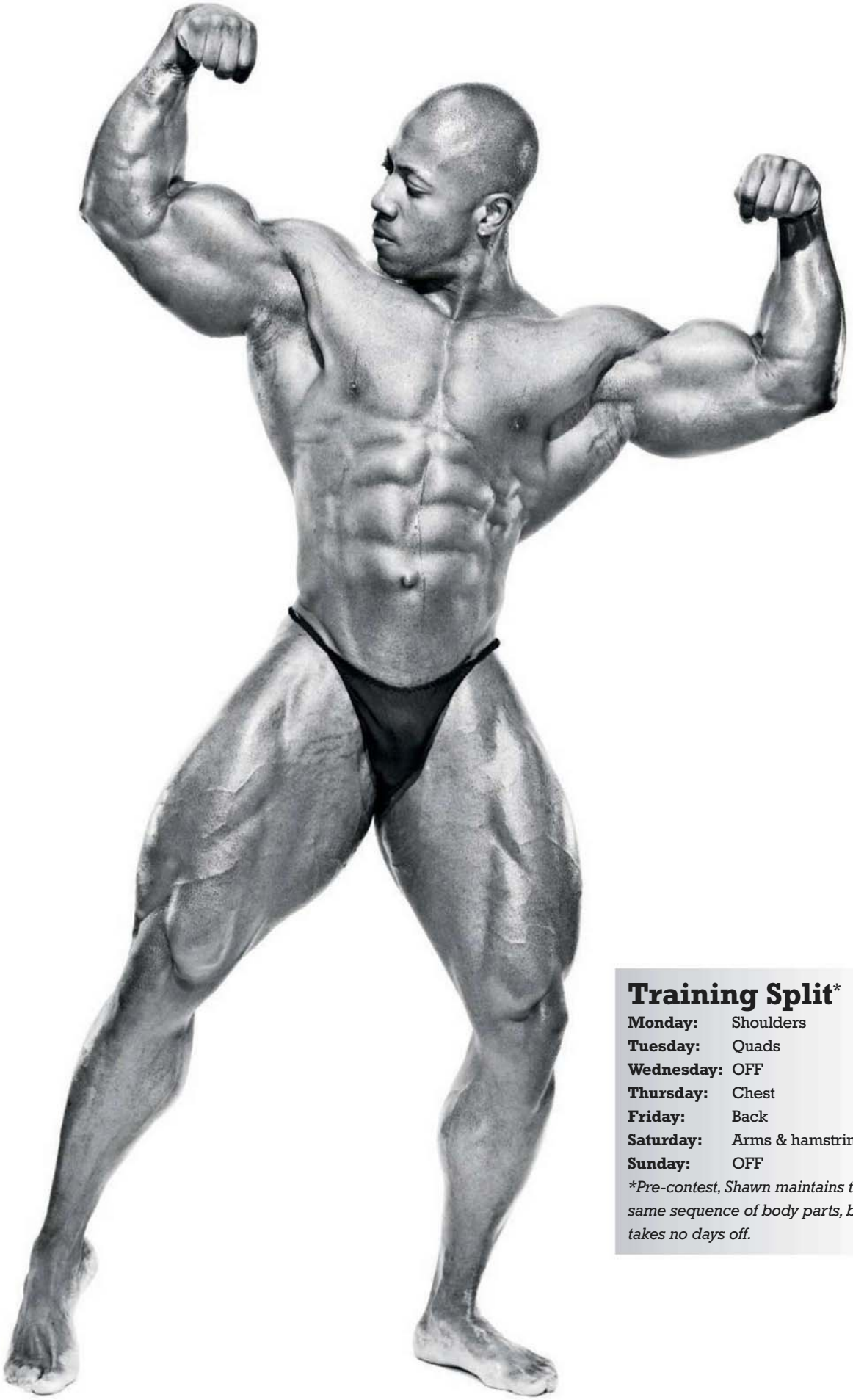
SR: Yes, really. My legs are actually two inches bigger than my waist onstage!

FW: So you won our pro card at a show you didn't plan on doing, after being back in training for only eight months. What's next for Flexatron?

SR: I have been talking to Hany Rambod and we'll be working together on a total overhaul. If I was able to make that much progress in just a few months, I think with a sold eight or nine months of dedicated off-season training, I can make some crazy improvements. I want more upper chest, I need to drop my lats down more, just get thicker overall while keeping my small waist and my lines intact. I'm very excited to see what I can do.

FW: I'm excited for you too, bro. I think you have a great future ahead of you in this game.

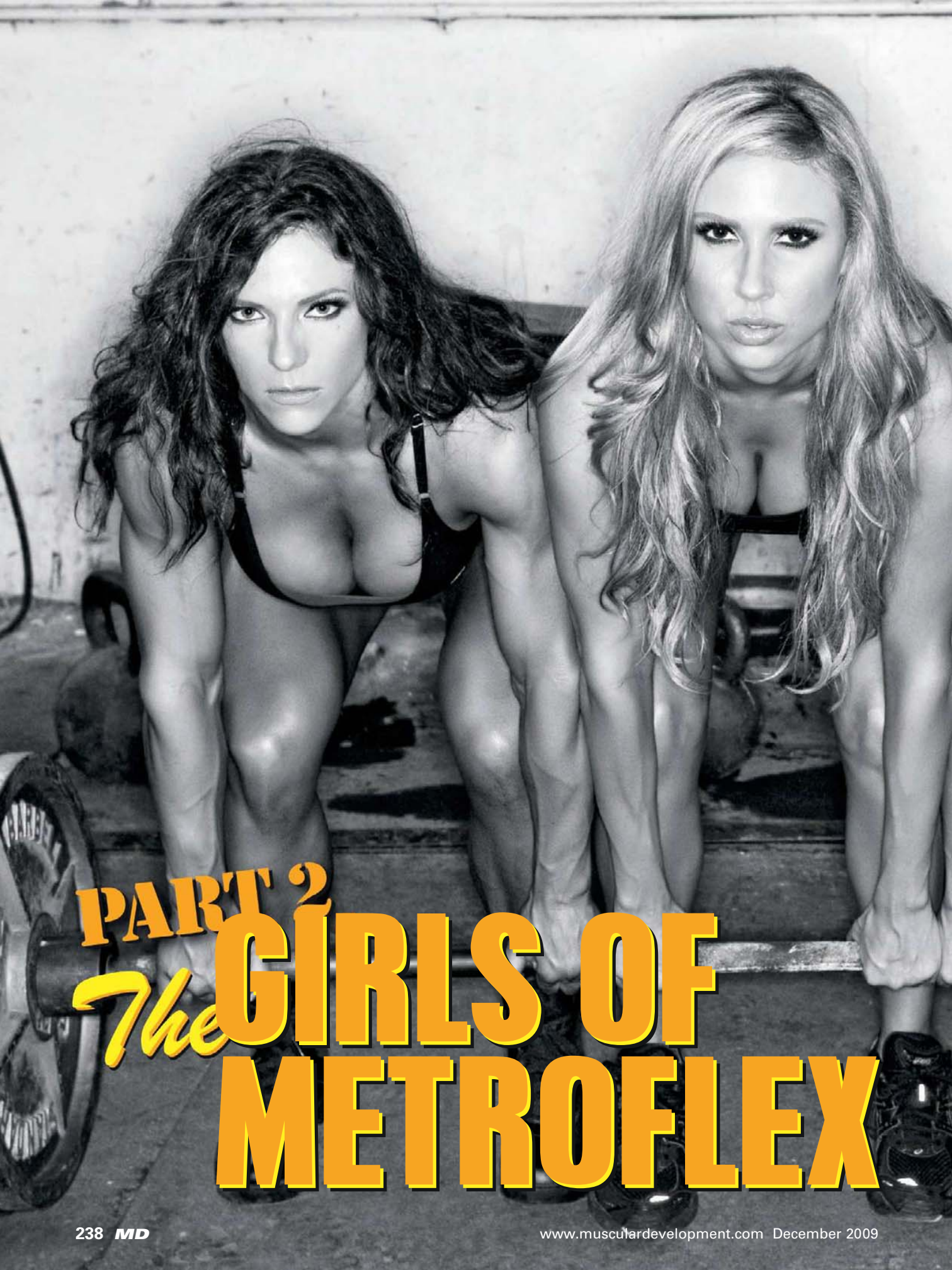
SR: Thanks Flex, that means a lot coming from you and I appreciate it. When I started competing, my goal was to win the Arnold Classic one day. I even promised my dad I would do it – so that's what I will be working toward over the next couple years. Wish me luck! ■



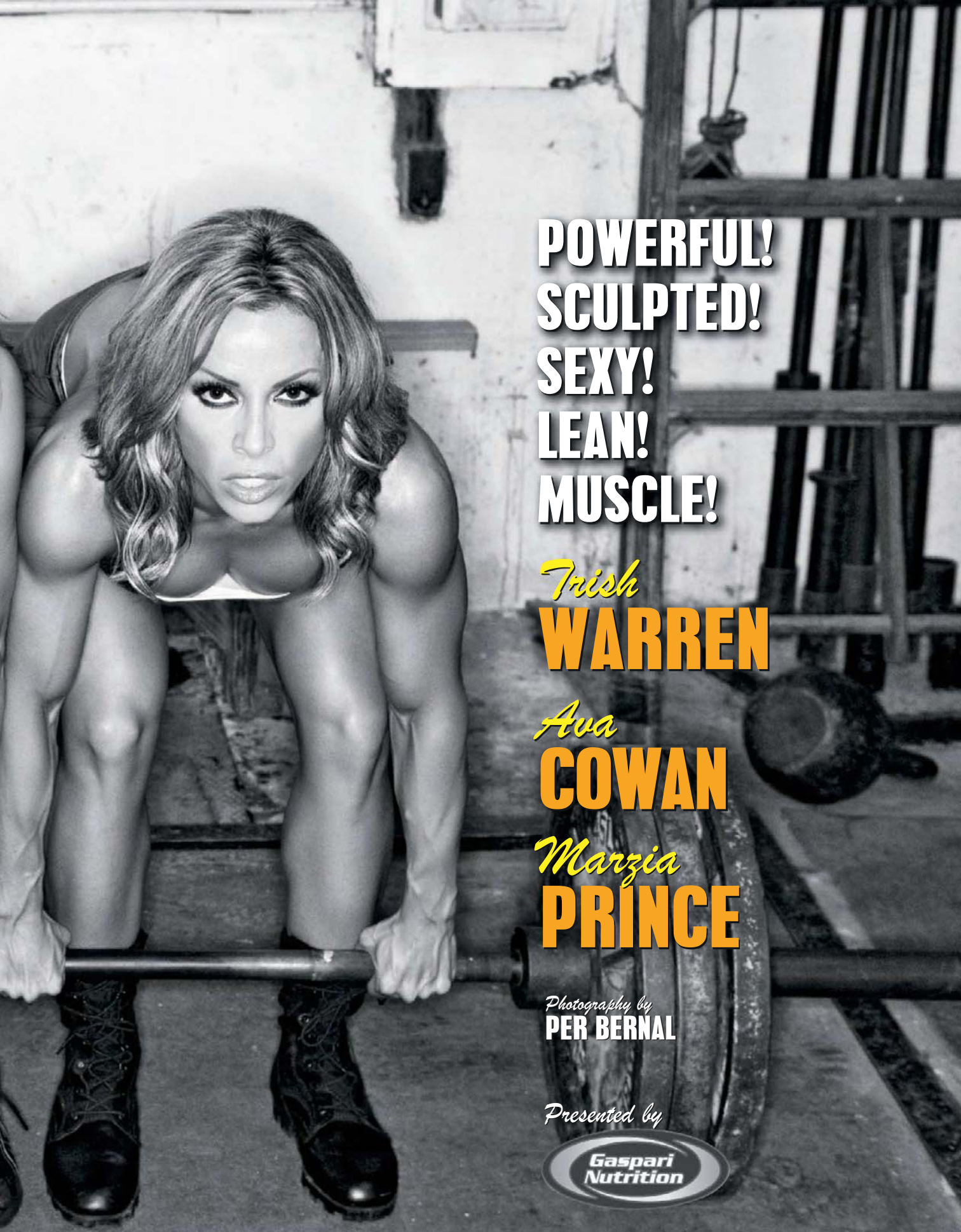
Training Split*

Monday:	Shoulders
Tuesday:	Quads
Wednesday:	OFF
Thursday:	Chest
Friday:	Back
Saturday:	Arms & hamstrings
Sunday:	OFF

**Pre-contest, Shawn maintains the same sequence of body parts, but takes no days off.*



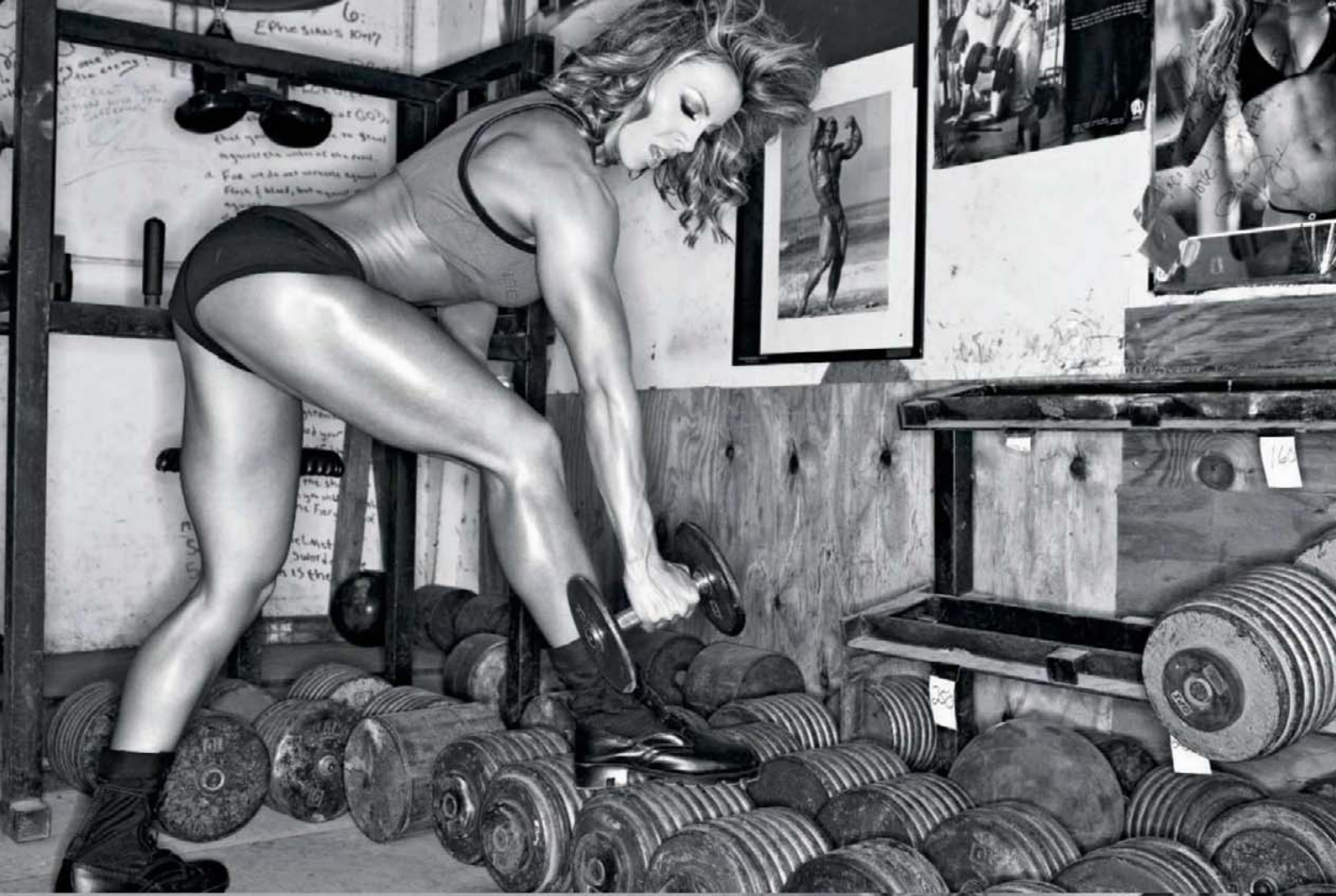
PART 2 The GIRLS OF METROFLEX


POWERFUL!
SCULPTED!
SEXY!
LEAN!
MUSCLE!
Trish
WARREN
Ava
COWAN
Marzia
PRINCE
Photography by
PER BERNAL
Presented by
Gaspari Nutrition


FORZA





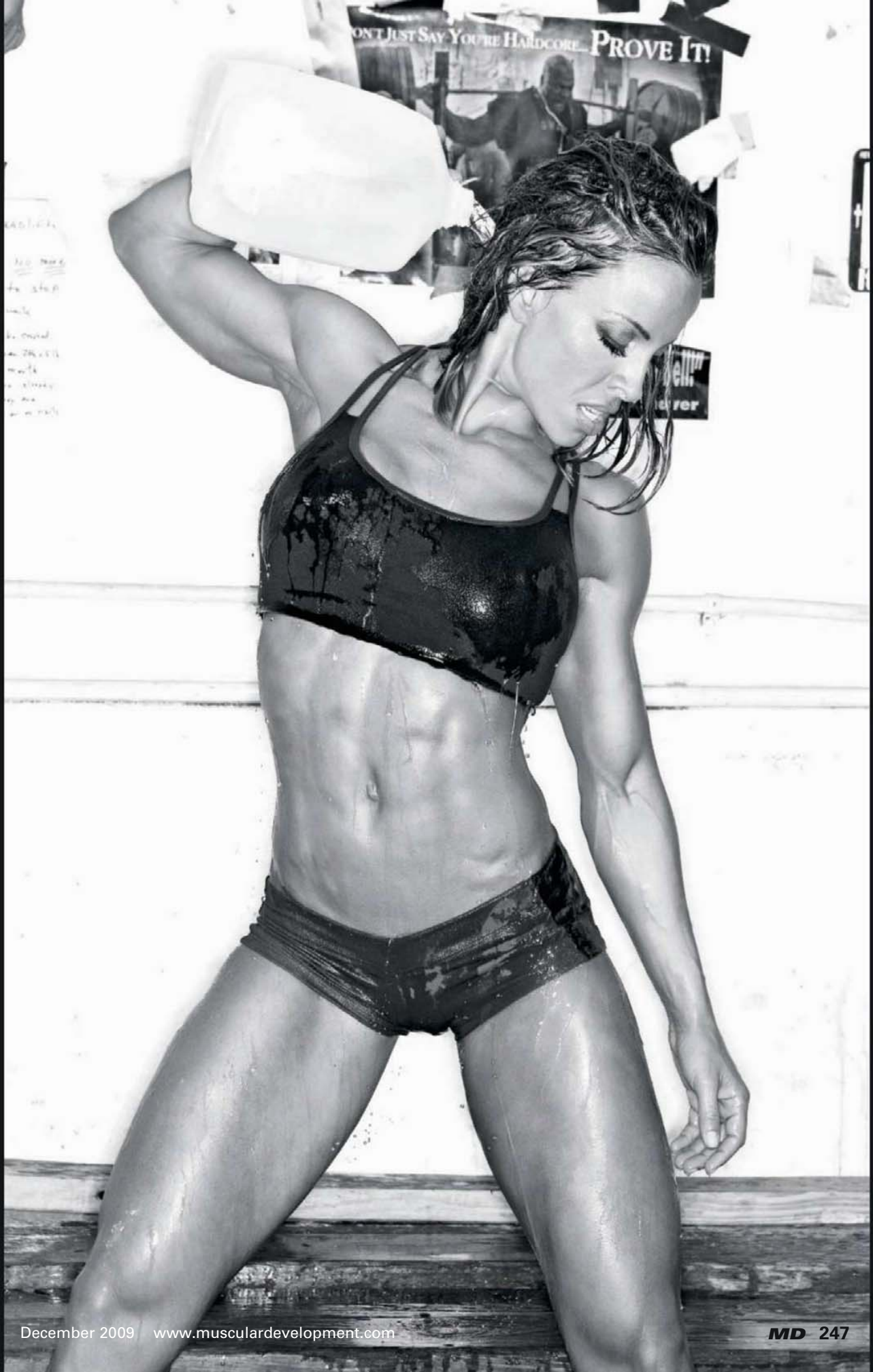



NO PAIN NO GAIN!!






STANDARD


ON'T JUST SAY YOU'RE HARDCORE... PROVE IT!


ALL
-Billy Joe



DORIAN YATES

BLOOD&GUTS

By Dorian Yates



SPREAD YOUR WINGS: MY GUIDE TO BUILDING A BETTER BACK

New Standards and Breaking Down Mental Barriers

Over the course of my Mr. Olympia reign, I became known for setting a completely new standard for back development, in much the same way that **Tom Platz** had done a decade earlier when it came to legs. That's how it usually is in any sports endeavor, like when my fellow Brit Roger Bannister ran the four-minute mile in 1954. Until then, such a feat was considered impossible. Yet once he had done it, the mental barriers came down and runners began doing it all the time.

It was much the same with back muscularity. Until I came along and set the new standard, bodybuilders never thought it was possible to build so much thickness, width, and detail in the lats. After me, **Ronnie Coleman** took his own back to a new level of freakiness. Not to say that his back was better than mine— he had a bit more overall size and I had more detail to mine— but you get the point.

I would never have built my back to the proportions I did, had it not been for a few champions who came before me. Foremost on the list would be the man who won eight Mr. Olympia titles just before my reign began, **Lee Haney**. Lee's structure alone had all the makings of a great back: very wide clavicles and a very small waist. So even before he started adding muscle back there, he already had a pronounced V-taper. While he was Mr. Olympia, one of Haney's most formidable physique weapons was his wide, thick back. It wasn't overly detailed, but it was still better than anything we had seen before in his predecessors.

The man who actually proved to be my greatest inspiration to make my back a strong point was the late **Momo Benaziza**. Momo beat me the first time I competed as a pro at the 1990 Night of Champions. It was the only time I was ever beaten as a pro, and the loss stung. The main reason Benaziza beat me was his thick, rugged back. It had such depth and was etched in detail all the way from his traps down to his draping lower lats,

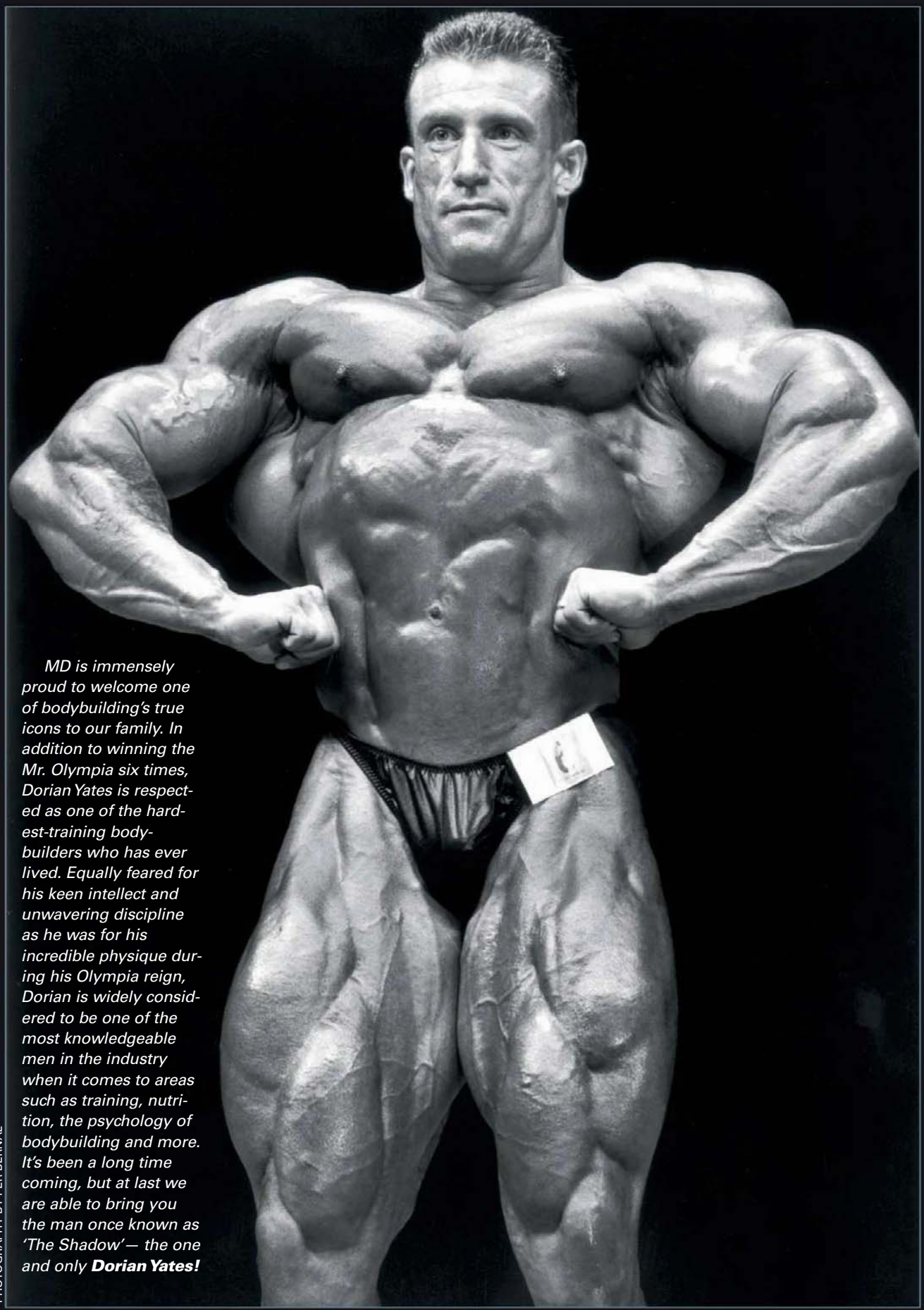


Ronnie Coleman

and it made mine pale in comparison at the time. Right then and there, I set it in my mind to get that same look for my own back, and for inspiration, I tacked up back shots of Momo at my home and at my gym.

Why Don't We See More Great Backs?

Since Ronnie retired, I haven't seen many backs in pro bodybuilding that I considered exceptional. I suppose this **Joel Stubbs** bloke from the Bahamas would qualify, but it's hard to give him full credit since he doesn't have a very complete physique overall (light in the



MD is immensely proud to welcome one of bodybuilding's true icons to our family. In addition to winning the Mr. Olympia six times, Dorian Yates is respected as one of the hardest-training bodybuilders who has ever lived. Equally feared for his keen intellect and unwavering discipline as he was for his incredible physique during his Olympia reign, Dorian is widely considered to be one of the most knowledgeable men in the industry when it comes to areas such as training, nutrition, the psychology of bodybuilding and more. It's been a long time coming, but at last we are able to bring you the man once known as 'The Shadow'— the one and only ***Dorian Yates!***

PHOTOGRAPHY BY PER BERNAL



legs). If you ask most bodybuilders why they don't have great backs, they will often give the excuse that only a handful of guys with very lucky genetics are capable of building backs like me or Ronnie. I can't speak for Ronnie, but I don't think there was anything very special about my genetics in that area. It's true that my lats do insert very low, but I see plenty of pros with similar attachments.

The real reason is that most bodybuilders fail to grasp the function of the back and never train it properly. The basic function of the lats, without getting overly technical, is to bring the arms down from an overhead position and also to bring the arms back when they are in front of the body. In other words, a pulling down movement as well as pulling back as in any type of row. To work the lats completely, the lower back must be arched, not rounded.

Another common limiting factor toward building the lats is that it's quite easy to let the biceps or momentum do the actual work rather than the lats, and as you should know, the biceps are much smaller and weaker than the lats. Therefore, if your biceps give out first, your lats never receive sufficient stimulation needed to spark growth.

The final and perhaps most significant issue working against back development is the simple and painfully obvious fact that the whole muscle group is in back of you, and you can't see it. Not only does the adage 'out of sight, out of mind' prove sadly appropriate in this case, but not being able to see the lats while you work them also makes it much more difficult to establish a strong mind-muscle connection with them, as opposed to 'mirror muscles' like the chest and arms.

I can say from the experience of having coached many bodybuilders over the years that the back is the one area where establishing this connection is the most critical. Just about anybody can stimulate the chest to grow with bench presses, the biceps with curls, or the quads with squats— but stimulating the lats whilst performing pulldowns or rows is not quite so simple. The very first thing I do when taking a bodybuilder through a back workout is to cut the weight they are using— often by half— and have him or her focus intensely on feeling the lats contract as they pull, hold the peak contraction point and squeeze the lats as hard as possible, and feel them stretch as they lower the resistance. I can't tell you how many of them have been stunned to actually feel their lats working for the very first time once they do this.

The Myth of Wide-grip Superiority

One myth that has held back the development of lats the world over is the persistent idea that using a wide grip on chins and pulldowns is the best way to build wider lats. This myth probably has its origins in the fact that using a wide grip on any vertical pulling motion will selectively recruit the smaller upper back muscles like



the teres major and minor, the upper portion of the traps, and the rhomboids.

When a bodybuilder feels these smaller muscle groups at the top of the back working, he often assumes he is making his lats wider. But the lats actually originate under the armpits and insert near the waist. Using a wide grip does not provide anywhere near a full range of motion for them. A narrower grip, in contrast, allows both a better stretch and a more complete contraction. If you don't believe me, pantomime two types of pulldowns right now as you read this, doing your best to contract the lats as hard as possible: a wide-grip pulldown and a narrow, underhand grip. I guarantee you that you will feel a more powerful contraction of the lats with the narrow underhand grip.

In my early career, I experimented with various types of grips, and I found that using a closer grip with the hands either parallel (facing each other) or fully supinated (underhand) actually provided the best contraction and most complete range of motion for the lats. Throughout my Mr. Olympia reign, I never did a single set of wide-grip chins or lat pulldowns. My two choices for vertical pulling were always a narrow underhand grip for lat pulldowns, which I would go up to 400 pounds on, and the Hammer Strength Iso-lateral pulldown machine.

A final reason to consider using a narrow grip beyond the issue of range of motion is the fact that it puts the biceps in a stronger position. Since the biceps are far smaller and weaker than the lats, putting them in a position where they are guaranteed to fail before the lats are properly stimulated, as in any wide-grip vertical pull, will cause you to shortchange your potential growth.

PUTTING TOGETHER THE IDEAL BACK WORKOUT

The back is a very large and complex group of muscles, but the ideal back training routine needn't be overly long or complicated. Here's what I recommend based on what I found to work best over my competitive career.

1. Nautilus pullovers (if available)

Arthur Jones capitalized on the concept of pre-exhausting back in the early '70s when he designed the first Nautilus pullover machine, which he referred to as "The Upper Body Squat." The beauty of this piece of equipment is that it allows the lats to be worked directly without having to go through the 'weak link in the chain' represented by the biceps. The lats can be worked through 180 degrees of motion to failure, and that failure is not limited in any way by the biceps, as they are not involved.

I know that not every gym has one of these machines, but I have had one at Temple Gym for over 20 years and consider it to be priceless in the quest for a bigger back. Another advantage to doing pullovers first is that you pre-exhaust the lats. It will take less weight in the subsequent rowing and pulldown movements to thoroughly fatigue the lats, and they will reach that fatigue without being limited so much by the biceps.

You can use a dumbbell for pullovers if you don't have access to a machine, but the range of motion is shorter and it's difficult to keep the triceps out of the motion. A straight-arm cable pullover is another option, but it's tough to use enough resistance and stay on the floor at the same time.

A Close-grip Pulldown Movement

As I said before, I preferred a close-grip cable pulldown, usually with an underhand grip. This provides the most complete range of motion for the lats and also puts the biceps in the strongest pulling position possible.

Barbell or Dumbbell Rows

The two most productive vertical pulling movements I found were barbell rows and one-arm dumbbell rows. I often would alternate between the two from workout to workout. With barbell rows, I discovered through experimentation that an underhand grip put the biceps in a stronger position. I also found that standing at roughly a 70° angle and pulling into the waist worked the lats more completely than the 'old-school' style of bending over with the torso parallel to the ground and pulling into the chest, which worked more of the upper back muscles, as opposed to the actual lats.

Cable or Hammer Strength Seated Row

I would also do some type of horizontal rowing movement, either the Hammer Strength seated row you've probably seen the famous black and white shots of me doing, or seated cable rows. The machine is a perfect choice for anyone who has lower back problems that could be aggravated by barbell rows. However, if you keep your back arched instead of rounded, that shouldn't be an issue. I usually did both a free weight row as well as either a seated machine or cable row in my routines.

Deadlifts

The order of the aforementioned exercises isn't overly important, but I do feel that doing deadlifts last as I always did is the best way to include them in your back routine. Very heavy deadlifts can put a great deal of stress on the spine as well as other areas. Had I performed deadlifts first, it would have required something like 600 or maybe even 700 pounds for me to reach failure with 6-8 reps. Instead, I did them last and needed only 405-495 pounds at most to get the job done. Also, I never did my reps from the floor up, but from the mid-shin. The initial pull off the floor is mainly using the legs and glutes, which I didn't care to train on back day.

A Final Word on Momentum

If there is one culprit to blame for lack of back development in

PHOTOGRAPHY BY PER BERNAL

bodybuilders, it's the use of momentum to move the weight, rather than pure lat power. One must keep in mind that there are three types of strength: positive (lifting the weight), static (the peak contraction at the top of the rep where the muscle is fully contracted), and negative (lowering).

Your strength is actually the least in the positive and the greatest in the negative. In other words, if you can lift 200 pounds, you can probably hold 250 pounds in the peak contraction and can lower about 300 pounds in the negative. That's just a very rough example. Most bodybuilders really only perform the positive portion of the rep and completely miss out on the other two possible areas.

A quick test to see if this describes you is to see if you can stop each rep at the peak contraction and pause to fully contract the lats, then lower it slowly under control for a good stretch. If you can't, you're using too much weight and would actually benefit greatly by reducing the resistance. Studies have shown that the negative portion of the rep causes more muscle damage and stimulates greater gains in strength than the lifting itself.

Summary: A Great Back Can Be Yours

So, armed with all this knowledge— can you now go forth and build a back like mine or Ronnie Coleman's? I can't say for certain that you can, but if you go about your back training in the proper manner, you at least stand a fighting chance. Having the confidence that you can improve the development of your back, along with the knowledge of how to train it properly, will mean that whatever your back looks like at the present moment, in time you can indeed make it wider, thicker, and more impressive.

DY Nutrition Launches!

It's been a hectic few months preparing for it, but at last I am launching Dorian Yates Nutrition throughout Europe and the USA. By the time you read this, my products will be available at GNC and on www.bodybuilding.com. They have already been selling in Europe for a short time, and several managed to achieve a cult-like status.

One product is **NOX Pump**. Users report incredible muscle pumps as well as a powerful stimulant effect, increased mental focus, and improved mood. My **TemPro** protein powder features an advanced blend of various fast and slow-release proteins, such as cold-processed whey and micellar casein, and we are the only company I know of that uses all-natural flavorings. Each flavor is fantastic, which means even the ladies, who tend to be very picky about shakes, will love them.

We're also going to come out with a weight-gainer for men, using the same protein blend plus complex carbs from rice, waxy maize, and potato starch. Just about all other weight gainers on the market use cheap protein and the simple carb maltodextrin.

Finally, the **CRX Cuts** fat burner product is truly unique as a multi-angle thermogenic, as it features a compound that elevates brain chemistry in the area that controls pleasure. This compound has been used successfully in clinical trials as a means of fighting various addictions ranging from smoking, to drinking, and most pertinent for bodybuilders, overeating. Women in particular often have issues with compulsive eating, so this is one product that will really help them get leaner. I'm very excited to get these products off the ground at last and available to those who can benefit from them.

Dorian On the Road

I've also been traveling all over with my product launch, and soon I will be visiting Russia for the first time ever. I have a lot of fans there, and I've always wanted to go. I'm also in the process of licensing **Dorian Yates Gym**, a concept I have for smaller gyms to take advantage of my name and also group buying power for equipment. There are a lot of great little gyms that are simply too small to be a Gold's or a Powerhouse, but they have a hardcore feel and represent the true spirit of bodybuilding. Most of the big corporate gyms today have plenty of equipment, but once they take your money, you become nothing but a faceless number to them. It's the smaller gyms that are almost always the best places to train, and soon some of them will become Dorian Yates Gyms.

Finally, I have been doing some personal training both at home at my Temple Gym and at the Apollon Gym in Edison, New Jersey, when I am in the States. I don't have time to do it very often, but when I do, I enjoy showing people the proper way to go about their training so they can get great results. You may have seen me at work training **Mark Dugdale** in his DVD "A Week in the Dungeon." I certainly don't coddle my clients. If you'd like to book a session with me the next time I am in New Jersey, you can do it through Robert Samborsky at www.ApollonGym.com. If you're in Europe and want to train with me at Temple Gym in Birmingham, England, you can contact me through www.DorianYates.net.

Next Month:

I will give my first-ever breakdown of the Mr. Olympia contest as seen through my eyes. I'll analyze each competitor and how he looked, plus tell you how I would have scored the big show if I were a judge.

You can check out my new company DY Nutrition, and our products at www.dorianyatesnutrition.com.

By Dan Gwartney, M.D.

Androgen Receptor Sensitivity: All Men Are *Not* Created Equal

IN the real world, or at least as real as it gets in the gym, bodybuilders and lifters have long been aware that some people explode on fairly moderate anabolic steroid dosages, while others struggle to justify the risks for the returns they receive. Some of the variation is obviously due to work ethic, equipment, lifestyle, etc. However, one underlying factor determines maximal athletic performance, as well as the degree of benefit and exposure to risks associated with anabolic-androgenic steroids (AAS) use—genetics.[1]

Charles Darwin is credited with recognizing that individuals within a species do not all thrive equally; some struggle and die, while others prosper and propagate by mating with selective members of the opposite gender.[2] The crux of his theories is commonly referred to as 'survival of the fittest' or natural selection. Sadly, Darwin's theories dominated the interest of biologists for decades, overshadowing the contributions of Gregor Mendel— whose experiments with peas led to the understanding of genes and genetic transfer.[3] This was in 1865, nearly 100 years before Watson and Crick were credited with discovering DNA.

Genes are inherited from one's biological parents, and contain the code for assembling the individual. Most genes are identical among people, even among primates in general



PHOTOGRAPHY BY PER BERNAL

(chimps, apes, etc). However, there are obviously clusters of people who have certain physical traits (the expression of these genes), and individuals who have nearly unique conditions. Most mutations (genetic changes) do not benefit humans— after all, we are the result of centuries or eons of natural selection. Those that remain in the gene pool are changes that alter traits by a matter of degrees: eye color, straight hair versus curly, enyzme activity, hormone action, etc.

The actions of testosterone are dependent upon the individual's ability to produce the hormone, maintain a relatively steady concentration over time, tissue-specific recognition and stimulation, G-protein coupling, co-activator and co-suppressor activity, response elements within the chromosomes, transcriptional and translational events, and so on.[4] The advances in science over the last few decades, particularly at the genetic and molecular level, have expanded the knowledge base to such breadth and depth that it is nearly impossible to be expert in all matters relating to androgen actions in humans.

Most experts in biosciences are forced to narrow their focus if they wish to advance understanding or be responsible for innovation or discovery. The days of the generalist have faded since the Renaissance, when a man could be a physician, mathematician, astronomer, physicist and barber— as long as he was cool with the church and had a steady supply of leeches.

The burden to modern-day researchers is picking through the vast and growing databases, selecting out the studies and reviews that expose a previously-unknown concept, explain the practical use of what is known, or connect-the-dots in understanding the relationship between seemingly unrelated findings or ideas.

There is a genetic trait that directly affects one component of the androgen response (such as building muscle). This trait affects the sensitivity of the androgen receptor, a vital piece in the anabolic pathway. The androgen receptor has a few regions in its molecular form where changes in the amino acid



sequence (all proteins are chains of amino acids; the shape and function of the protein is determined by the sequence) can affect the sensitivity of the receptor for attaching to testosterone or other androgens, attaching to the chromosomes (DNA)— or relaying the receptor-stimulated gene messages to the rest of the cell (an event called 'transcription').

Androgen receptor sensitivity is actually pretty variable among men— some respond vigorously to testosterone, while others do not respond at all. There are a number of genetic males who develop as women, due to androgen receptor insensitivity.[5] These women are unaware they are genetically male, unless a chromosome analysis is performed, usually as part of an infertility exam. This condition deserves a great deal of empathy, as these individuals are often married and seeking to begin a family when they discover they are 46XY— genetically male.

Transcription and Manly Men

The trait of interest in this article affects the transcription, or message-relaying effect of the androgen receptor. The androgen receptor binds testosterone normally, and travels to the cell nucleus (where the DNA is compartmentalized), but is unable to turn on and off the appropriate cell functions to the same degree as men who are more androgenized.[6]

This trait, called the CAG repeat polymorphism (CAG), refers to a glutamine-tag attached to the androgen receptor. CAG refers to the DNA sequence of the gene that produces the androgen receptor.[7] It takes three nucleotides (the building-block units of DNA) to code for one amino acid in protein chain; CAG is the sequence of cytosine-adenine-guanine, which codes for the amino acid glutamine.

Ironically, the androgen receptor gene is located on the X chromosome, which necessarily comes from the mother (assuming you are a male). Called the 'sex chromosomes,' females have 2 X (or XX), while men have an X and a Y (XY). One might think men who carry an extra X chromosome (XXY), a syndrome called Klinefelter's, might be at an advantage— but in reality, these men have low serum (blood) testosterone concentration, small testicles, suffer from infertility, and are prone to gynecomastia.[8]

The CAG would not appear to have a function, coding for a redundant stretch of glutamine inserted in a receptor that is otherwise identical to the androgen receptor of all normal men. However, as has been readily demonstrated, the longer the glutamine chain,

the less efficient the androgen receptor is at turning on or off the genes that create the healthy male physiology.[8]

Let's compare it to an everyday example. A happily-married couple generally communicate well. Sitting side by side on the couch, the wife can tell the husband, "Trash needs to go out for tomorrow's pickup." If the television is on, her comment is still heard, just not as clearly. If she starts talking just as the late Billy Mays starts hawking an 'as seen on TV' product at the top of his lungs, his shouting makes it harder for the husband to hear. Making matters worse, the husband has moved into another room, knowing that "America's Got Talent" is coming on next; likely, he barely hears her. Suppose the couple had argued about the wife's addiction to all things David Hasselhoff and he is in the garage listening to Kid Rock songs in his project car 1970 Pontiac GTO that is sitting on blocks. There is no way he is hearing about the garbage, and it likely won't go out.

Every degree of separation reduces the strength of the message, "Take out the garbage," and represents a greater risk of a negative consequence— garbage piling up in the house another week, in this example. Each CAG repeat is like a degree of separation between the husband and wife. When testosterone enters a cell (for the biology geeks, this is restricted to the genomic effects of testosterone), it binds with an androgen receptor. There are different co-factors in the various cell types (skeletal muscle, fat, liver, etc.) that either enhance or impair the ability of the receptor to connect with and stimulate the cell to respond.[9] These co-factors attach onto the testosterone-androgen receptor complex and travel as a unit to the nucleus, and bind to the chromosomes (DNA) at specific androgen response elements— think of it as assigned parking spaces. The complex then dimerizes (pairs up with another complex) to actually turn on the testosterone-sensitive genes.

Genes are information; they do not function as anything other than data storage. In order for the information they contain to become new cell structures or change function, the information has to re-enter the cell in a form that the machinery of the cell can understand. This occurs through transcription. Transcription creates a 'chemical memo,' or instructions from the head office. The longer the CAG repeat, the higher the degree of separation, and the less likely the message is to be affected.

A great deal of research has been performed on CAG repeats and testosterone action. One clear expert in this area is Dr. Michael Zitzmann of the Institute of Reproductive Medicine at the University of Munster, Germany.[10-16]

Again, the length of CAG repeats has been shown to decrease the response of the body, or tissue and cell cultures in the lab, to the hormone testosterone. Dr. Zitzmann has published a number of studies and reviews, showing that men with short CAG repeats demonstrate a more 'androgenic' profile, whereas those who have longer CAG repeats are less robust.

Men with extremely long CAG repeats exhibit signs and symptoms similar to those shown by men with testosterone deficiency, including insulin resistance/type 2 diabetes, gynecomastia, reduced fertility, 'soft' bones, higher body fat, increased cardiovascular risk, elevated LDL (bad) cholesterol, as well as neurological and psychological problems. Conversely, men with short CAG repeats develop prostate cancer earlier, have a higher risk of male pattern balding, lower HDL (good) cholesterol, and are more prone to aggressive behavior.[16]

One might think that a simple solution to these CAG repeat-associated problems might be increasing testosterone (e.g., testosterone injections). In fact, this does not appear to be the perfect solution, as men with longer CAG repeats are more prone to certain negative side effects, protected from others, and do not receive the same degree of certain benefits.[12] Nonetheless, so long as adverse events are closely monitored (changes in PSA, cholesterol, hematocrit, mood, etc.), men with long CAG repeats can benefit over their baseline when treated with testosterone.

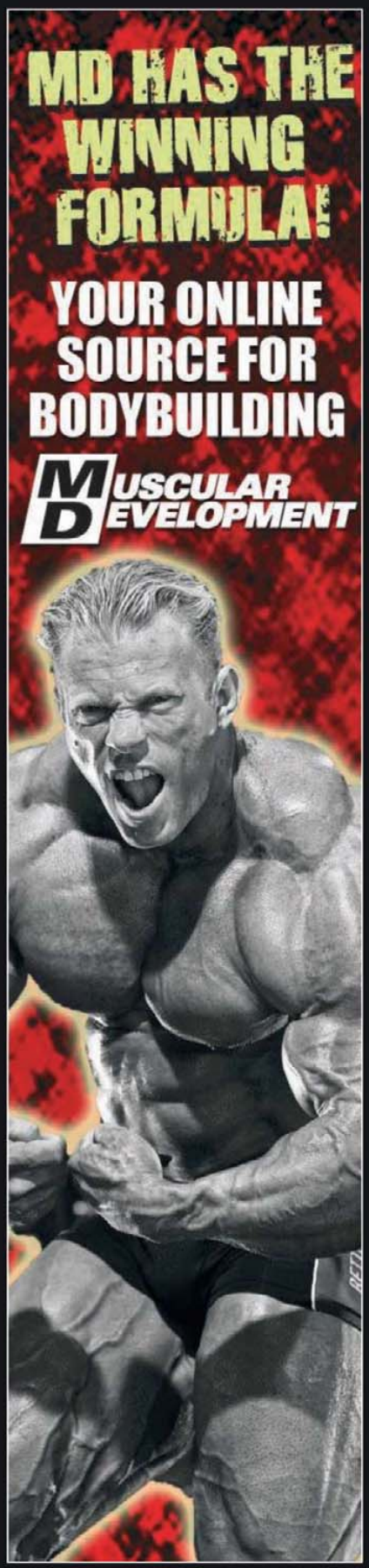
CAG Length and Bodybuilding: Does Size Matter?

Of course, the interest of bodybuilders and athletes is any effect of CAG repeats on physical performance or body composition. Men with longer CAG repeats suffer from all sorts of performance handicaps compared to their short-CAG cohorts. Lengthening of CAG repeats may contribute toward decreased muscle mass, increased body fat, weaker bones, decreased aggressiveness, increased depression, reduced insulin sensitivity, and harm cardiovascular health through elevations in heart rate and blood pressure.[12,16]

Some interesting observations were noted. There is a racial trend in CAG repeat length; with men of African descent having fewer CAG repeats, followed by Caucasians, then East Asians.[16] Former sports analyst and bookie 'Jimmy the Greek' Snyder was strongly criticized and fired from CBS for making a comment that American blacks were more physically gifted— in his opinion, as a result of being selectively bred for stronger slave stock during the colonial and pre-Civil War period of U.S. history.[17] Snyder's comment was certainly insensitive and likely indicative of the attitude and beliefs formed as a result of his upbringing and culture. However, this measure of CAG repeat length does show that there are some racial traits that may imbue physical advantage to certain groups. As social barriers and geographical obstacles are being overcome, this molecular discretion will likely fade over generations.

It is important to be aware that any performance-related genetic trait only represents potential, and must be developed through individual effort before its advantages or disadvantages may be realized.

The question for the young, healthy man may be, "How do I know what my CAG repeat length is, and what can be done about it?" Very few labs measure this, and no clinician performs this test as part of a routine physical or even during an evaluation for hypogonadism (low testosterone).



Testosterone

For the bodybuilder, athlete, or recreational AAS user, there is little value to knowing personal CAG length at this time.

Even if one were to learn of a long CAG repeat polymorphism, there is no treatment. However, for those who do not seem to respond to AAS use, at comparable dosages and training to his peers, this may be an early sign of a long CAG repeat polymorphism. There is value to being aware of this, as this trait may lead to early signs of hypogonadism, or other metabolic conditions, even in the presence of 'normal' serum (blood) testosterone concentrations. Those who respond very vigorously to AAS may wish to acknowledge the increased risk seen in men with shorter CAG repeats, and more closely monitor cholesterol changes, PSA, mood, and hair loss.[16]

Even anti-aging practitioners would be hesitant to treat a man with normal testosterone concentrations— but a history of marginal AAS response, early onset of signs and symptoms of hypogonadism, and a normal testosterone concentration should suggest that a CAG repeat length determination be performed. Men with extremely long CAG repeats may benefit clinically from improved quality of life and protection from hypogonadal-related condition, with testosterone replacement treatment maintaining circulating testosterone in the upper region of the normal range.

People are not stamped out of some cosmic dough with a cookie-cutter. We all differ slightly from each other, and the differences can often go undetected unless a person places himself in extreme conditions or becomes ill. Certainly, training and pursuing muscular development is a rare state in this fine country suffering from obesity, addiction, and sloth. Those who use AAS may discover that they are predisposed to easily gaining size and strength, or face genetic hurdles that make progress more difficult and limited. While those who find they are resistant to AAS-induced benefits face disappointment early in life, it may provide a clue that might aid in getting proper health treatment as they age. ■

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ramblin freak



By Gregg Valentino



DISCLAIMER:
The following is uncensored/ unedited and in no way reflects the opinions of the staff of Muscular Development. Who the hell knows what this guy might say... he's a mental freak. This article is for entertainment purposes only.

***TWEET*....8-16-09...BREAKING NEWS: I was eating a steak at Victor Martinez's Muscle Maker Grill in Edgewater NJ...Normally I don't mind vegetarians, but I really hate it when they get all superior and preachy about the "Evils of Eating Meat"...So anyway, this fitness girl that I know comes over to me and says that she is a vegetarian and she just can't bear to watch me eat that steak...I looked at her and said, "If you want to only eat vegetables that's fine with me, but the way I see it, this cow used to be a vegetarian and look how things turned out for the poor cow!!!!"**





YEAH, SO I WAS DRIVING IN MY CAR TODAY SINGING ALONG TO MY NEW ***JONAS BROTHERS*** **CD**...*EERRR*...**WHAT???**...***AHEM***....**BLUSHING** > ***UMM***, DID I *SAAAAY*... **JONAS BROTHERS???**...**NERVOUS LAUGH** * > ***HA HA HA***...*OH SILLY ME*, **I DON'T LISTEN TO THAT SHIT!!!...***WIPING SWEAT OFF MY BROW**...***NO, NO, NO...***I MEANT I WAS LISTENING TO *MY NEW* **ROB ZOMIES** CD...*WOOF*, ***GEEEZ, IT'S HOT IN HERE!!!...I'LL BE RIGHT BACK, I GOTTA GO OPEN UP A WIINDOW!!!***... **WHISPERING TO MYSELF** * >> OH GOD, I CAN'T BELIEVE I SAID ***JONAS BROTHERS*** HOW EMBARRASSING!!!

OK I'M BACK, *SORRY* ABOUT THAT!!!...SO WHAT I WAS TRYING TO SAY WAS I JUST GOT HOME FROM *MY LONGTIME* FRIEND **VICTOR MARTINEZ's *MUSCLE MAKER GRILL*...YO' I love my boy *Victor Martinez* kinda just like a fat kid loves cake!!!!**....EXCEPT I DON'T WANT TO EAT HIM EVEN TOUGH ***MY GIRLFRIEND*** **MERCEDES** ALWAYS SAYS, ***"DAMN THAT VICTOR IS DELICIOUS"***...I GUESS IT'S A LATIN THING...*wink*...**VICTOR** AND ME HAVE BEEN FRIENDS FOR *ALMOST* **20 YEARS** SO I FIGURED I JUST HAD TO **"REPRESENT" *MD*** AT THE ***MUSCLE MAKER GRILL*** **GRAND OPENING**...YO' THERE WAS A LOT OF **HUGE** *MOTHERFUCKERS* THERE, ***THE INTERNET*** **BODYBUILDING *"FORUM JUNKIES"*** WOULD HAVE LOVED ALL THE **BIG BUFFED BODYBUILDERS** THERE....**MAS PUTO's** *(<<GOOGLE THAT SHIT IF YA WANNA KNOW WHAT IT MEANS)*.

I WAS LOVIN' **THE HOT YOUNG** *YUMMY* ***WAITRESSES*** AS WELL AS THE CUTE **LATINA & ITALIAN LOOKING GIRLS** THAT WERE JUST ***HANGIN OUT*** WITH **THE BODYBUILDING LATINO KING** HIMSELF **VICTOR MARTINEZ**...DAMN, IT SEEMED LIKE **EVERY GIRL** THERE HAD A **NICE HOT BODY!!!**...*OH YEAH BABE*, **MY BOY *VICTOR* DON'T PLAY AROUND**...wink.

Two female bodybuilders were looking for "Muscle Worshipping Schmoes" to make some coins *(money)* **from the shmoes who were eating dinner at *Victor Martinez's* Muscle Maker Grill. One female bodybuilder said, *"Girl, we gonna get paid tonight, I can smell* 'Schmoe Dick' *in the air."*...The other girl just laughed and said, *"Bitch that's because I just burped."***

OK, *SIMMER DOWN*, ENOUGH BULLSHIT FOR A MOMENT, LET ME JUST TELL YOU, MY BOY **VICTOR** STOOD UP BY **THE FRONT DOOR** ALL FUCKING DAY AND **HE GREETED *EVERY SINGLE PERSON*** THAT ENTERED ***THE MUSCLE GRILL***, AND YO' THERE WERE A LOT OF PEOPLE ***IN & OUT*** OF THERE!!!!..NOW I GOTTA TELL YA, **VICTOR** REMINDED ME OF ***"MY ITALIAN GRANDMOTHERS"*** BECAUSE FROM THE MOMENT I GOT THERE **VICTOR** ASKED ME, ***"WHAT DO YOU WANT TO EAT"*** ABOUT **50 TIMES!!!**...**NO LIE!!!!...** THAT'S ***GRANDMA* >> ALWAYS TRING TO FEED YOU!!!!!!**..AND

MAKE *NO MISTAKE*, **"THAT'S LOVE"...**YO' THAT'S HOW ***HOSPITABLE*** **VICTOR** WAS TO EVERYONE...FROM **THE EARLY & MID '90s** TO **NOW,** SO ***MANY YEARS*** *& TOO* ***MUCH DRAMA*** LATER, **VICTOR & I** ARE ***STILL FRIENDS*** AND ***MD*** **BROTHERS,** IT'S MIND BOGGLING.

SO ANYWAY, MY BOY ***VICTOR*** ORDERED ME **A STEAK,** AND GET THIS >> HE EVEN **TALKED TO THE COOK** AND TOLD HIM **HOW I WANTED IT COOKED!!!..VICTOR** THEN TOLD **THE WAITRESS** TO TAKE CARE OF ME WITH WHATEVER I WANT!!!!..**THAT'S LOVE!!!!...***THAT'S* MY BOY **VICTOR MARTINEZ!!!!...** *CHECK IT OUT,* I WAS STANDING UP IN THE **FRONT OF THE RESTAURANT** TALKING EVERYONE'S ***EAR OFF*** *(OH SHUT UP...)* WHEN **THE WAITRESS** CAME TO ME WITH A NICE **BIG *JUICY STEAK*** AND SHE EVEN BROUGHT ME OVER TO A TABLE THAT **VICTOR** HAD ***CLEARED*** FOR ME, **WHILE I ATE LIKE A FUCKING KING!!!!**...AND LET ME JUST TELL YOU, **THE RICE** WAS SO ***DAMN GOOD*** THAT **I *BRAGGED*** ABOUT IT TO **MY GIRLFRIEND** *(AHHH YESSSS...MY GIRLFRIEND MERCEDES, THE SAME GIRL WHO SWORE SHE WASN'T GOING TO CALL ME, OR TEXT MESSAGE ME... INSTEAD, SHE WAS JUST GOING TO WAIT FOR ME TO CALL HER WHEN THE PARTY WAS OVER...MEANWHILE MY PHONE DID NOT STOP GOING OFF, THANK GOD IT WAS ON VIBRATE ONLY!!...THE BITCH CALLED & TEXTED ME EVERY 15 mins...OH YEAH, BABE...IT'S A LATINA THING BABE...AND JUST TO LET YOU KNOW, I DON'T DARE NOT ANSWER IT, OH HELL NO!!!!!).*

GETTING BACK TO **THE RICE**, MY GIRL **MERCEDES** STARTED ASKING ME A MILLION FUCKING QUESTIONS ABOUT *THE DAMN RICE >>>>* ***WAS IT DOMINICAN RICE??***...**WAS IT DARK COLORED??**...***WERE THERE DARK COLORED BEANS IN IT???***...**WAS IT DRY OR WET???**...*etc, etc...* ***OOOWWWWA***, WHAT'S WITH **A THOUSAND FUCKING QUESTIONS *ABOUT* THE DAMN RICE!!!**!...YO' I'M A **WHITE BOY,** I'M ***NOT*** AN *EXPERT* ON **SPANISH RICE!!!...** *GEEZ*, I TOLD HER IT WAS **THE BEST RICE** I HAVE EVER EATEN AND ***YES*** IT WAS ***VERY MOIST*** BECAUSE **MY STEAK** WAS SO ***JUICY*** THAT IT MADE **THE RICE** EVEN *YUMMIER...OH YEAH BABE,* I STAYED THERE TILL THEY **CLOSED UP** AT ***THE END OF THE NIGHT***...THAT'S WHEN I SAT WITH **VICTOR** AND WE *DRANK* A **PROTEIN SHAKE** TOGETHER...NOW KEEP IN MIND, *ON THIS DAY* **VICTOR** IS ONLY ***6 WEEKS*** AWAY FROM **THE OLYMPIA** SO WHATEVER HE ***EATS*** AND ***DRINKS*** HAS TO BE **SPOT ON,** THERE IS ***NO ROOM*** FOR **BAD FOOD** OR **CHEATING!!!!...**SO EVEN THOUGH I'M COMPETING FOR THE **MR. O-BLIMPIA** I SAID I WANT **THE EXACT** SHAKE **VICTOR** IS DRINKING *(MINUS THE STRAWBERRIES...DAMN, I WOULD BE SHITTING OUT THOSE LITTLE SEEEDS LATER ON...IT WOULD LOOK LIKE SAWDUST IN MY TOILET, SO "NO THANKS" ON THE STRAWBERRIES).*

ANYWAY, THE GUY WHO MADE **VICTOR'S** *&* **MY *SHAKE*** WAS THROWING IN **"SCOOPS OF THIS"** AND ***"SCOOPS OF THAT"...*VICTOR** EVEN HAD A *SCOOP* OR 2 OF **GLUTAMINE** PUT INTO OUR SHAKE...AND YO' LET ME JUST TELL YOU THAT **"VICTOR MARTINEZ's *OLYMPIA-PREP* PROTEIN SHAKE"** WAS ***THE MOTHER FUCKING BOMB!!!!...*** **WOW!!!!**...IT WAS ***SUPER DUPER*** **"THICK,"** JUST THE WAY I LIKE IT!!! *(I HATE PROTEIN DRINKS THAT ARE THIN LIKE MILK OR YOO-HOO... YUKKKK)*....THIS SHAKE TASTED LIKE **SOFT, THICK *CARVEL* ICE CREAM**...AAHHHH YES, **VICTOR** AND **I** SAT LIKE **2 KIDS** IN AN ***"ICE CREAM SHOP"*** SIPPING AWAY ON OUR **"MR. OLYMPIA PROTEIN SHAKES"**...IT REALLY WAS GREAT, I HAD ***NO GAS*** AND **NO *"EMERGENCY"* MUD BLASTS!!!!** *(SHITS).*

SINCE THAT DAY, EVERYONE HAS BEEN ASKING ME FOR **"THE SECRET RECIPE"** FOR **VICTOR'S > MR. OLYMPIA SHAKE** AND I WILL TELL YOU ALL NOW WHAT I TELL THEM **>>** GO TO **THE MUSCLE MAKER GRILL** IN ***EDGEWATER, NJ*** AND ASK FOR **VICTOR'S PERSONAL SHAKE.** I CAN'T GIVE OUT *THE EXACT* INGREDIENTS BECAUSE I DON'T KNOW THEM, BUT ALL I CAN TELL YOU IT HAD **65 GRAMS OF PROTEIN**, IT HAD ***GLUTAMINE*** IN IT AND I THINK IT HAD **18 GRAMS OF CARBS** WITH A TON OF OTHER ***"NUTRITIONAL GOODIES"*** MIXED IN AS WELL AND IT'S ONE OF **"VICTOR MARTINEZ's *SECRET WEAPONS"***... TRUST ME, IT WAS ***"ALL THAT"*** AND **MORE!!!.**

ALL IN ALL, **VICTOR** WAS AN ***INCREDIBLE HOST***, HE ***"HOOKED ME UP"*** AND **TREATED ME LIKE A KING...**BUT...HE ALSO TREATED ***EVERYONE*** ELSE LIKE **A KING** TOO!!!...I WANT TO THANK HIM FOR EVERYTHING, IT WAS A GREAT TIME.. YO' **VICTOR** *MY BROTHER* >> **always follow your dream, unless of course it's the one where you're naked onstage at the Mr. Olympia!!!!** *OH YEAH BABE!!!*

I MET A FEW GUYS THERE FROM THE ***MD*** **FORUM** AND I HUNG OUT AND CHATTED A BIT WITH **VICTOR'S** *TRAINING PARTNER* **ARMONDO *"THE KID"* PENA** WHO IS A **GREAT GUY** WITH A HELL OF A BODY ON HIM AS WELL AS A HELL OF A *VERY* **PRETTY GIRLFRIEND** *(WOOF...wink)* ...YO' ANYTIME **I GET TO EAT** A *NICE JUICY* **STEAK** FOR **FREE**, SEE ***HOT BODIED* YOUNG LATIN BABES** *(HELL...YOUNG BABES, PERIOD...wink)* AND JUST ***HANG OUT*** WITH MY BOY **VICTOR MARTINEZ**, IT'S A GREAT TIME FOR ME!!!!...I'M NOT ***BLOWING SMOKE*** UP ***VICTOR'S ASS*** BUT **THE FOOD AND THE HOSPITALITY WERE OUTSTANDING!!!**... TOO BAD I DON'T LIVE CLOSER, I WOULD BE THERE EVERY FUCKIN DAY...AND ***THE WAITRESSES*** MAKE ME ***HUNGRY*** AND WANNA *EAT* SOME **PORK!!!!...** *YUMMMM,* **HOT YOUNG BABES**, IT'S A *"FOOD OF LOVE"* THING, BABE!!!!.. LEAVE IT TO **VICTOR** TO HIRE THE HOTTIES **;)**.... YO' ***VIC***, WAY TO **REPRESENT!!!!!!...** **I TOLD VICTOR >> *"If you win the Olympia everything in your life gets better, your food tastes better, you sleep much better, your finances feel better and your wife all of a sudden***

looks just like Jenna Jameson." *(OH YEAH, BABE...THERE IS DEFINITLEY A "FOOD OF LOVE THING, BABE"... YUM, YUM, YUM...I NEED TO WIN THE OLYMPIA)**...GV***

SEASIDE HEIGHTS, *YO' I NEED A VACATION FROM MY VACATION!!*... BRINGING ***YOUR KIDS*** AND ***YOUR GIRL*** WITH YOU ***ON VACATION*** IS ***NO* VACATION!!**...I KNOW YOU GUYS FEEL ME ON THIS ONE...*WOOOF....**"A family vacation is when you go away with the very same people you need to get away from!!!"**...*OH YEAH BABE*...I AM GOING TO SWITCH OVER AND TYPE IN ***LOWERCASE*** *AT* ***MY DAUGHTER* GINA'S** REQUEST BECAUSE SHE THINKS ITS FUNNY BUT HATES THAT I WRITE IN ALL CAPS...MORE ON THAT IN A MOMENT BUT FOR NOW, **HERE GOES>>>** I took **Mercedes** to ***Seaside Heights NJ boardwalk*** with my daughter **Gina** *&*



my niece **Karina** and as **the kids** *&* **Mercedes** played games I ordered 2 steak sandwiches...After eating my third steak sandwich, Mercedes wanted one too so I brought her to the stand with me and told the guy, **"I'll have another steak sandwich, please."** The guy behind the counter then said to me, **"Damn, aren't you worried about the mad cow???"**...I replied, ***"Nah, she can order one for herself."...*** **SIKE**

So ANYWAY, later on that night Mercedes *&* I were high up in the air on a casino pier boardwalk ride when all of a sudden I had a huge Creatine Toxic Explosion *(FART)* that kinda snuck out of my ass-pipe *(HOT & SILENT...THE WORST KIND!!!)* and I was just praying that Mercedes didn't smell it. At the same time I had just pointed out to Mercedes that we were flying right over a fisherman who had a big bucket of fish he had caught while fishing on the pier right below us. Mercedes looked down at the fisherman, she saw the huge bucket of fish and I guess that's when the "*Ass-Gas"* got into her nostrils because said to me, **"Holy shit, look at all those fish he caught, but I'll be God Damned. YO'...I can smell those sons of bitches all the way up here!!!"**...She then turned to me and with a very serious yet disgusted look on her face as she took in a *"Deep Sniff"* and she said, **"Oh my God, Gregg...do you smell that shit???"..."Man those fucking fish smell AWFUL and I can't believe I can smell them all the way up here, that's so gross!!!"**...I just sat there with tears streaming down my cheeks from laughing so hard to the point that I couldn't breathe!!

At first, I tried to ignore it and play dumb, but it but I knew that *"My Anal Oxide Emission" (the damn fart)* had crept up on her...She looked at me as her nostrils flared in disgust and she said, **"What the fuck is so funny??...I ain't playin' around, I swear to God I smell those nasty fish all the way up here...I hope that guy don't eat them...YO' that shit has got to be rotten, their stench is to damn horrible!!!"...**I was now crying so hard that the ride we were on was actually shaking...I could hold back no longer, so I told her, ***"It's *Rectal Turbulence**** **that you smell, it's NOT the damn fish, besides how the hell are you gonna smell fish that are over 50 feet away on the ground, while we are up in the air on a friggin' ride???"**

She was totally puzzled by what I just said, and yet kinda pissed off so she said to me, **"WHAT ARE YOU TALKING ABOUT, WHAT THE HELL IS **RECTAL TURBULENCE**???"** ...I couldn't stop laughing and I just blurted out, ***"I fucking FARTED, you retard"***...Now she was "OUTRAGED" and Extremely Pissed Off, so she punched me really hard on my chest and then she said to me, **"Oh my God, you fucking pig!!!!...*THAT WAS A FART???"***...She punched me again and said, **"You gross, nasty, faggot-ass *COCHINO*** *(DISGUSTING PIG)*, **I wanna get of this ride & throw up!!!!"..."You fucking asshole, here I am thinking it was the fish that were stinking and all along it was your faggot-ass that threw a FART!!...I fucking hate you!!!!"**...



She punched me again, saying to me, **"I swear to God, YO' I gotta throw up"**...I just kept laughing and crying, it made my night to see her so upset...when we got off the ride, she ran right up and told my daughter *&* my niece what had happened and of course she text messaged her sister *&* cousin, telling them what just happened too!!! It's funny because Mercedes wouldn't talk to me for the rest of the night, she was that upset....it was GREAT!!!!!!!

Boardwalk rides for 2 kids & 2 adults—$150...Quarters for playing boardwalk games —about $100... Boardwalk food & drinks for 2 kids, myself and my girlfriend—$50...Throwing a fart that makes your girlfriend wanna puke & not talk to you for the rest of the night—Fucking Priceless!!!!

Whoever said money can't buy happiness, obviously couldn't know about the feeling I sensed from the mighty forces unleashed upon me by the steak sandwiches *(with fried peppers & onions)* **and the creatine drink I had ingested earlier!!!!...***Oh Yeah Babe,* **I LOVE IT!!!**

OK, THAT'S ENOUGH OF THAT NONSENSE!!!...*wink*...I'M BACK TO WRITING IN ***"ALL CAPS"***...<<< ****OH SHUT UP**** YOU FUCKING LITTLE ***"SISSY-WHINERS,"* THE BOSS *(STEVE BLECHMAN)*** LOVES IT WHEN I WRITE IN **ALL CAPS**, HE SAYS ***"IT'S GRITTY"*** AND IT'S ***"DYS-FUNCTIONAL"*** aka IT'S ***"RAMBLIN***

FREAK" STYLE!!!...*YA HEARD???...***"RAMBLIN FREAK in da* HOUSE!!!"...**

*** *REPRESENTIN'* *...YO' HOLLA!!!!* OH SHIT!!!...*OOOPS* SORRY!!!...**I GUESS I GOT CARRIED AWAY FOR A MOMENT THERE...***MY BAD...***AFTER ALL **STEVE BLECHMAN** IS THE MAN WHO ***GAVE BIRTH*** TO THE ***"RAMBLIN FREAK," HE*** COINED ***"THE NAME"*** THEN STEVE RELEASED ME ON ALL OF YOU READERS AND NOW **YOU FUCKERS LOVE IT!!!!..**YOU CAN'T WAIT TO READ ***MY BULLSHIT*** EACH MONTH SO DON'T DARE LET ME HEAR ANY OF YOU MOMOS CRYING ABOUT ***"THE CAPS"***...I'M NOT **"SHOUTING"** AND IT'S ***NOT*** **"TOO HARD"** ON YOUR ***DELICATE EYES...***IF YOU FEEL THAT WAY THEN YOU'RE A PUSSY AND YOU DON'T BELONG HERE, SO GO READ ANOTHER COLUMN!!..**IT'S TOO BAD,** THIS IS THE WAY I TYPE, WITH *ONE FINGER* AND *REALLY FAST*, SO **"FUCK OFF"**...*OH SHIT*, **MY DAUGHTER** BETTER ***NOT*** BEING READ THIS CRAP, I FORGOT ABOUT THAT!!

ANYWAY, *FINISHING UP MY STORY*, I RAN INTO A LOT OF ***MD* READERS** AND **BODYBUILDERS** WHILE IN ***SEASIDE HEIGHTS!!***...I EVEN MET UP WITH **MY BOY** *NEW YORK BODYBUILDER* AND VERY CLOSE FRIEND OF MINE ****TURNPIKE*** **MIKE DEITZ**...HE BOUNCES AT A ***BOARDWALK*** NIGHT CLUB CALLED **JR's** DURING THE WEEK AND AT ***HEMINGWAYS*** DURING THE WEEKENDS...ALL ***MD*** READERS GO THERE AND ASK FOR HIM, TELL HIM I SENT YOU AND **HE WILL HOOK YOU UP!!!!...**OOOPS, I ALMOST FORGOT , THE HIGHLIGHT OF THE WEEK WAS WHEN ***MY DAUGHTER* GINA** *PUSHED* ME IN **THE POOL** WITH ALL ***MY CLOTHES*** ON WHILE **MERCEDES** *& MY NIECE* **KARINA** LAUGHED...BOY DO I NEED A ***VACTION***...**ALONE!!!!!!!!!... If brains were rain, I'd be a friggin' desert!!!**

OK, I'M GONNA END THINGS A LITTLE DIFFERENT THIS MONTH...I'M GONNA VENT !!!!...YO' I'M A LITTLE *CONFUSED* RIGHT NOW AND I REALLY NEED TO GET SOMETHING OFF MY CHEST...YA KNOW WHAT'S FUCKING CRAZY, I JUST GOT HOME FROM A VISIT WITH **MY DENTIST** AND *UNFORTUNATELY* I HAD A **"WISDOM TOOTH" *PULLED TODAY*** SO **MY MOUTH** IS *VERY, VERY* **SORE!!!**...NOW KEEP IN MIND, I HAVE NO IDEA WHY I GOT THE TOOTH PULLED, I HAD ***NO PAIN*** AT ALL, **NO TOOTHACHE**, *NOTHING IN THAT AREA OF MY MOUTH*, **NOW I GOT A HOLE WHERE MY TOOTH WAS** AND *IT'S SORE AS HELL!!!*...THE WHOLE ORDEAL ACTUALLY MADE ME *WONDER* IF ***MY DENTIST*** JUST *PULLED* **MY TOOTH** BECAUSE ***IT'S A RECESSION*** AND **HE NEEDS TO MAKE SOME MONEY!!!**...I SWEAR TO GOD, *WHY ELSE* WOULD HE **PULL A TOOTH** THAT GAVE ME ***NO DRAMA*** AND FELT PERFICTLY FINE???...YO' NOW I'M FUCKING ***BLEEDING*** IN THAT AREA AND **I CAN'T EAT SOLID FOOD FOR A DAY!!!**...*MY JAW IS SORE, TOO!!*...ALL THIS **"SORE MOUTH"** DRAMA JUST BECAUSE **MY DENTIST** NEEDED TO MAKE ***A FEW EXTRA BUCKS*** SO THE BASTARD **PULLED MY TOOTH** AND MADE $***300*** FOR LESS THAN A *HALF-HOUR* OF **WORK**...THAT'S FUCKED UP!!!

I MEAN REALLY, YO' I KNOW IT'S A FUCKING ***RECESSION*** BUT *DON'T* BE *PULLING* **MY TEETH OUT** JUST TO MAKE A ***FEW BUCKS!!!***...YO' I BETTER NOT FIND HIM SELLING **MY TOOTH** ON **EBAY**....I CAN IMAGINE IT ALL RIGHT NOW >> ***"MD's* "RAMBLIN FREAK'S" TOOTH FOR SALE!!!"**...IF YOU DON'T LIKE THAT ONE MAYBE THE FUCKING ***NUT-JOB*** **DENTIST** WILL *PULL ANOTHER*...YEAH RIGHT, ***OVER MY DEAD BODY!!***...YO' I FEEL VIOLATED, I WANT MY FUCKING TOOTH BACK...DAMN, I'M SORE!!!

PART 2...FAST-FORWARD A WEEK LATER!!!...SO NOW IT'S BEEN A WEEK SINCE I HAD MY ***WISDOM TOOTH* PULLED** AND AS ***MY BAD LUCK*** WOULD HAVE IT, I DEVELOPED A CASE OF **'DRY SOCKET'** WHICH IS WHERE **"THE WISDOM TOOTH HOLE"** DOESN'T ***CLOSE UP*** RIGHT AWAY AND YOU CAN ACTUALLY SEE ***THE BONE*** INSIDE...IT'S ALSO VERY PAINFUL, TOO!!!!...SO I WENT BACK TO ***MY DENTIST*** AND ON THIS DAY HE HAD *HIS* **DAUGHTER** *(WHO JUST GOT OUT OF DENTAL SCHOOL)* **WORK ON ME**...THE ***DAUGHTER*** IS PRETTY CUTE, *NOTHING TO GO CRAZY* ABOUT, BUT SHE SEEMED TO BE A ***PRETTY GOOD* DENTIST!!!**...*KEEP IN MIND*, **HER FATHER** WHO IS ***MY LONGTIME DENTIST,*** WAS ***OVERSEEING*** HER WORK ON **ALL PATIENTS** ON THIS DAY...SO NOW I GOT MY MOUTH OPEN AS **THE DAUGHTER** IS ***PACKING* "MY HOLE"** *(THE HOLE IN MY GUMS, YA MOMOS...GET YOUR MIND OUT OF THE DAMN GUTTER... GEEZ!!!* ... NOW HERE'S ***THE CRAZY*** PART OF *MY STORY* **>> THE FATHER *"MY DENTIST,"*** WALKS IN *EATING* A **RITZ CRACKER**, WATCHING WHAT'S GOING ON...WHEN **THE DAUGHTER** FINISHED ***PACKING* MY HOLE**, HER FATHER ***LEANS OVER*** ME, LOOKS INTO ***MY MOUTH*** TO CHECK ON **HER WORK** AND AT THE SAME TIME HE TAKES A BITE OF A **RITZ CRACKER**...YO' I *SWEAR* TO GOD, ***NO LIE***, THE FUCKING **CRUMBS** FROM ***THE RITZ CRACKER* FELL RIGHT INTO MY OPEN MOUTH!!!**...*I FUCKING* **GAGGED!!!** I QUICKLY SAT UP AND STARTED ***COUGHING*** SO HARD THAT ***THE PACKING*** IN **MY HOLE** CAME FLYING OUT OF MY MOUTH TOO...**MY DENTIST** REALIZED WHAT HAPPENED AND SAID, ***"OH MY GOD, I'M SO SORRY!!!!"...*** NEEDLESS TO SAY, I WAS PISSED OFF *& HIS DAUGHTER* WAS **MORTIFIED!!**... LATER THAT DAY I WAS ON THE PHONE WITH ***MD's* ROBBIE DURAND** AND AFTER I TOLD HIM WHAT HAPPENED, HE TOLD ME THAT SOMETHING LIKE THAT ONCE HAPPENED TO HIM TOO, BUT IT WAS WITH A **COOKIE...**I SWEAR TO GOD, I GOT SOME FUCKING ***CRAZ-ASS* BAD LUCK** FOLLOWING ME!!!..***This would be really funny if it weren't happening to me!!***...OK ENOUGH SAID, TILL NEXT MONTH, ***FUCK OFF!!***

NO JUICE Bodybuilding

By Layne Norton,
BS Biochemistry, Ph.D.
Candidate Nutritional Science



PART 1

The Final-Week Contest-Prep Fallacy,

"If it ain't broke, don't fix it."
~Unknown

Since the theme of this month's MD is 'Road to the Nationals,' a lot of contest-prep topics have been on my mind. Now a lot of what I do in this column ends up being myth-busting, not because I plan it that way, but because there is so much ridiculous information out there that typically telling the scientific reality ends up being 'myth-busting' and manages to step on the toes of established methods. Contest prep is no stranger to this, especially when it comes to the final week.

How many times have you heard a competitor say, "I looked so great a week out and then I looked terrible onstage." That's easy; you hear it after every show from a good number of competitors. Now how many times do you hear, "I didn't look very good a week out, but that final week everything really came together and I looked great onstage." You hardly ever hear that. Why the difference? What if I told you that the 'established' methods of final week peaking are almost completely wrong and based on about zero science. Nowadays every gym 'guru' has the perfect 'secret' plan that is going to make you super-dry, full, and shredded onstage. Stop me if this 'secret' plan is any different from what I've laid out here:

Sunday-Tuesday: Low/zero carbs. Super high water, high-sodium, and high-rep depletion workouts.

Wednesday-Thursday: Begin super-aggressive carb load (Some may wait until Thursday to begin loading). Beginning Thursday, reduce sodium and water. No more workouts or cardio for the week beginning Wednesday.

Friday: Continue carb load, and continue to reduce water and sodium. By this point, most of these plans will have you taking in less than half your normal water intake and some may even have you at zero. Sodium is usually zero by this point and typically potassium loading begins. Begin taking diuretic (some may begin on Thursday)

Saturday: Continue carb load, almost zero water, no sodium, continue loading potassium, and taking diuretic.

So how close am I? I'll bet I'm damned close. And if you followed this protocol you probably wonder why it didn't magically take you into striated-glute land. I'm afraid I have bad news for you: if you don't have low enough body fat to have striated glutes, no crazy peaking method is going to get you there. There is one secret to looking shredded onstage, and that secret is… BEING SHREDDED!

Over the next few issues of MD I am going to explain why these typical 'peak week' protocols are more likely to make you look worse, not better. This month I am going to focus on cutting water and using diuretics.

The idea behind cutting water and using diuretics is simple. If you cut water, there will be less under your skin and you will look more shredded, right? WRONG! The reality is, water is stored in basically 2 compartments inside the body: intracellular (inside the cell) and extracellular (outside the cell). Intracellular water is great; it makes your muscles look full and volumized. Extracellular water is what people are attempting to eliminate by cutting water and taking diuretics.

The body maintains the ratio of intracellular to extracellular water in about a 70:30 ratio and this ratio is EXTREMELY tightly controlled. Anyone who claims that you can eliminate water from one compartment without affecting the other is flat out WRONG. If you pull water from one compartment, you will also pull it from the other to maintain homeostasis. This is basic chemistry/physiology concept taught to freshman-level college students. It is explained nicely by Le' Chatelier's Principle which states: "If a chemical system at equilibrium experiences a change in concentration, temperature, volume (i.e., water volume), or partial pressure, then the equilibrium shifts to counteract the imposed change."



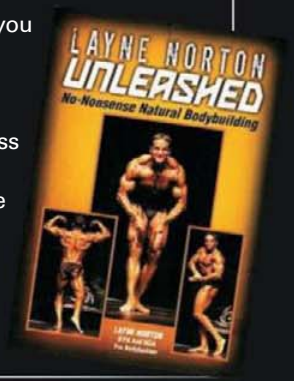
So if you take a diuretic or cut water, you will lose extracellular water, but you will also lose intracellular water in order to maintain homeostasis. The ratio of intracellular: extracellular water will remain unchanged and all you will have accomplished is flattening yourself out. This is a big reason why you always hear people at shows talk about never being able to fill out or get a pump.

Furthermore, I'm sure many of you have experienced or have heard of competitors who couldn't fill out the day of the show no matter what amount of carbs they ate— but after the show they went out to IHOP and pigged out and they looked 10X better an hour after the gorge-fest. That's because what causes carbohydrates to fill muscles out is not the carbs themselves, but the water that associates with carbohydrates.

If you are cutting water, you can eat all the carbs you want and you will never fill out properly. After the show when competitors pig out and can't believe how much better they look, they assume it's because of all the crap food they ate and they simply must not have carbed up enough (like 1,000 grams of carbs isn't enough to fill you out)— when the reality is, it is not the food they ate that made the difference. It was the fact that they drank a bunch of water with the food and *that* finally allowed them to fill out!

Now I know you are probably thinking, "But Layne, what if I time it just right— can't I catch myself where I am losing more extracellular water, instead of intracellular water?" Not really. Your body's water balance is so crucial to cell osmolarity, ion balance, blood volume, and blood pressure that it is regulated by the minute! There is no way you could only pull water from one compartment without affecting the water. Moral of the story with water is: if you are shredded and look great a week out when you are drinking a ton of water, why would you change a bunch of things? If it ain't broke, don't fix it!

Part II will discuss sodium/potassium manipulations— be sure to pick up the next issue of MD to see what I have to say about that nonsense! ■



PHOTOGRAPHY BY PER BERNAL

By Anthony L. Almada, MSc, FISSN

Shred of Evidence

Show Me The Proof!

PROTEIN AS RELIGION?

PERSPECTIVES OF A PROTEIN HERETIC



PHOTOGRAPHY BY PER BERNAL

"I'd add FOUR scoops of this into your post-workout shake. Thank you," confidently added my friend who owned and operated a sports nutrition store. Another happy customer with the keys to the physique universe… and for only $39.95 plus sales tax.

This seasoned veteran of sports nutrition sales had become a close friend over the past year. He all but blowtorched several big-name products after I shared with him several research studies showing they did NOT work (and the companies could not produce research showing they DID). He also became a nightmare to a few other companies by asking a single question about certain products they were pitching: "Do you have any published research studies on YOUR ACTUAL product, showing greater gains in muscle mass and/or strength, compared to a placebo or another product?"

What he received as a response was equivalent to asking a sports car salesman for a copy of an independent road test and receiving a picture of the car in a slick brochure, plus a hefty dose of testimonials, intermixed with mumbling and stuttering.

"Hey Greg…," I started, his head moving in an owl-like perfect rotation, from the cash register to my eyes, "…those FOUR scoops mean 48 grams of protein. Where did you get that hefty dose recommendation from?" I was placing my inflatable boat into the river and ready to take Greg with me over the falls, 500 feet below. Hopefully, our friendship wouldn't drown.

"Anthony, have you lost your ability to read? I remember reading in the muscle mags two decades ago that 40-50 grams was the maximum dose your body could use after training. And you showed me the studies saying about 1.5 grams of protein per kilo of bodyweight— in 'unassisted' resistance-trained athletes— as being the daily dose needed to support mass and strength gains![1,2] Are you gonna

tell me to get my nitrogen from breathing air?!"

I had touched a nerve— with a hot branding iron. Greg prided himself on being a very informed sports nutrition retailer— and not informed from reading muscle magazines, web forums, or Wikipedia alone. He had invested a lot of time into being an evidence-based sports nutrition store owner, and was well recognized for his expertise. Through his almost two decades of experience he had become a protein advocate, promoting protein supplements to virtually all of his customers engaged in resistance training and endurance.

I threw up a question to Greg: "Have you ever seen any studies that measured the anabolic effect in muscle of DIFFERENT protein doses in resistance-trained persons, after they finished a workout?" Long pause— I could tell his hard drive was scanning terabytes of info. "Uh… no," he disappointingly replied. Neither had I, until very recently. And now it's starting to come in droves.

I also remember reading in the muscle mags— all 145 pounds of me as a high schooler— that your body could digest and use up to 40-50 grams of protein in one dose— and that the rest would be burned off or wasted. Back in those days, muscle protein anabolism studies were as inaccurate as measuring the distance between two stars by holding a yardstick up in the sky and eyeballing. Way off. No magazine article or 'expert' ever had a precise number… and they never had a scientific reference to back up this 'magic number.'

And then out of nowhere, Dr. Stuart Phillips and his team from McMaster University provided an answer to the question of what's the maximum protein dose to support muscle protein anabolism.[3] They found, using resistance-TRAINED males, that a dose of more than 20 grams of egg protein (40 grams) was effectively 'wasted,' not increasing muscle protein synthesis to a greater degree.

"Greg, I used to think the same thing, because I read those same magazines and there had never been a study asking the question in resistance-trained athletes," I humbly offered. "But didn't you read Robbie Durand's article in MD, or listen to his interview with Dr. Stu Phillips [http://www.musculardevelopment.com/content/view/1343/79/]? Greg's protein religion was about to be cleansed



in the waters of new research, and his eyes mirrored his acceptance of having to change his prayer. I told him about the study and what it suggested— taking higher doses could blunt the body's anabolic response to lower doses of protein (less than 20 grams).

"They didn't test a 30-gram dose, so we don't know if 20 grams is the max dose, and they didn't do a different study with whey protein instead of egg, right?" he brightly replied.

"No, and good questions," I replied. "The egg study did not measure muscle protein breakdown, so we don't know what happened to muscle protein balance. But let's move to meat. Another group, led by Dr. Bob Wolfe— the high priest of protein metabolism— did a similar study but in untrained subjects, no exercise bout, and with 30 or 90 grams of protein from low-fat beef patties[4] (the study was supported by the National Cattlemen's Beef Association). They also found a lower dose (30 grams) to max-out muscle protein anabolic response, but they didn't measure the burning of the 'excess' amino acids and they also didn't measure muscle protein breakdown rate. In the egg study, total insulin response was greater over the 4 hours of the study when the 40-gram egg protein dose was given. In the beef study, they measured insulin but didn't report the differences between the high- and low-dose beef bonanza."

"So let me try and digest this," Greg retorted, enthusiastically. "Egg protein hits an anabolic response ceiling somewhere between 20 and 40 grams after training, in trained persons. We don't know what whey— or any other protein's— anabolic response ceiling is in trained subjects. Beef's anabolic response ceiling— in untrained subjects— is between 30 and 90 grams. And we have no clue what the anti-catabolic/muscle protein breakdown response ceiling is with any protein in resistance-trained subjects— we don't know the NET effect of a protein dose on muscle protein anabolic response. And a higher protein dose means a higher insulin spike, and insulin is a potent muscle anti-catabolic agent[5]," he concluded.

"Yes, that's where we are today," I passionately confirmed. "You nailed it. And perhaps the biggest question is what would happen to resistance-training athletes if they downsized their max protein dose to between 20-30 grams at a time, and still took in a TOTAL of about 1.5 grams protein/kilo of bodyweight?"

Greg smiled and answered, "They may be richer, leaner, and just as strong. ■

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PATRICK ARNOLD
The "Clear" Chemist



By Patrick Arnold

I know most of you wish I would write about a new anabolic wonder drug each month that rewrites performance-enhancement history. Unfortunately for all of us, science just doesn't advance fast enough for me to do that. What I can do, though, is once in awhile tell you about something you probably never heard of that has the potential to improve your quality of life, prevent disease, and maybe even give you a boost in the gym or bedroom.

This month, I will tell you about a new, cutting-edge drug therapy that is gaining a lot of attention in the progressive medical community. When I first read about it I was pretty fascinated— partly because of the purported impressive effects it had on a lot of serious medical conditions, but also because of the potential I saw in my mind for improving the health and performance of normal people looking to maximize their physical and mental condition.

Endorphins

I am sure you are familiar with the term endorphins, and you know that they are basically your brain's own pain-killing chemicals. Like morphine and other similar drugs, endorphins work by binding and activating opiate receptors, which are located in certain key locations throughout the brain and the body. You also probably know about that wonderful sensation of euphoria during a great workout. I am talking about that state of body and mind when even tremendous exertion results in surprisingly minimal discomfort. That feeling is due to the release of endorphins, and the corresponding activation of the brain's dopaminergic reward system in what is known as the mesolimbic pathway.

'Endorphin' is a general term for any endogenous opiate peptide of which there are three major distinct classes: the endorphins (main one being beta-endorphin), the enkephalin (main one being met-enkephalin), and the dynorphins. All of these peptides have distinct affinities to one or more of the opiate receptors (mu, kappa, and delta).

Endorphins are primarily released into the central nervous system (via the hypothalamus and pituitary); however they also are present throughout the body (perhipheral). For optimum health, the body strives to maintain a delicate balance of central and peripheral endorphin and opiate receptor subtypes. An imbalance can have many negative effects such as interfering with the way your body handles pain and stress, an inability to feel pleasure, and immune system disruptions.

Lately, a growing amount of research has implicated endorphin deficiencies and imbalances in a number of pathological conditions such as autoimmune diseases (i.e., multiple sclerosis, Crohn's disease, and lupus), and psychological disturbances (i.e., autism and depression). Along with this research, a very interesting method of restoring endorphin balance has been developed called "low dose naltrexone (LDN) therapy." I will describe to you the theory of how LDN therapy works, how it is currently being successfully used by many folks to treat several medical conditions, and what benefits it might have for fitness-minded athletes.

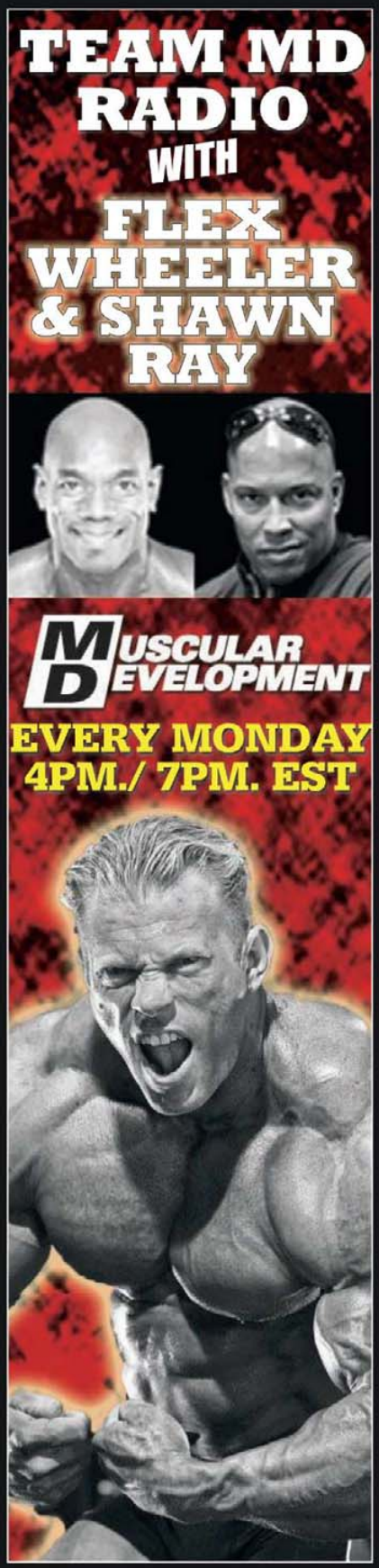
Low-Dose Naltrexone (LDN) and 'Endorphin Rebooting'

Naltrexone is a drug derived from the narcotic painkiller oxycodone. Unlike oxycodone however, naltrexone blocks painkilling opiate receptors rather than activating them. Naltrexone is approved for the treatment of alcoholics and opiate addicts who wish to avoid relapse. Since the opiate system is central to the reward mechanism that drives such substance abuse, blockade of the system prevents the reinforcing 'high' obtained by the drugs. When used as a relapse preventative, relatively high dosages of naltrexone are used. These high dosages (50 to 300 mg a day) result in a sustained 'round-the-clock' opiate receptor blockade.

LDN, on the other hand, is designed to only block opiate receptors for a short period of time, and this blockade is more preferential toward the mu-opiate receptors. When ingested at night in dosages of 3-4.5 mg, naltrexone results in a short blockade lasting no more than 4-6 hours. Then something interesting happens. The expression of opiate receptors increases, as well as the amount of circulating met-enkephalin and beta-endorphin. This rebound effect restores the endorphin/opiate system to full sensitivity and balance throughout the rest of the day.

The positive health consequences of this 'endorphin rebooting' are just beginning to be understood. LDN has been found to provide remarkable benefits for many patients suffering from illnesses, especially autoimmune disorders. One such disease is Crohn's disease. Crohn's is a very nasty condition where the body attacks part of the digestive tract and causes massive inflammation. The result is abdominal pain, diarrhea, fatigue, and weight loss. A recent pilot study at Penn State showed that LDN therapy resulted in an 89 percent significant reduction in symptoms, with 67 percent going into remission. Positive results have been seen in patients with multiple sclerosis, although so far most of the data is anecdotal.

The connection between endorphins and the immune system is something new, still there definitely seems to be a link. Low levels of circulating endorphins have been found to



PATRICK ARNOLD
—the "clear" chemist

be common in patients suffering from immune system disorders, and an inverse relationship between inflammatory conditions and endorphins is seen. Direct treatment with beta-endorphin has been shown to reduce progression of arthritis in rats by affecting the catabolic and destructive NF-kappa2 pathway and promoting a better balance between TH1 and TH2 cytokines. Researchers at Penn State also published initial evidence showing impressive effects with LDN on reducing the incidence of certain cancerous tumors as well as retarding the development of existing tumors.

Benefits for Healthy People

If you currently suffer from any of these types of immune system-related ailments I am sure you find this of interest, but even if you don't, there still is a lot to be excited about, in my opinion. Although pretty much untested for in use by healthy individuals who wish to become healthier, I think we may find LDN offers some pretty cool potential.

Certainly being able to keep your endorphin system in tip-top shape is going to lead to better, more enjoyable workouts, as well as provide psychological benefits outside of the gym. More endorphins during a workout means more activation of the dopamine reward system and that means positive reinforcement every time you work out (gym addicts know what I am talking about). On top of that, the positive influence on immune system competence and inflammatory responses might help keep overtraining and chronic injury flare-ups at bay.

Rise and Shine!

There are widespread reports of increased energy and improved quality of sleep (with more vivid dreams) from people on the Internet who have reported their experiences with LDN. Another interesting phenomenon reported by men is an increase in morning erections, and although the cause of this is not exactly known, it may have something to do with an increase in testosterone levels.

I am not sure if there is a substantial connection between LDN therapy and testosterone, but naltrexone definitely has the potential to influence the hypothalamic pituitary testicular axis (HPTA). Many studies have shown increases in testosterone levels in animals (including humans), as well as increases in sexual activity and libido with administration of naltrexone. Naltrexone increases the release of GnRH from the hypothalamus, and GnRH is the signal that causes the pituitary to release LH and FSH, which of course then increases testosterone and sperm production in the testes.

Opiate receptors have an important regulatory role in GnRH production, and apparently receptor blockade results in increased output of GnRH. Of course LDN therapy only results in temporary opiate receptor blockade, so any up-regulation of the HPTA is probably also transient. Whether this nighttime spike in HPTA activity is enough to cause an increase in morning 'wood' is debatable, and its possible that some other neuroendocrinological phenomenon is at play.

Practical Aspects of LDN Therapy

The protocol for LDN is pretty simple. A small dose (anywhere from 1.5 to 5 mg) of naltrexone is taken at night before bedtime. This will result in an opiate blockade of a few hours while you are asleep. Side effects are pretty rare, but initially there may be a little bit of insomnia in the early part of the night and overstimulation during the day. Heartburn has also been reported.

One important thing to take note of is that naltrexone should never be taken if one is also taking a narcotic analgesic medication (codeine, hydrocodone, methadone, etc.), as it will block its effects. This is especially critical for people addicted to such drugs, as naltrexone will precipitate severe withdrawal symptoms in these individuals. Naltrexone is a relatively non-toxic drug, but it has been associated with elevated liver enzymes. At the dose used in LDN therapy, hepatotoxicity is unlikely to be an issue, though. ■

MuscleTech RESEARCH REPORT

By Team MuscleTech Research and Development

BODYBUILDING Q&A

Q: After a hard training session, what's the best way to put myself in a highly anabolic state?

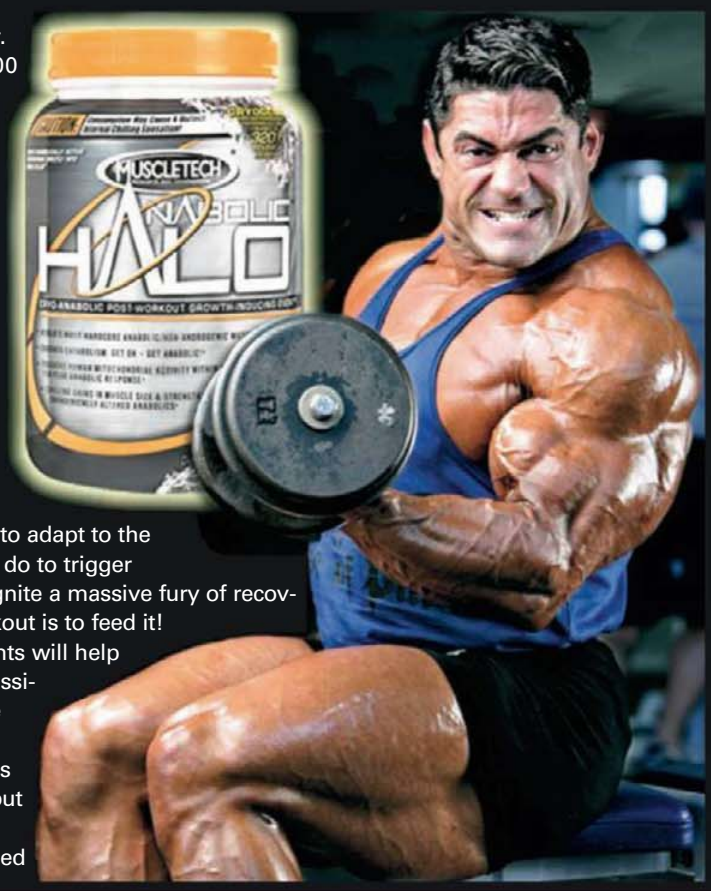
A: Well, there are lots of ways you can jack up anabolism, and one of the most important opportunities to do this is through post-workout nutrition. Serious athletes of any sport, but more importantly bodybuilders, need to take advantage of the post-workout anabolic window for recovery and growth.

In the body's flight-or-fight response to stress or injury (in this case, when you break down muscle fibers during your workout), the body needs key nutrients to recover quickly to respond to the stress of training. Since our bodies are strong enough to handle the stress of even the most punishing workouts, your body 'fights' or reacts to the stress. Think of it this way. If your goal is to bench 300 pounds, only through repetitious attempts will your body react to the ongoing stress. In essence, the more you train, the more stress you put on your muscles, the more your body will try to adapt to the stress and trigger the muscle-building process.

The trick is, the quicker your body recovers from your workout, the faster you're back in the gym— forcing your body to adapt to the new stress. What you can do to trigger extreme anabolism and ignite a massive fury of recovery and growth post-workout is to feed it!

So what critical nutrients will help you get as anabolic as possible? Protein is usually the first thing we think about when feeding our muscles to force muscle growth, but there are other key compounds that should be used to accelerate the growth process even further. In fact, several other key compounds have been shown by leading university research to replenish your muscles' nutrient stores and dramatically aid the recovery and growth processes. This is exactly why Team MuscleTech™ researchers utilized this third-party research to formulate ANABOLIC HALO™ — a potent post-workout growth-inducing cycle.

The formula for ANABOLIC HALO™ includes multiple forms of scientifically-validated creatine, fast-acting carbohydrates, BCAAs, as well as L-carnitine. With its scientifically-advanced core ingredients, ANABOLIC HALO helps amplify free-testosterone androgen receptors, manipulates insulin and increases total muscle fiber area. After 21 days of a third-party study involving 10 resistance-trained subjects, one of the powerful ingredients in ANABOLIC HALO™ increased the number of testosterone (androgen) receptors more than when subjects used a placebo.



Another third-party study published in the journal *Medicine & Science in Sports & Exercise,* involving 22 untrained subjects divided into three study groups, showed that subjects using a key ingredient gained more muscle than subjects using a placebo after 12 weeks. If you truly want to force new gains in size and strength, you should be consuming more than just protein, post-workout. The science behind the ingredients mentioned earlier will amplify your gains even further.

For best results, try ANABOLIC HALO™ — a formula that includes the earlier-discussed ingredients in precise dosages, that's supported by research and is also trusted by pro and amateur bodybuilders worldwide. ■

The Anabolic Doc RAW And Uncensored

By Thomas O'Connor, M.D.



PHOTO SARA MAJIDY

THE TOP 5 Best Steroids for Raw Power

I read your four-part interview in *Powerlifting USA* magazine and was totally amazed. All I can say is that it was awesome! What, in your opinion, are the top 5 steroids for power and strength?

Thanks for the kind words about the interview! I put a lot of time into it, so I am happy to hear that you liked it so much. In regard to your question about what steroids are best for power and strength, I will give you my personal opinion from not only a medical and scientific angle but also from a real world hands-on practical application that I have seen from world-class lifters. I have been in this underground strength culture for over 25 years and I know the reality of what truly goes on behind the scenes, in both bodybuilding and powerlifting.

I am sincere to my professional medical ethics and I am also very sincere in making sure that you protect your long-term health. Do I agree with everything that I see taking place in the strength sports, in regard to drug use and abuse? The answer is no! But since you all are my brothers and sisters in iron, I do want to make sure that you stay healthy during your competitive years and beyond.

You see, my clients come to me for three main reasons. First off, it is because I am sincere to the under-culture of the strength sports and this is important because you are ultimately putting your life in my hands. I am a doctor who you can put your trust in and in this day and age, in regard to the stigma of drugs in sports in this country, it is nonexistent with other doctors who are too afraid to go against the grain.

Second is the fact that I know what the reality is in regard to anabolic use and performance enhancement. I know what the pros use in bodybuilding and powerlifting and the reality of what it takes pharmaceutically to make it to the top of these sports. I know the reality of dosages, underground steroids, and even the crazy things that athletes of all sports will do to perform at their best. I know this reality from my time in the sport, as well as from the world-class athletes who I deal with day in and day out.

Third, I know the hardcore internal medicine and how it relates to performance-enhancing drugs. This right here is the big ticket, because some doctors may know their medical texts inside and out, but that is only half of the puzzle. Put them in a room with a 250-pound bodybuilder who is taking 18 I.U. of GH daily and 3,000 mg of testosterone weekly plus all the other goodies and he won't have a clue on what the hell to do to bring this guy's health and blood profile back to where it should be. The difference is between these doctors and me is that I have built my professional medical reputation on making sure that I get the job done. So with this said, let's take a look at the best anabolics top-strength athletes use to take their strength to the next level!

Testosterone Suspension

Oh yeah baby, 'Test' is best! Now the inclusion of some form of testosterone in a strength athlete's cycle is essential for optimal gains. When it comes to strength gains, no other form of testosterone compares to suspension. This is due to the fact that it is so fast-acting. This is because there is no ester and basically you are getting straight testosterone in water. You can look forward to increased muscle gains and even strength that will make you feel like Hercules.

One drawback is the fact that it must be injected daily. In my opinion, to truly maximize the benefits of testosterone suspension, it must be administered twice daily, due to its short half-life. Another undesirable reality of using suspension is the painful shots. Many of the brands of testosterone that float out in the black market are veterinary grade. To make matters worse, because it is not micronized and the crystals are very large, it clogs syringes very easily.

One lifter I know used some vet-

NEW COLUMN!

grade suspension and he had to inject it with an 18-gauge needle. Damn it makes me cringe just thinking about it. He must have felt like he was getting stabbed by an icepick. Plus the majority of underground labs do not even make suspension. This is because many of them in reality are not run by educated chemists like they want you to think. Making a sterile testosterone suspension at the quality of even vet-grade gear is not going to happen unless the guy is a chemist with a degree behind his name and is preparing it in a clean room. Most guys will take about 100-150 mg per day, broken up into two daily shots for best results.

Anadrol 50

Oh yeah, they don't call these bad boys 'A-Bombs' for nothing. I am sure all of you reading this know that it is a derivative of dihydrotestosterone. In powerlifting and strongman circles, this is no doubt a top drug of choice for many reasons. First off, the strength gains are fast. Seeing a guy jump 30 pounds in his bench press in 10 days is not uncommon at all. It increases water retention a lot and for powerlifters, this can be a good thing, because it optimizes your leverages. Secondly, it will make your power gear like your bench shirt fit just that little bit tighter, allowing you to get even more poundage out of your shirt. Lastly, it can really jack up your red blood cell count leading to increased pumps and training endurance.

Now for those guys who may be taking one tablet per day for short periods of time, there is not much worry. But for the 'Anabolic Kamikazes' who are in our midst, taking five or more tablets per day, elevated red blood cell count is one danger that must be taken into consideration. For those who do such extreme practices making sure you get regular and comprehensive bloodwork is essential for your long-term health. Taking large doses of Anadrol 50 for extended periods of time can make your blood resemble Canadian maple syrup and that is no lie! The other main thing you have to watch here is liver enzyme elevation. The liver is one tough beast, but that doesn't mean you should abuse it without showing it some respect. Most guys will take 50-100 mg daily, broken into two doses, but there are others like I mentioned before who take this much just to start off their day with breakfast.

Halotestin

Halotestin does not have the following in America that Anadrol does and this is for a couple reasons. First off, for most in the underground scene in the U.S., getting your hands on legitimate pharmaceutical-grade Halotestin and enough quantity to make it worthwhile is like finding a fucking leprechaun and a pot of gold at the end of the rainbow.

For most— except for those with horseshoes up their asses— neither of the two above scenarios is going to happen. It is also at least double the price of Anadrol. Many people will pay more for 10 mg tablets of Halotestin than 50 mgs of Anadrol on the black market. Halotestin provides very fast strength gains and in my opinion, even better than Anadrol. Plus there is no water retention and this is why it is so popular with many bodybuilders in the last four weeks of contest prep.

If you think Tren will turn you into an ass-clown in record time, then Halotestin will take it to whole new level. In fact, this drug is very popular with European strongmen since it is much easier to get across the pond. Plus let's face another reality that most of you are probably unaware of: Europeans are not afraid of side effects like guys here in the U.S.— I lived there and I know the deal. The hardcore gear scene in Germany and England makes us look like candy-asses. When the average guy here in the U.S. is talking milligrams, they are talking grams and this is everyday Joes, not pro athletes. Since hepatoxicity is a concern, taking it for four weeks or less is the best option. Most guys will take 20-40 mgs daily, spread out in three doses throughout the day.

Trenbolone Acetate

Tren is one of the most popular steroids in strength sports for many reasons. First off, since it is three times more androgenic than testosterone, you can now understand that it is very potent. With an androgenic ratio like this, its a goldmine for strength athletes looking to increase their power output. Since it doesn't aromatize, you won't get the water retention like you do with Anadrol. This means you will pack on lean, dense muscle and your strength gains will be bang on, too.

Many guys will take around 75-150 mg of tren acetate every other day. Because it has a short ester, it needs to be taken on an every-other-day basis minimum, while some lifters do prefer taking it daily. Another plus is the major increase in aggression. Now if you sport an attitude without tren in your life, then you will be a 'super-sized' asshole, once you start incorporating it in your plan. Increased aggression and trying to rip everyone's head off that you come in contact with, is not an uncommon emotion while taking tren.

Another thing you to watch out for is impaired kidney function. The kidneys are not as strong as the liver so you need to take extra care in this area. You also need to make sure you balance the ratio of your dosage of testosterone in relation to taking tren. If not, your sex drive will hit an all-time nonexistence and your manhood will be nothing more than a soggy noodle.

Mibolerone

This oral steroid is known as Cheque Drops and is derived from a nandralone base. It is a vet drug that was created to alter the ovulating cycle of female dogs to keep them from going into heat. Now in powerlifting circles this is a well-known pre-contest bad boy that is quite popular. I personally know of one guy who is a 1,000-pound squatter who takes a couple cc's of this right before going under a heavy squat in World Championship competitions.

Now you might be wondering why he would do that. The reason for this is that it turns you into a raving beast in minutes. It can dramatically increase your aggression in record time. Since aggression is a key attribute in all strength sports, powerlifters seem to like this more than bodybuilders. In fact, I have not heard of too many bodybuilders that this drug is popular with. Now another sport where it is

taking center stage is MMA and professional boxing.

Oh yeah, fighting in a cage or ring without rules can be some crazy shit, so there is nothing like getting all jacked up during the fight. Since it clears the system fast as well, it makes it popular with MMA fighters who are now under the scrutiny of rigid drug testing. For boxers, it is rumored that one legendary pro who already sported an attitude of a pit bull used this right before a major fight, where he mistook his opponent's ear for a Big Mac.

Yeah, no shit, this stuff will turn the weak-hearted into an animal and bad-ass into a fucking cannibal. Now if you don't want your liver to turn into Swiss cheese, then I would advise against taking this steroid, because it is extremely hepatoxic. It is so strong that is measured in micrograms, unlike milligrams with other steroids. Hardcore powerlifters will use it for the last two weeks before a contest on their hardest training days as well as at the contest. Most will take 1 ml under the tongue about 15 minutes to half an hour before training or competing.

My Personal Favorite Pre-workout Supplements

I have a question about pre-workout supplementation. I was wondering what you use before you train to get all jacked up before an intense workout?

You see I am going to tell it like it is. My favorite pre-workout stack is Plasma Jet and Super Pump 250 by Gaspari. Now, before all you reading this get your balls in a knot, just to give you the 411, I am not sponsored by Gaspari Nutrition. Nor do I get free supplements or endorsements. I go down to my local GNC like every other hardworking American and spend my hard-earned dollars on these products because I believe in them. I have been a fan of Rich since his career in the '80s and in my opinion, he should have beaten Haney on several occasions.

But even though you may disagree with me on that one, I don't care. What I do care about is telling you the no-bullshit truth of what I actually lay down my Benjamins for every month and what I use before I tackle a 500-pound bench press.

About three hours before I hit the gym, I down 10 capsules of Plasmajet on an empty stomach. I love this stuff—it is my favorite N.O. booster by far. You see the science behind Plasmajet is very sound, and it's not just another one of those arginine-loaded N.O. boosters that the pump starts off great, then fizzles out two hours later. Because it is composed of numerous high-quality ingredients, including Peak ATP, it truly is in a class of its own. Then about half an hour before I start training I take 2-3 scoops of Super Pump 250 in 16 ounces of water.

By the time I hit the gym I am ready to Smash Fucking Weights (SFW). This is a common powerlifting term that means you are going all-out, balls-to-the-wall. Basically it's a war between you and the iron. This keeps me fueled right throughout my workout. I like Gaspari products because they work hands down and it is what I took before I hit that 500-pound bench press record that I did just a few months back. Rich, keep up the good work and keep the kick-ass products coming!

Trashing Triceps Powerlifting Style

Hey Anabolic Doc, what's up my man? I loved the interview series that you did and it kicked ass! Now in your first column here you mentioned you would be giving us some of your secret powerlifting training tips, too. My question is about improving my triceps strength and power. I know powerlifters have some of the strongest triceps around, so I thought you could let me in on some new ideas that I can incorporate into my training plan. My bench press sucks and I can barely get one rep with 275. I have been training for six years and I know it has to do with my weak triceps. I do a lot of the basic bodybuilding exercises like push-downs, dips and kick-backs so I was wondering if you could throw something new my way. Thanks again for such a great interview and I look forward to more of your work in Muscular Development.

Hey, thanks for the kind words about the series I did. The sole intention was for powerlifters, but many of those same things will apply to bodybuilders as well. It is very important to take care of your long-term health because this, in my opinion, is often overlooked when in search of that bigger powerlifting total or 21-inch guns. In reality, this should not be the case at all and your main goal should be maintaining optimal health while at the same time improving at your chosen strength sport.

So— you are looking to bring up those triceps, are you? Not a problem— the Anabolic Doc has benched pressed over 500 pounds at 44 years old, so I know a thing or two about improving triceps strength. Now I am going to give you a really kick-ass workout idea that you most likely have never heard of.

These are known as Crazy 8s and for good reason. This technique was developed by world-renowned strength coach Rahim Kassam. Believe it or not, it's not just an exercise, but a complete workout. I recommend warming up with a few good high-rep sets of pushdowns just to warm the area and increase blood flow to prevent injury before starting this exercise. I am sure you have done lying dumbbell extensions before, even though I know many bodybuilders don't make this a major movement—but they should.

Now the powerlifting twist will shake this exercise up to a whole new level and believe me when you are done, you will be begging for mercy. First off, we won't be using a flat bench but a decline bench for this exercise. What makes this so hard is the rep and tempo scheme that I have laid out. The reason why it is called Crazy 8s is because of the fact that you will be doing 8 sets of 8 reps. Now you may be thinking, "Ah, that's all— what kind of exercise is that?" Well, hold on to your panties for a minute boys, it's not over yet.

The rest periods will not be 1

minute like you are used to doing. They will be shortened down to a nice 8 seconds. Yep that's right, 8 seconds between sets, which will give you just about enough time to take in two to three deep breaths— and down you go again for another set. It's not over yet.

Let's talk about the tempo next. You will be doing a 3:1 eccentric-to-concentric action. For all you meatheads out there who do not understand what I am talking about, this means that you will take 3 seconds to lower the weight and 1 second to bring it back up. There are two reasons for this. Lowering it slowly in an eccentric action will help increase hypertrophy. We all know that the negative portion of the exercise is what causes the most muscle damage and growth. The concentric or raising motion will be done in a strict, yet explosive form. This will cause you to build explosive strength in your triceps and allow them to fire more efficiently.

Did you ever see the difference between a bodybuilder bench pressing and a powerlifter? Yes, the form is slightly different, but as the bodybuilder just grinds out the reps like every other exercise he does, the powerlifter brings it down with control and then fires the weight explosively yet with control. I am not talking about bouncing it off your chest like these retards that you see at the gym. I am talking about strict explosive power here, not sloppy, bouncy bullshit that is done at gyms all across America. If you want to lift weights— and I am talking about big weights— you must develop your explosive strength and what is known as speed strength. Without these two, you may look big, but your strength won't compare to a powerlifter who weighs 100 pounds less than you.

So you will be doing 8 sets of 8 reps and you get a whopping 8 seconds rest in between each of those sets. Now if you are used to using 50-pound dumbbells for normal sets of 8 for this exercise, get ready for a rude awakening when you can barely get 30s up. Remember, you can't change the resistance during the set program. If you choose 30s, you have to go all the way through with it and not drop down to 20s by set 5.

Now let's talk a little about the biomechanics and form. The reason this exercise is done on a decline is because MRIs have shown that it recruits more muscle fibers than doing it on a flat bench. Second, the form must be strict with the elbows tucked in and close to the sides. When this exercise gets hard, people will cheat by flaring their elbows out— and this is not what you should be doing. Lastly, you want the dumbbells to come down far enough where they can touch your ears. This way with the decline, you are going to get one hell of a stretch.

You may think this workout is over— but hold on just a little longer, my friend. To finish this off, you will be doing another 3 sets of decline extensions with flex bands for a giant drop set. For these, you will not use the 3:1 tempo that was done with the dumbbells, but a regular 1:1 tempo. Basically you are now banging out the reps to force some blood in there, but again, the form must stay strict.

We hook up three sets of flex bands to the bottom of the bench or with dumbbells. So once you have done all 8 sets, you have another 3 sets done without rest, with these bands of varying strength. The reason for using bands is that it will totally change the feel of the exercise and will further stretch your triceps. Plus, the main reason why powerlifters use flex bands on many different exercises is the fact that they're great at improving explosive strength. Incorporating them into your training is known as the 'Contrast Method' and is very effective at increasing strength from another angle bodybuilders have never heard of.

By the way, make sure you get true Jump Stretch Flex Bands made by Dick Hartzel. He is the originator, and makes the highest-quality bands on the market. Over time, inferior bands will crack and break. This happening during triceps extensions isn't a major problem, since the most you might get is hit in the face and a fat lip. But it's not something you want with 600 pounds on your back during a heavy box squat. The consequences of this happening can result in a major injury, so quality bands are the name of the game.

First, you will get the Light band— but don't think it's that light, because it has a resistance of about 70 pounds in each hand. Some of you will be so destroyed that you won't even be able to continue, so this technique is reserved for advanced lifters only. You will now bang out as many reps as you can with this band. Then once you can't do any more, you will jump to the Mini Flex band and again do as many as reps as you can without resting. Then when you can't take it anymore, you will grab the Micro Mini Flex band and continue again until you simply can't do anymore.

If you can complete this workout and if it's done with the right intensity, I am telling you good luck at trying to move your arms for the next couple days. This will take your triceps training to a whole new level. If done properly, not only will this help increase your bench press strength because you are focusing on many different aspects of training methodology with this just one exercise, but you will forge some horseshoes made from granite.

In all the years I have spent in commercial gyms, or even spent time training with advanced bodybuilders, never have I seen them do this exercise with this rep and tempo scheme. If you have the guts to try this, give it a shot because I am telling you it will fry your triceps in a very short period of time. Besides the few sets of pushdowns that I recommended to get your elbows warmed up, this whole workout will take no more than 10 minutes. But believe me, if you do this with true intensity and proper form, it will destroy them more than spending 40 minutes hitting three different exercises. By the time you have completed that last set of the band extensions to utter failure, you will need your training partner to help get you off the bench.

To get a set of these Flex Bands go to www.jumpstretch.com. Give this triceps thrashing program a whirl and I guarantee it will take your pressing strength and size to a whole new level. ■

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STEROID OF THE MONTH

Anabolic Pharmacology

By Seth Roberts, M.A.

Pharmacology is the study of drugs and their effects. Anabolic pharmacology is the study of drugs that have growth-promoting effects on muscle. This column will explore anabolic pharmacology by profiling a different anabolic drug and its effects each month. The focus of discussion this month will be the anabolic androgenic steroid, dromostanolone.

DROMOSTANOLONE



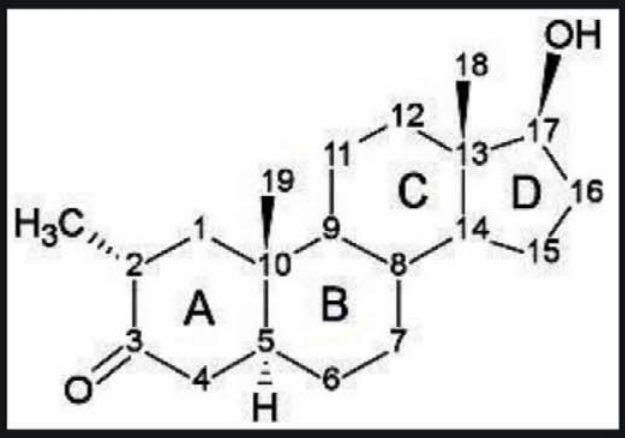




PHOTOGRAPHY BY PER BERNAL

Dromostanolone is a synthetic derivative of DHT. DHT binds more strongly to the AR than testosterone, but does not have an effect in muscle tissue, because it is deactivated by 3-alpha hydroxysteroid dehydrogenase. The methyl group at the 2nd position allows dromostanolone to stay active in muscle tissue by disallowing deactivation by this enzyme to some degree. However, since dromostanolone is converted primarily to 2-methyl androsterone and 3-alpha diol derivatives, there is still considerable deactivation by 3-alpha hydroxysteroid dehydrogenase.[1]

The presence of the 2-methyl group does reduce potency of dromostanolone compared to DHT, but only to about the level of testosterone. Since dromostanolone is already 5-alpha reduced, it is not converted any further by 5-alpha reductase. Therefore, it is equipotent or slightly less potent in skeletal muscle compared to prostate, hair follicles etc. Due to the fact that this steroid is 5-alpha-reduced, it cannot be converted to estrogenic metabolites. Additionally, 5-alpha-reduced steroids have been shown to have anti-aromatase activity.



The strong androgenic effect of dromostanolone, combined with its anti-estrogenic effects, can result in reduced levels of circulating SHBG. SHBG seems to have a protective role against estrogen-induced proliferation in the breast.[2,3,4,5,6,7] With the reduction of SHBG levels by dromostanolone, previously-bound estradiol and estrone circulate unbound and are much more likely to induce breast tissue growth in the environment of reduced SHBG. Dromostanolone is also known to result in hair loss and acne as well as prostate enlargement.

No binding to progesterone or glucocorticoid receptors has been shown with this steroid. Dromostanolone is traditionally injected as a propionate ester, requiring it to be injected every two or three days. It is a painful injection resulting in swelling and soreness.

There are no legitimate producers of dromostanolone propionate at this time, only underground suppliers. I would not be surprised to see different esters of dromostanolone show up on the black market and there have been some reports of oral dromostanolone being sold.

Though many consider this steroid to be similar to DHT and expect side effects to be similar, dromostanolone is actually somewhat less harsh than DHT and other, more potent androgens. Its potency is similar to testosterone but without the conversion to estrogen which is demonstrated in its anabolic-to-androgenic ratio (about 3:1). Dromostanolone has been shown to build up red blood cells with a similar potency to oxymetholone[8] and is known for its positive effects on strength. Among users, this drug is known as a "hardener" because it loads water into the muscle without subcutaneous water retention (edema) resulting in a hard-looking physique. ■

Seth Roberts is a former pharmaceutical research scientist with over 10 years of pharmacological research in the discovery and development of novel therapeutics. Seth's new book ANABOLIC PHARMACOLOGY *is available now at www.Ergogens.com. [©Seth Roberts, 2009. All rights reserved. For informational purposes only, not to be considered as medical advice or an endorsement of the use of illegal substances.]*

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KNOWLEDGE IS POWER

Anabolic Research Update

By William Llewellyn



Warning: Opinions expressed in this column do not necessarily reflect the views of this magazine's publisher or its editorial staff. MD does not condone any form of illegal drug use for bodybuilding or for any recreational purpose. MD also does not condone abuse of legal drugs for any purpose.

2009 Counterfeit Steroid Report

This month, I want to review another detailed report on the prevalence of counterfeit performance-enhancing drugs (PEDs). This particular study comes from the Centre for Sport and Exercise Research at Newman University (U.K.), working in cooperation with the Drug Control Centre analytical lab at King's College in London. The study involves the analysis of mainly oral and injectable anabolic steroid products, but also several samples of recombinant human growth hormone (somatropin) and other ancillary and performance-enhancing drugs.

The testing was ordered in response to an increase in reports of injection-site abscesses by bodybuilders in the United Kingdom. While this series of testing took place in the U.K., given the global nature of the steroid trade these days, it should hold strong relevancy to underground markets worldwide.

The Drugs

A total of 57 drugs were submitted for analysis as part of this report. Although the exact source of the drugs was not identified, it was stated that all were obtained from the black market. A total of 19 oral products were submitted. These consisted mainly of oral steroids such as methandrostenolone, oxymetholone, mesterolone, and stanozolol.

In addition, there were several other non-steroid products sent for testing including clenbuterol, albuterol, ephedrine, clomiphene, furosemide, and levothyroxine. For the injectable products, a total of 38 were submitted for analysis. Again, these consisted mainly of traditional anabolic/androgenic steroids such as testosterone, nandrolone, methenolone, trenbolone, and boldenone.

Testing Methods

The laboratory testing protocols used for this investigation were fairly basic. With regard to the active constituent, the lab focused on determining if the listed drug was present in the product. There was no quantification of steroid dosage. As a result, we do not know if any of the products were overdosed or underdosed.

As per this testing, a product is considered counterfeit only if the drug listed on the label is not found. This, of course, presents a great limitation, as many counterfeiters will put the correct steroid in their products, just not in the correct amount. There was also a test for any bacteria content in the injectable products; however, the results for each were not provided, so we do not know which individual items were contaminated.

The most detailed part of the investigation seems to have been the acquisition of raw steroid powder samples for comparative analysis. In some cases, the researchers seem to have gone to great lengths to obtain the drugs from their original manufacturers:

- Samples of methenolone, methenolone enanthate, and mesterolone were obtained directly from Schering (makers of Primobolan and Proviron).
- Samples for nandrolone decanoate, nandrolone phenylpropionate, and Sustanon (various testosterone esters) came from Organon.
- Stanozolol was obtained from Sterling-Winthrop, and clostebol from Farmitalia.
- Their sample for methandrostenolone even came from Ciba, the original marker of Dianabol, which has been off the market for decades now. While this does not hold much relevance to the results, I found it fairly interesting, and worth including.

Drug Testing Results

The full results have been provided for your review. In going over the data, we see a few trends for these results. For one, the oral steroids were much more likely to contain the correct drug. A total of 11 oral steroids were tested, and of them only three (27 percent) contained deviant or no active ingredients. Of the 33 injectable

anabolic steroids tested, a total of 15 (45 percent) were determined to be counterfeit. With regard to the five growth hormone products tested, four (80 percent) were counterfeit. As would be expected, the drugs with the lowest likelihood of being counterfeited were the non-steroid ancillary drugs, were are generally much more widely available, traded without the same legal controls, and known to generate the least profit for dealers.

Category	*Percent Counterfeit*
Oral Steroids	27%
Injectable Steroids	45%
Growth Hormone	80%
Anti-Estrogens	(none)
Beta Agonists (clenbuterol, albuterol)	(none)

Oral Drug Test Results (Real and Counterfeit)

Product Label	Product Claimed	Drug(s) Found
1 Clenbuterol (Spiropent)	Clenbuterol	correct
2 Salbutamol	Salbutamol	correct
3 Stanozolol	Stanozolol	none
4 Stanozolol	Stanozolol	dihydrotestosterone
5 Methandienone	Methandienone	correct
6 Stanozolol	Stanozolol	correct
7 Oxymetholone	Oxymetholone	correct
8 Oxymetholone	Oxymetholone	correct
9 Methandienone	Methandienone	correct
10 Methandienone	Methandienone	correct
11 Stanozolol	Stanozolol	correct
12 Ephedrine	Ephedrine	correct
13 Furosemide	Furosemide	correct
14 Stanozolol	Stanozolol	Methyltestosterone, caffeine
15 Ma Huang	ephedrine alkaloids	Ephedrine
16 Clomiphene citrate	Clomiphene	correct
17 Levothyroxine	Levothyroxine	Thyroxine
18 Clenbuterol	Clenbuterol	correct
19 Proviron	Mesterolone	correct

Injectable Products Containing Correct Drug (Real)

Product Label	Product Claimed	Drug(s) Found
1 Deca Durabolin	Nandrolone decanoate	correct
2 Deca Durabolin	Nandrolone decanoate	correct
3 Equipoise	Boldenone undecylenate	correct
4 Omnadren	4 ester T. blend	correct
5 Sustanon	4 ester T. blend	correct
6 Sustenon '250'	4 ester T. blend	correct
7 Sustenon '250'	4 ester T. blend	correct
8 Parabolan	Trenbolone acetate	correct
9 Primobolan depot	Methenolone enanthate	correct
10 Primobolan depot	Methenolone enanthate	correct
11 Stanazol	Stanozolol	correct
12 Testosterone enanthate	T. Enanthate	correct
13 Testosterone enanthate	T. Enanthate	correct
14 Testosterone enanthate	T. Enanthate	correct
15 Testosterone propionate	T. Propionate	correct
16 Trenbalone acitate	Trenbolone acetate	correct
17 Zambon (Winstrol depot)	Stanozolol	correct
18 Norditropin simplexx	Growth hormone	correct
19 Sachet 1 Www.821.in 'tep'	T. Propionate	correct

Bacteria Testing Results

The bacteria testing results were also positive. Some of the injectable steroid samples were shown to contain common bacteria species that live on the skin. These are usually known as skin commensals— meaning that the host (human) benefits from the bacteria in a type of symbiotic relationship.

Although not specifically identified, these skin commensals may include staphylococcus epidermidis, mycobacteria, propionibacterium, and corynebacteri. While normally beneficial or benign to humans, these skin bacteria can have a pathogenic (illness causing) effect in some cases when they penetrate the skin and enter the body. This is a common risk with sharing or reusing steroid vials or injection equipment, or using illegitimate steroids produced under less than sterile conditions.

Tests on EcoOils

Although few brand names were included in the report, two of the products listed were known steroid sachets labeled as 'Indian Aromatherapy Oil.' The report listed the source as a website called 821.in, and incorrectly identify these products as topical steroids. In fact, these are injectable steroids. The sachets, which do not list the exact steroid contents of the packaging, are usually shipped in small envelopes to conceal the drug from customs officers. Customers would go to the website for the products and reference the code on the sachets against a list to identify the true drug contents. The code on one product (TEP) refers to testosterone propionate, and on the other (TE3) a 300 mg/mL Sustanon blend.

The results for the sachets were not perfect. While the testosterone propionate sachet did have the correct active drug, the Sustanon sachet contained testosterone, but the esters did not match what was supposed to be inside. The researchers incorrectly identified

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Injectables Containing Substituted Drug (Counterfeit)

Product Label	Product Claimed	Drug(s) Found
1 Boldenona 50	Boldenone undecylenate	T. Propionate
2 Nandrolone decanoate	Nandrolone decanoate	T. Enanthate
3 Primobolan depot	Methenolone enanthate	Nandrolone phenylpropionate
4 Sustanon	4 ester T. blend	Incorrect T. Blend (enanthate)
5 Trenbolone 80	Trenbolone enanthate	Trenbolone acetate
6 Unlabelled	Growth hormone	rhGH material present (22 kda peak, only)
7 Sachet 2 Www.821.in 'te3'	4 ester T. blend	T. prop, cyp. Deca.

Injectables Containing No Drug (Counterfeit/Fake)

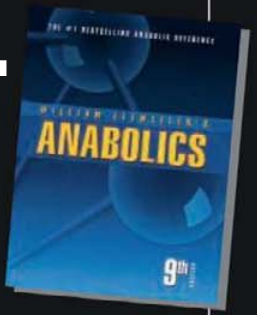
Product Label	Product Claimed	Drug(s) Found
1 Boldabol	Boldenone undecylenate	none
2 Boldebal-h	Boldenone undecylenate	none
3 Mastabol	Dromastanolone dipropionate	none
4 Primobolan depot	Methenolone enanthate	none
5 Spectriol	T. Esters	none
6 Testabol depot	T. Cypionate	none
7 Testex elmu prolangatum 250	T. Cypionate	none
8 T. Cypionate Inj. (cypionax)	T. Cypionate	none
9 Trenbol 75-r	Trenbolone acetate	none
10 Youth gh	Growth hormone	none
11 Somatotropin	Growth hormone	none
12 Norditropin simplexx	Growth hormone	none

both as counterfeit, perhaps because they did not correctly match the supposed contents of each product. These particular products are actually known to U.S. Customs already. In early 2008, the DEA sent out a bulletin warning to other law enforcement about the existence of these products. The DEA further identified them to the public as coming from the EcoOils operation. The EcoOils website was shut down in response, and the operation is reported to have been closed. Sachet manufacturing/smuggling operations like this, however, continue to operate.

In Closing

While the anabolic steroid trade remains stronger than ever, the quality of substances being traded has degraded since the enactment of strict prohibitionist policies in the west. Regular readers will know this is something I comment on very often. This latest study provides further evidence of the eroding quality of the black market steroid supply. The results seem to be somewhat in line with previous testing efforts, which have been showing a high percentage of counterfeit items for many years now. This latest testing, however, shows an incredible 45 percent counterfeit rate among injectable steroids, and an 80 percent rate among HGH products.

These numbers are quite alarming, and above many previous studies. While results like these always present an isolated look at quality for a particular set of products, they are certainly cause for concern for everyone using illicit steroids. The exact global relevance of these results, of course, remains to be seen. As always, be careful, be safe. —WL ■



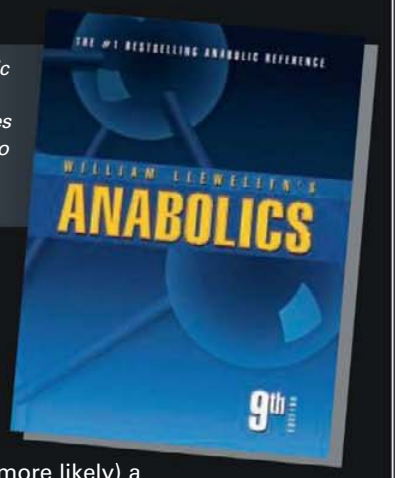
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ASK THE EXPERT

ANABOLICS Q&A

By William Llewellyn

ANABOLICS Q&A is a monthly session with William Llewellyn, author of the bestselling anabolic steroid reference guide, William Llewellyn's ANABOLICS, 9th edition. William is widely regarded as one of the world's foremost authorities on the use of performance-enhancing substances by athletes and bodybuilders. If you have a drug or supplement-related question that you would like to direct to William, don't hold back. Please e-mail it to QandA@AnabolicsBook.com. William will answer the most interesting and pertinent questions right here each month.



Q: I am 73. I am a bodybuilder and still competing. I use testosterone cream 100 mg/0.5 ml, at an amount of 0.5 ml per day. Can I use the testosterone cream all year round, or do I have to cycle it? I have been taking the cream for eight weeks. I then have three weeks off, during which time I take Androtest, which is a testosterone booster. Also, is this enough to restore my own testosterone production, or have I to use the PCT mentioned in your book?

A: It is great to hear from a competitive bodybuilder at 73. You are an inspiration. The dose you are taking appears to be along the lines of what you would expect with a traditional hormone replacement therapy regimen. At 73 years young, your body is probably not producing optimal amounts of this hormone on its own. Staying on transdermal testosterone indefinitely is not unusual if you aren't producing enough of the hormone naturally. Of course, I am not your physician, and can't speak to what he/she finds is appropriate for you.

With regard to the product you mention; if I have it correct, this appears to be a natural dietary supplement. It contains (among other things) tribulus and an extract of eurycoma longifolia root (Longjack). While tribulus doesn't have much clinical substantiation yet, longjack has been clinically proven to increase testosterone levels, at least to a small degree. Natural products like this, however, are studied under normal hormonal conditions, not 'post-cycle.' I would tend to think a traditional PCT would be much more reliable for restoring natural testosterone production.

You also mention a PCT/off-cycle period of only three weeks, which is insufficient for full recovery. This can take more than a month in most cases, sometimes much longer. At best you would be on the way to recovery right when you start the testosterone cream again. If you want my advice, I would speak to your physician and see if there is a better option; either longer periods of time off, or (more likely) a long-term (permanent) approach to managing low testosterone production with transdermal testosterone.

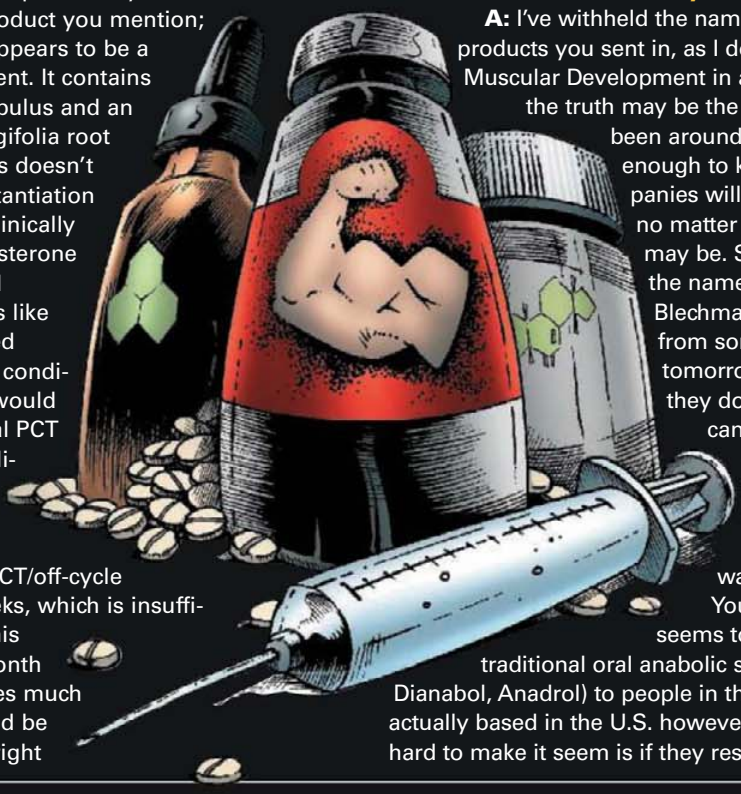
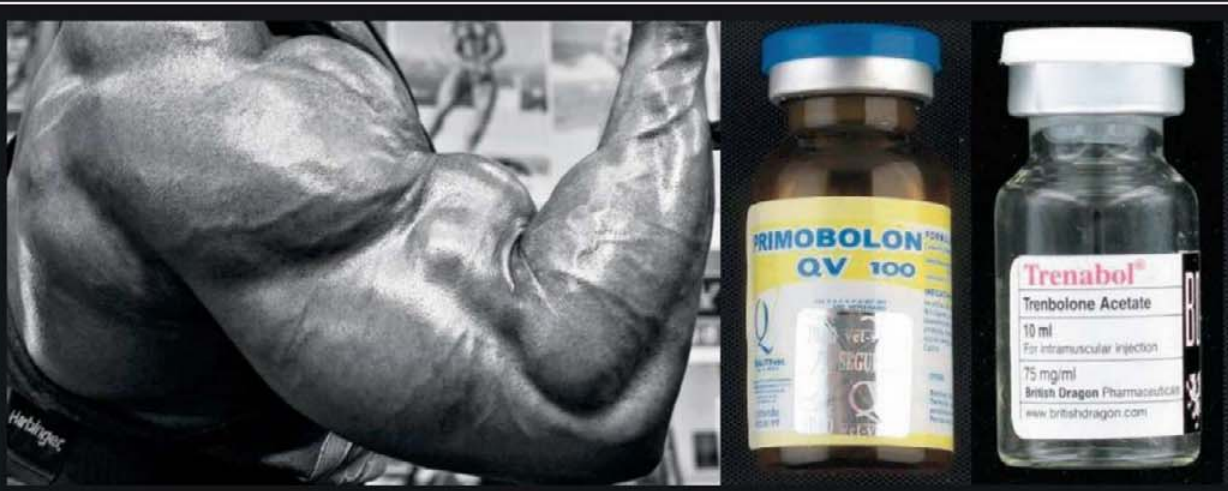


ILLUSTRATION BY JERRY BECK

Q: I am from South America, Colombia where it is hard to get anabolic steroids. So I browse the web to know more about these so I can get to buy them. I am about to buy some anabolic steroids to start a cycle but I want to know about these products and how legitimate they are. The website is (site withheld), where they have many of these products. I don't know the reference, if they are counterfeit or fake steroids. Can you help me?

A: I've withheld the names of the company and products you sent in, as I don't want to get Muscular Development in any legal trouble. While the truth may be the ultimate defense, I have been around this industry long enough to know that American companies will sue at the drop of a hat, no matter how right or wrong they may be. So I think it best to keep the names out, otherwise Steve Blechman is likely to get a call from some angry attorney tomorrow, threatening to sue if they don't retract what I wrote. I can tell you a bit about the company you have referenced, though. For the careful reader, it should serve as plenty of a warning.

You gave me a website that seems to specialize in the sale of traditional oral anabolic steroids (Anavar, Dianabol, Anadrol) to people in the U.S. The company is actually based in the U.S. however, even though they try hard to make it seem is if they reside outside. This is the



first major red flag. If you think steroids are difficult to find in Colombia, try the U.S. Granted we have a huge black market here, but the law never tolerates open sale like this.

If this company sold actual illegal steroids, they would have been closed long ago. What this company does do, like several other companies, is go to great efforts to make you think you are buying steroids, with very steroid-sounding names and bottles/pouches that resemble black market drug items. They are, however, actually dietary supplements. You will not find what you are looking for here.

Be sure to look very closely and make sure you are not doing business with a site like this, which is only interested in taking your money and pawning off (in this case worthless) supplements on you, not the anabolics you are looking for. I am surprised to hear that you are having such trouble locally. I know that Colombia doesn't have a thriving black market, but there are enough domestic veterinary and human pharmaceuticals in production that I would expect you should be able to find them through local pharmacies and veterinary suppliers. Maybe it would be worth trying to order through the mail, but domestically?

Either way, good luck, and be careful shopping. Remember that if you are looking for traditional oral and injectable steroids, you won't find them from a website in the U.S.

Q: I have a question on reliability of two certain product lines. The first is British Dragon. The second has been shut down for some time and I do know that the name has been assumed to be an underground manufacturer, QV? Are these products legit?

A: Since you seem to know something about these companies, I am going to take 'legit' to mean only 'contains real steroids.' The answer to this is not going to be a simple yes or no, so bear with me a little.

First, let's discuss British Dragon (BD). This operation ushered in the modern explosion of large-scale underground steroid manufacturers. While underground labs were in existence long before BD, this operation seemed to bring this business to a new level. For a long time, the BD products were widely sold on the black market, and had a very good reputation among consumers. Counterfeiters haunted this company from nearly day one, however, so there were always issues with checking for security features and trying to avoid the knock-offs.

The British Dragon operation was closed down by an international cooperative law-enforcement effort some time ago. Since then, we've seen the brand continue to thrive on the black market, all at the hands of a variety of enterprising counterfeiters, not the original partners. There are too many counterfeiters still making/selling the BD items to give you any assessment of quality.

You should know also, that I have heard from one of the owners of a British Dragon website. He informed me that a new company will emerge with this name, and it will be both GMP-compliant and registered officially. Time will tell if this materializes. For now, be very careful. Until this operation officially launches, counterfeiters will be making all the BD products.

As you correctly noted, the second company is also closed down now. This is Quality Vet (QV), a former Mexican veterinary producer. QV also had a very good reputation at one time. Until several years ago, this was one of the largest and trusted vet producers in Mexico. They too were closed, due to the efforts of an international law-enforcement operation.

I believe the QV products you are asking about come from a well-known supplier/counterfeiter in Asia named 'IP.' I tested one of the products recently, and it did appear to be accurately dosed and free of gross contamination. Of course, I can't say anything for sure, given the uncertainties of the counterfeit market.

As you may have seen me write quite often, when you are dealing with counterfeiters (as opposed to registered labs and established companies), you are always taking additional risks. Clandestine labs often use sub-pharmaceutical-standard materials, and make their products in less-than-sterile conditions. This may lend these products to have many potential types of contamination, from bacteria to heavy metals.

I would never suggest someone knowingly use an underground or counterfeit steroid product, given these risks, though admittedly I have no horror stories at this time to report about the QV items. Just be careful. —WL ■

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Smith squat, leg press, and leg extension. Muscle biopsies were obtained before and 24 hours after exercise, whereas venous blood was collected before, immediately after and 24 hours after exercise. Free testosterone levels were greater in younger participants at all time points in addition to a greater increase in the younger men immediately post-exercise.[5]

This certainly explains why young men are plainly more anabolic then older men. And certainly, why the need for testosterone replacement therapy may be required in the older male population. Weight training itself can elevate testosterone levels. For instance, in one study six healthy men (26 years old) performed a knee extension exercise protocol on two occasions separated by 1-3 weeks. Rest preceded one trial and a high-volume upper-body RE or resistance exercise protocol designed to increase circulating T preceded the other trial (i.e., high T [HT] trial). They found that circulating T concentrations remained stable during CON. Alternately, HT significantly increased T concentrations above resting values (+16 percent). Thus, they found that acute elevations in circulating T potentiated muscle AR content following resistance exercise.[6]

I Swear Honey, It's Testosterone!

This is more in the realm of 'that's pretty funny'— but it does point out to how unique the effects of T are in men. Scientific evidence suggests that in humans, variations in testosterone (T) levels between men reflect their differential allocation in mating versus parenting efforts. Or in English, scientists think that guys with high T levels would rather chase new tail then stay at home.

So what's the data show? Scientists measured variations in salivary testosterone levels in a polygynous (i.e., men can have 2 or more wives) population of agriculturists in rural Senegal. This is what they found. Married fathers have lower morning T levels than unmarried non-fathers. Second, among fathers, individual differences in parenting effort, as well as variations in mating effort, predict morning T levels in fathers.

Indeed, men highly investing in parental care show lower morning T levels. Moreover, among men under 40, polygynous men show higher morning T levels than monogamous men.[7] So there you have it. Blame it on testosterone! The more you got, the more you'd rather, you know, seek outside love and affection. Hey, it's what the science shows. ■

Jose Antonio, Ph.D., is vice president of the National Strength and Conditioning Association. He has a Ph.D. in muscle physiology and is chief executive of the International Society of Sports Nutrition.

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Extreme Muscle Enhancement



By Carlon M. Colker, M.D. FACN

MUSCLE MASS and the Law of Accommodation

Living in a home on a mountain ridge with spacious windows and large decks, it's the ideal place for indoor plants to flourish (or so one would think). But the sad reality is that if I even attempt to handle the care of my own flora, the resultant disaster can only be described as complete botanical decimation. So while I love plants, I certainly can't profess to have a green thumb. Yet the same cannot be said for my dear mother who has always had a knack for making plant-life flourish.

What astounds me to this day is the degree to which her plants grow. Even the most anemic little sprig around her seems to rapidly grow at an exponential rate to monstrous proportions. It turns out that one of her tricks is the frequency with which she re-pots her plants. Common greenhouse knowledge stands to reason that a plant will only grow to accommodate its confines. In other words, if the pot remains small, so will the plant. Only by successively replanting into increasingly larger vessels, will a plant become significantly larger. Lo and behold, the same is true for muscle.

Muscles are surrounded by a sheet of fascia that compresses and contains it in the same way a pot does to a plant. While it adds support, protection, tissue integrity, and potentiates a certain degree of functionality, it is also a limiting factor in muscle growth. Much like the way the growth of a plant is limited by the size of the pot, so is muscle limited by the confines of the fascia. It is for this reason that peculiar muscle-expanding drugs like synthol actually work to create bigger-looking muscles.

When injected into the muscle, synthol stretches and ultimately tears the surrounding fascia enough to allow the muscle to re-accommodate and expand in size to fill the bigger space. This technique, though it truly works to expand the fascia, is filled with perils. In addition to the obvious dangers of infection, another effect often not considered is the fact the fascia is being forced to stretch and thus so often tears.

Though any method of muscle building, even just natural weight training, will invariably strain, stress, and split the fascia surrounding our muscles, there is no functional damage because it happens in a gradual way. When synthol is injected in too high a volume and too frequently, the muscle bellies artificially inflate in such dramatic fashion that the fascia is split wide open. As a result, the functional integrity of the muscle is profoundly compromised, producing what I can only describe as a droopy sac. I've seen it in practice and it is certainly shocking to look at.

When injected into the muscle, synthol stretches and ultimately tears the surrounding fascia enough to allow the muscle to re-accommodate and expand in size to fill the bigger space. This technique, though it truly works to expand the fascia, is filled with perils.

Of course, that's not the only technique used to blow muscles up beyond the limit of the surrounding fascia. Though site-specific injections with large volumes of fat-soluble testosterone can achieve a similar fascia-straining effect, when abused in the traditional way for large-scale mass building, even high-dose testosterone will not lead to large changes in the compartment of the fascia. The same can be said for growth hormone. It simply does not directly influence the fascia, though indirectly these drugs alone or in combination can certainly be said to strain the constraints of the fascia simply by combining their influence with the intense brand of weight training I describe in my book.

There have been a number of other non-pharmaceutical techniques discussed over the years in both the published

scientific realm as well as the lay press, intended to contend with the fascia and its constraints on building big muscles. While there is a paucity of published research in this area of techniques to promote greater fascia muscle accommodation, there are a number of anecdotal methods. I recall one of the first people to talk about the subject was Vince 'Iron Guru' Gironda. He's a long-since-passed old timer; most guys today would never recognize the name. But I consider him a major figure in the history of bodybuilding, because he was an innovator in diet, training, and other muscle-building techniques. I didn't agree with much of what he professed; he was as controversial a figure as any in the sport, and was somewhat difficult in person. Nonetheless, he made me think. And that's worth gold.

Vince was arguably the first in our sport to openly recognize and discuss the fact that muscle growth is limited, in addition to our individual genetics, by the constraints of a tight fascia surrounding each muscle. As such, he had a theory that you could manually break up the fascia to loosen it and create more space for the muscle to grow into. He felt this could be achieved with a specialized massage technique involving excruciatingly deep and pointed pressure. This pressure was applied in the most painful way you can imagine, using the maximum amount of pressure tolerated in the smallest possible region at the center of the muscle belly, and for the maximum duration. Basically, it's torture. While I sense Vince was right in theory, since the very few people that I knew that tried it couldn't stand it, I quickly shelved the idea in my mind, right next to other cockamamie cogitations like jumping out of a plane head-first to get rid of your headache. Nevertheless, the idea stayed with me and, as always, he made me think more about the fascia and finding ways to expand its limits.

Some also profess different versions of manual stretching to potentiate fascia room in order to accommodate bigger muscles. I suspect that, much like the Iron Guru's technique, it is a technique with real merit, but similarly, you won't find published science to support this anecdotal stretching theory either. The fact is that I'm convinced it works. The idea is that after a muscle reaches maximum pump in a workout, you stretch it through a full range of motion and in a specific range that stresses the largest area of muscle belly circumference. Of course, it seems to reason that if you train through a full range of motion, which you should, there may be less need and thus less benefit to such a technique.

Although like all the other ideas, it currently remains theoretical; it is my own novel belief that myostatin is actually a factor that influences fascia, in addition to its well-reported effect on muscle. The presence or absence of myostatin is perhaps the most important single influence of muscle growth. Myostatin has long since been identified as responsible for inhibiting the growth of muscle, so lower levels of myostatin produce higher levels of muscle growth. Animals and humans that naturally lack the gene needed to produce myostatin are otherwise healthy, yet are well-muscled.

Those same individuals with a little bit of training gain slabs of muscle. But they do this to a degree and proportion far greater and with a much higher ceiling than even that achieved by high-dose combination abusers of growth hormone and testosterone.

In addition to the many myostatin-null animal examples like the Belgian Blue bull and the Piedmontese breeds (born without the gene to produce myostatin) and the increasingly identified number of humans born with low or no myostatin, it is now well-known that their health is not adversely affected. In fact, neither is their muscle function, despite the immense muscle belly girth. This is in sharp contrast to artificial muscle-expanding techniques which, when utilized too aggressively, lead to a functional compromise of muscle. I believe low levels of myostatin and the accompanying concomitant high degree of muscle mass, along with preserved health and functionality, can be explained by fascia having on it receptors for myostatin. So in the absence or low concentration of myostatin, not only do muscles grow much more easily, but the tension of the fascia itself is released to allow for greater accommodation of a larger muscle in a safe and comfortable way.

While the pharmaceutical industry continues to experience the pitfalls of developing drugs that irreversibly block myostatin production, there are natural ways to achieve this objective. As my book *Extreme Muscle Enhancement* goes into its 4th edition, along with a plethora of information about how to most effectively build muscle, I discuss specific dietary and training techniques designed to lower serum myostatin. In keeping with this, my decade-long research into a natural myostatin inhibitor has also come to fruition in the form of the now commercially-available MYO-T12™. In admittedly shameless self-promotion, it is the truth that my MYO-T12™ is the only dietary supplement of its kind supported by published scientific research showing it can truly reduce human myostatin levels. The most recent clinical study on MYO-T12™ showed a high-grade short-term suppression of myostatin in 100 percent of the human test study subjects, with an average reduction in blood levels of myostatin of 46 percent in only 12-18 hours.

Myostatin has long since been identified as responsible for inhibiting the growth of muscle, so lower levels of myostatin produce higher levels of muscle growth.

So the moral of the story brings us back to the plant idea— that being, a plant can only grow to a certain point as dictated by the size limit of the pot it sits in. In this way, recognize that there may be other factors that you must contend with when trying to make stubborn muscles grow. No matter how hard you train, there are certain factors, like the limits of muscle fascia accommodation which, when not addressed, will limit your bodybuilding success. ■

Dr. Colker's book, ***Extreme Muscle Enhancement: Bodybuilding's Most Powerful Techniques*** is available by calling **1-800-310-1555** or ordering the book on-line at **www.prosource.net.**

Busted! Legal Q&A

By Rick Collins, JD



RICK'S LEAP FOR LIFE

Q: What's the update on your planned skydive? Did you actually make the jump?

A: I'm not a great fan of heights. That's exactly why I chose throwing myself out of a perfectly good airplane to raise money for charity. The late August event was billed as my "Leap for Life" by the American Cancer Society (ACS) and in local news reports.

My first-time jump took place at Skydive Long Island, the only local drop-zone flying to a heart-pounding 13,500 feet. Skydive instructor Rich Winstock and cameraman Marko Markovich were awesome. I was also joined in the plunge by James Villepigue, co-author of my new book to maximize your physical and mental mojo, *Alpha Male Challenge* (in stores now and at www.alphamalechallenge.com).

The scariest part of the jump was hanging my legs over the side of the open plane door. Once you're in free fall— at speeds of over 120 mph— it's an insanely fun adrenaline rush! The parachute glide down is scenic, and my landing was fine— like sliding into home plate. Check out the "Rick Collins Skydive" video on YouTube or at www.facebook.com/rickcollinsesq.

Skydiving helped me push my limits, hopefully inspiring others to explore new ways to challenge themselves. More importantly, I raised nearly $14,000— surpassing my goal of one dollar per foot of the drop— to help the ACS continue to make strides in cancer research and services. You can still donate through the ACS webpage at www.leapforlife.org. Please help!

Hmmmm... Parting question: Skydiving is extremely dangerous, but if it's fundamentally American to allow you to do it anyway, why is our government so insistent on restricting your freedoms to make *informed adult decisions* about taking physique-enhancing supplements and other substances for *purely cosmetic purposes*?

Rick Collins, JD, CSCS [*www.rickcollins.com*] is the lawyer who members of the bodybuilding community and nutritional supplement industry turn to when they need legal help or representation. [© Rick Collins, 2009. All rights reserved. For informational purposes only, not to be construed as legal or medical advice.] ■



PHOTO BY MARKO MARKOVICH

WOMEN'S BODYBUILDING



By Cheri Owen, B.S., J.D.

Repeat Offenders



When you think of an offender, one assumes they have done something wrong. What offense did they commit? In this instance, the offense of winning consistently, the same show every year.

The Atlantic City Pro Bodybuilding show promoted by Ron Goldstein was all about Auckland. Not the city of Auckland in New Zealand, but **Lisa Auckland**. Not just in 2009, but ever since the show's beginnings. Since 2006, Lisa Auckland has won the Atlantic City Pro Championship and has been in the top five of the Ms. Olympia. **Cathy LeFrancois** repeated herself at the New York Pro— repeating from a win in 2008, and **Iris Kyle** is going for a repeat at the Ms. Olympia here in a few weeks. Since 2006, Iris has held the title of Ms. Olympia. This year she is going for her fourth consecutive repeat as well. What does this tell us? What is it about repeating something that inspires us? Does repeating a win make us *more* of a champion?

One thing for sure, repeat winners tell us that there are greats in each sport. Greats that do the same show over and over, seeking to repeat their consistency and championship performance. Every sport has them. During the early '90s, the Chicago Bulls were the untouchable team, known for having one of the greatest dynasties in NBA history, and inspiring the term "three-peat" for their three-time NBA championship, which they actually did twice: winning six championships in eight years time.

But all six of those championship teams really came down to just one standout player: Michael Jordan. Which makes the "We are the champions" motto true, of course, for the team at large, but made basketball into what it is today: a highly individualized sport, with singular star status, not so far from tennis or golf, and of course, bodybuilding.

Arguably, it is only through individual sports that women are able to attain the same powerhouse status as men: consider women's tennis stars Billie Jean King, Martina Navratilova, and the Williams sisters. In every tennis competition, there are both men's and women's professional divisions. It would be unheard of for the USTA to have the Australian Open without a women's professional's single championship— but the Australian Pro has never had a women's bodybuilding division. What this tells us is that women's professional bodybuilding doesn't have nearly as many shows as the men's bodybuilding, including the Open and the 202 & Under, an increasingly popular field of competition, allowing many more men chances to compete at the Olympia, than the women.

What opportunities did women have this year to qualify for the top competition, the Ms. Olympia—the goal of every female professional bodybuilder? For those who were not qualified already, there were

PHOTOS BY BILL COMSTOCK







only a handful of shows: obviously the Ms. International kick-started the bodybuilding season in March, but after that, the only shows available for women were the New York Pro (May), the Pro Bodybuilding Weekly Championships in Tampa (August)— which was nearly cancelled for the women for lack of funding— and the Atlantic City Pro (September). Other than these three shows in the United States, professional women competitors have had no other opportunity to compete in 2009. Last year in August of 2008, the Europa Super Show in Dallas offered pro-women's bodybuilding. However, this year the women's bodybuilding division was nixed— leaving women one less opportunity in an already shrunken pool.

So I ask you: is it truly repetition, or is it just that there are so few shows to pick from that the roster is nearly the same, show after show? IFBB Rule 4.5.5(b) states that: At 'Open' competitions, the top three finalists qualify for the Ms. Olympia. If any of the top three finalists are already qualified, up to a maximum of three previously-unqualified athletes may also qualify.

For example, if the top finalist is already qualified, the qualification shifts to the 2nd, 3rd, and also 4th place. While this is a great rule, offering up an extra spot, should one become available, it is still not the same as winning a show in order to qualify. Rather, it is a win by default. If there were more shows for women, would there be a bigger and more diverse pool of talent in the Olympia, which would, in turn, draw more of an audience? On the other hand, there are women who have received their pro card and have competed infrequently, if at all. I'm sure there are reasons, but is this productive to the sport? Perhaps a 'use it or lose it' policy would be beneficial.

Over and over, it is the women bodybuilders who feel themselves to be the consistent underdog of the sport. And I have to admit— I'm definitely a fan of the underdog, the dark horse who pops up unexpectedly and steals the show. I'm an athlete and I love all sports— of course, bodybuilding, then basketball, then tennis.

So as I watched the U.S. Open this past month, did I want Serena Williams to win? No. Not because she isn't a great player— but to see the mother Kim Clijsters come back from a 27-month retirement and kick everyone's ass brings me *satisfaction.* It's the comeback athletes who really get me going. And why shouldn't they? They are not the Queen Bee, they are the worker bees: they work hard day after day, and come in and win unexpectedly.

So, we are left with the repeat offenders. Winning consistently, show after show. The repeat champion is one thing; the Queen Bee buzzing around in the honeycomb while the worker bees remain loyal. What about the one who decides to fly the other way and jumpstart her own hive? The *potential* exists, of course: a new competitor who suddenly swarms the spotlight. ■

responded, "Well, if it worked for you when you were lighter, then the smartest thing that you should have done— especially now that you have three times the amount of muscle— is of course to up your calories even more instead of lowering them, right?"

We both agreed that most bodybuilders seem to forget what worked for them in the past. Many competitors try to find that 'magic' potion and unfortunately, most guys are taught that the magic potion is to drop your carbs to nothing. With certain people that might work but believe me, for people who are hungrier in the gym than on the table, carbs are the answer.

Branch came into the Arnold at his all-time best and about 8 pounds bigger and tighter than ever before— and the rest is over. Just imagine that this kind of diet worked on a veteran like Branch. What could it do for any average guy seeking to get bigger and stronger?

Add your carbs *back to your diet* and start working out to build your muscles— not to stay where you're at! After all, that's the reason we all started working out— to build our muscles.

I really like the way you have been bringing your athletes in. I read a few magazine articles where various pro bodybuilders and amateurs said you get very sentimental when they are onstage and winning. Can you explain to me what this is all about?

Thank you for the nice compliment. I get very sentimental every single time my athletes are on the stage. I just want every person who seeks my help to have full trust in me, and there is no better way to show these individuals who are seeking my help than for me to become very involved in their achievements.

I'm still an active IFBB pro and I know how important it is to succeed. Every one of us knows how many months and months of dieting and pushing yourself in the gym to the max are in involved in contest prep, not to mention the sacrifices we make in order to stand out. Having me being there 24/7 seems to help my athletes achieve the unachievable. Believe me, there is nothing more satisfying than to see the look in my athletes' eyes after I have helped make their dreams come true. It is all well worth it to me.

Best of Luck, Guys

I want to wish the best of luck to my clients going to the Nationals— and they will be hard to beat: **Fred Smalls**, **Kirk DeFrancesco**, **Jeff Long**, **Ronald Torres**, **Victor Delcampo**, **Dave Fisher**, **Gary Lodoen** and many more. Best of luck to all of the competitors in Ft. Lauderdale and until next time, stay focused and remember that nothing is impossible.

Got a question for George Farah? You can ask him directly on the MD website and have George personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for George Farah.

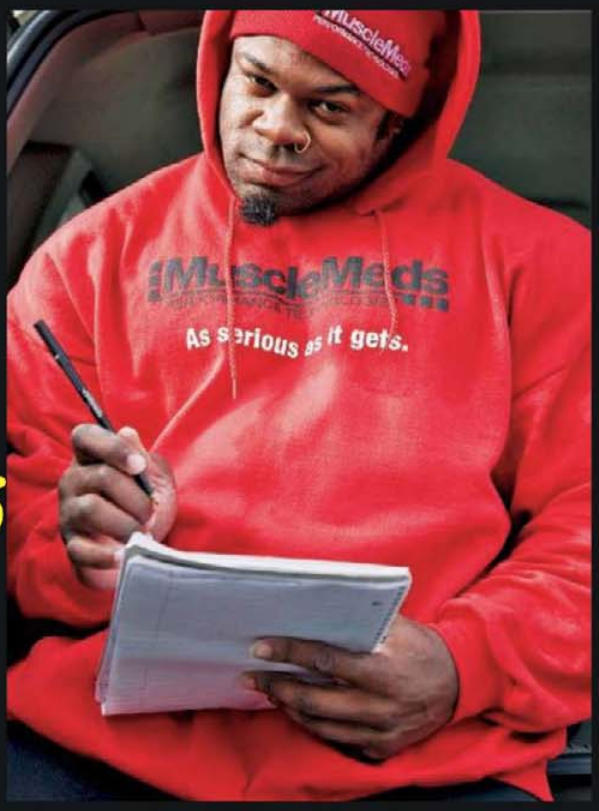


KAI GREENE

The Predator

By Kai Greene

MR. OLYMPIA JOURNAL: The Final Weeks



August 21: 5 Weeks Out

Hey guys, long time no talk! It's Kai, on the road in Vegas. Oscar's been kicking my ass so *I* can kick ass onstage in five weeks. Things are really getting serious now. We've been training at the Gold's on Flamingo and Sandhill, one of the biggest and best-equipped gyms I have ever seen. I'm a lot more used to smaller, more hardcore places, but this works, too. It's not the gym the bodybuilder is in that matters; it's the bodybuilder in the gym.

Oscar and I are tearing it up and putting out maximum intensity at every workout. There are lots of guys out here who obviously follow the sport and know who I am, but they're giving me space to train, which I appreciate. They know I'm doing business and that's good. A lot of times fans don't understand how critical it is for me to keep my concentration entirely on the task at hand, and that these last few weeks of training are paramount to the end result. Luckily these guys out in Vegas seem to 'get it.'

I'm still hitting it heavy with the weights, but Oscar has me doing cardio twice a day now. The first session is early in the morning on an empty stomach. Taking MethylBurn then, and it is really helping me cut up. Cardio is done again either in the afternoon or at night, depending on my lifting. My carbs are down, and my protein is up. Lots of Carnivor. Love that stuff!

Gotta get some rest now. It's damn hot out here, so I don't spend much time outside my room. They say Las Vegas has a 'dry heat,' but you know what? So does an oven, and I wouldn't hang out in one of those! All I see here is the gym and my hotel. But that's what I'm here for— to train to win the Mr. Olympia, and nothing else. I feel like this is what I was put on earth to do. I love this life!

August 28: 4 Weeks Out

Greetings again from fabulous Las Vegas! Ha! I saw a postcard with that on it in the hotel lobby and thought I'd pass it on to all you guys out there! Vegas isn't fabulous for me; it's a work place. I'm here for one reason: To train to win the Olympia. My mind is clear from all other thoughts now. I wouldn't even know what day it was if Oscar didn't keep telling me. Four weeks and two days, Kai! Then it's four weeks and one day, and so on. It's a countdown to glory, to the biggest day of my life so far. I'm training, sleeping, eating and training, all on schedule. Nothing is being left to chance.

I weighed in this morning 283.4 pounds. Dead on course. Maybe even a little ahead of schedule, but that's OK. You're always better off being a little ahead than behind. If you're ahead, you can do things like bump up your carbs a little or rein in the cardio a touch.

My days revolve entirely around my contest preparation. I'm doing cardio first thing in the morning on an empty stomach, because that's when you burn the most body fat. Then I eat two meals, go to the gym and train a body part, then eat another meal. I go back to the gym for a second weight session, then two more meals follow that. Then it's a second round of cardio at night on an empty stomach right before bed, so my body keeps on burning fat while I sleep. I go to bed and start it all over again the

PHOTOGRAPHY BY PER BERNAL

next day. Every workout, every cardio session, every posing practice, every meal of my diet food and every hour of sleep take me one step closer to my goal.

I have to sign off now. We're heading back to Gold's in a few minutes for shoulders. My weights are still up and I'm feeling strong. Oscar is pushing my 'kicked ass' as only he can! I can't tell you what a difference it makes having him here every step of the way to push me and make sure I give it my all, at each and every workout.

I also have to give shout-out to my sponsor, MuscleMeds. I signed a two-year contract extension and I can happily say I'm living my dream of making a *living* doing bodybuilding! It wasn't long ago at all that this was only a distant dream that seemed many times as if it would never come to fruition. The company is the best and I am very happy to be part of their team. I'm also glad to be able to represent them at the shows, and I hope to become their very first Mr. Olympia champion under contract very soon.

September 3: Just Over Three Weeks Out

We are training four times a day now, plus posing, plus tanning! Now this is what I call a training camp! Oscar says I'm tiring him out putting out so much effort, but I am tired, too! He works his ass off just as hard as I do. The phrase 'hands-on coach' doesn't even begin to describe Oscar's role. He is right here in the trenches with me during this ordeal.

But this 'Vegas Experiment' is working even better than I envisioned. Oscar keeps saying I'm in the best shape of my life, but I'm not letting that go to my head because I can't let up the heat even one notch. It has to be all-out up to the bitter end onstage at the Orleans Arena.

I weighed in today at 278. My waist is getting smaller, and my glutes are already sliced and grooved like at the Arnold. But we are still four weeks away. My goal is to beat the Kai of the Arnold Classic first, then to become the 2009 Mr. Olympia! I know in my heart and soul that once I do surpass the physique that won the Arnold Classic back in March, victory is a foregone conclusion. I will take the stage with the utter calm and supreme confidence that only comes with knowing you honestly could not have trained or dieted any harder than you did.

Time to sign off once again. I have a second weight training session soon. I don't even know what I'm training, but I don't need to know. Oscar will tell me once we get there. It's such an advantage to not have to direct my thoughts anywhere but exactly where they need to be, which is picturing the Mr. Olympia title as mine. Kai Greene, Mr. Olympia— it has a heck of a ring to it.

Also, Mike Pulcinella is coming here this weekend for more video shooting from Monday through Wednesday of next week. MuscleMeds is sending him out to get footage for my new DVD. He'll be giving some of that footage to MD, so I'm sure you will all have some good 'sneak previews' of how I am looking leading up to the show— just don't expect me to train with my shirt off or any nonsense like that. Never have, never will, unless the show is all over and I'm doing a photo shoot. I stay covered up and don't unveil my physique until game day.

September 8 —Post by Mike Pulcinella, Documentary Filmmaker

Just sent a tape to Robbie of footage that I shot last night of Kai working chest at Gold's Gym. It was an incredibly intense session. Toward the end, Kai's body began to give out on him. I'm paraphrasing Oscar, so I'm probably getting a lot of this wrong, but Kai's muscles stopped contracting because he is so calorie-deprived at this point. He said something about the sugars in the muscles being completely depleted. Still Kai powered on.

I hope some of the intensity comes through in the tripod footage I mailed to Robbie. Please don't blame him if it's a little spotty at times. I'm running two cameras and the documentary hand-held shots must take precedence.

The chest workout happened during the night. After that and a supermarket stop, we got back to the hotel at 2:30 a.m. Even though Oscar was going to let him off the hook, half an hour later Kai felt ready to go back and do cardio, so we piled into the car and drove back to the gym!

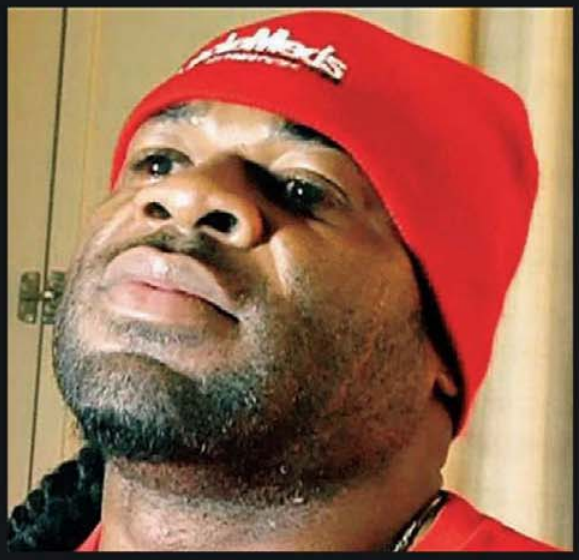
Later today we go shopping for more food. Then more cardio and another workout. I've never seen a human being pushed like this. It's beyond endurance and is almost a monk-like ordeal. Kai rarely speaks. He listens to motivational tapes all day, writing in a journal when he isn't eating, sleeping or working out. His intensity, and focus is almost frightening, yet he projects an aura of calm so that I feel very relaxed when I am in his presence. So far this has been an amazing experience.



September 10: —Post by Mike Pulcinella

Kai keeps himself covered all the time. I got one short glimpse of his physique the entire time I was there. He looks amazing, of course!

He and I hardly spoke. It seems like he's in a constant state of meditation. Oscar speaks for him. Kai spoke an extended bit to me only two times in four days. He apologized to me once when I arrived and again as I was about to leave. He didn't want me to take his silence personally but he explained that his focus is so great that all else must take second place to this most important moment of his life. Intense!



When this is all over and he comes home I will interview him and review the whole thing, including his thoughts on God, if he is willing to be that personal.

At this point, Kai is only eating flounder and string beans. Sometimes with a few cashews or a bit of sweet potato. But it's not very much food. The amount he is eating wouldn't be enough for ME. That's his struggle right now. He is still at a high level of activity but he's not getting enough calories to sustain him and so he runs out of energy. He is slamming up against this wall again and again and yet he refuses to give up or compromise.

The one concession that they make is that they schedule Kai's workouts around Kai's body. If he's ready to hit it again, he does. If not, it's back to bed for a few hours, another meal and try again.

What that meant for me was that at any time day or night I was 'on call.' There was no way they could tell me with any certainty when the next workout would be. So I had to stay close and available, even if that meant getting out of bed in the middle of the night, which did happen.

This is why there is no leg training footage. Because there couldn't be. Kai was never ready to go when we thought he would be and so things stretched out and stretched out until there was no time left and I had to fly home.

I still got some GREAT footage however, never fear! This is going to be an awesome DVD... and we're not done shooting yet. I go back for the show!

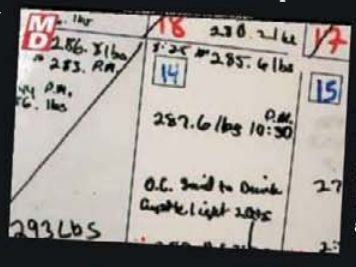
September 11: Two Weeks Out

Hey fellas, a quick note from Vegas. Heading to the gym again tonight for yet another weight-training session. I have to hand it to Oscar because he's keeping up with me every step of the way, as he's trying to kill me! Still holding at 274 at my weigh-in this morning. That's a true weight, before I've eaten anything. I'm dead tired. But I'm closer than ever to my dream and I'm pushing harder than ever.

Mike Pulcinella was out here for three days this week. It was a little weird training and eating with a camera in my face, because as most of you know, I am a pretty private person. I am definitely not anything like the stereotypical 'attention whore' that bodybuilders are often portrayed to be— quite the opposite, in fact. But Mike's work is the best, so I was able to relax after a little while. He tells Oscar he got great stuff for the MuscleMeds DVD, but I don't know because I was busy busting my ass. Things are getting down to the wire now with just two weeks left to go. Eating mostly protein, very low carbs.

September 16: Ten Days Out and Final Entry

This is it, guys. From here on in, I can't afford to expend one ounce of mental or physical energy on anything not directly related to winning the Mr. Olympia, so this must be my last journal entry before the show. My energy levels have been very low, but that's part of the process to get to where I need to be. Right now I am 271 pounds and in better condition than I was at the Arnold Classic. Oscar says I could step onstage right now and win, but we still have 10 more days to fine-tune my physique and make it that much more formidable. He said something today that really resounded with me and filled me with both humility and gratitude:



"I've trained hundreds of bodybuilders over the years, but you are my masterpiece."

Oscar has me in a constant meditative state because now more than ever, the battle is in my own mind. If I can master myself and my own thoughts, nothing and no one can possibly stop me from achieving my goal.

By the time you read this, the 2009 Mr. Olympia contest will be in the record books. I believe that the coveted Sandow trophy held aloft in the past by great champions like **Arnold**, **Sergio Oliva**, **Lee Haney**, **Dorian Yates**, and **Ronnie Coleman** will be in my hands. It would be the culmination of many years of sacrifice, dedication, and most of all, an unwavering passion for the sport of bodybuilding that I have had since I was practically a child. Hopefully, this dream of mine, this grand vision, will come to pass. ■

Got a question for Kai Greene? You can ask him directly on the MD website and have Kai personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Spotlight, for Kick Ass Inc.

SCREEN GRABS BILL COMSTOCK

VICTOR MARTINEZ— The True Victor

By Victor Martinez





I have been using mostly barbells for chest since I started training over five years ago, though now I mix in a Hammer machine or two as well as some pec deck or cable crossovers. My chest is way behind my shoulders and arms, and I keep reading about using dumbbells. I find them hard to balance, plus the weights I can use are nowhere near as heavy. With that being said, I don't see how dumbbells can really help me with these limitations.

You already answered part of your question when you mentioned how difficult it is to keep your balance and 'stay in the groove' when you use dumbbells. Because they are independent and not connected like a bar, it's literally twice as much work to control them and keep your form tight. You see that extra work as being irritating, but it's really what makes dumbbell presses so effective. They force your chest, and even the supporting and stabilizing muscles around it, to work harder.

When it comes to exercises, almost every time, 'harder' means better results. Why do barbell squats make your legs grow better than a leg press or a Smith machine squat? They're harder to perform. You can say the same thing about barbell rows vs. cable or machine rows, or chin-ups vs. lat pulldowns. I don't know anyone who ever built a great back without chins and free-weight rows. You can build a great chest with barbells if you have a solid mind-muscle connection and you can get quality contractions and a full stretch on your reps using a bar. A lot of guys can't, and their front

PHOTOGRAPHY BY PER BERNAL

delts and tri's take over. It sounds like that's your deal.

You have to keep using dumbbells and get your form and feeling down pat. You have been giving up on them way too soon. You're also worrying too much about how much weight you use. For one thing, the weight doesn't really translate exactly anyway. Not many guys who can bench press 315 for 10 reps can press a pair of 160-pound dumbbells even once. And regardless, after five years of training, you're not a rookie anymore. You should have figured out by now that working the muscle as hard as possible is the most important thing, and the amount of weight you use isn't such a big deal. Show me a guy who can squat 315 for 10 deep reps in perfect form, and he's definitely working his legs harder and stimulating more growth than the idiot doing half-reps with 405 and bent over on the way up like he's about to puke all over the floor.

OK, do you get the message yet? Ditch the barbells and do all your pressing movements for chest using dumbbells. Stick with them and you'll be rewarded with new growth in your pecs, I guarantee it.

Sometimes I hear about guys, and I mean big guys, who have won contests, that claim to only eat two meals a day. Number one, do you think they are telling the truth? And number two, if they are, do you think maybe the rest of us are wasting a lot of time and money eating every two to three hours when maybe we could get the same results without it?

First of all, no, I don't believe these guys. Why would they only eat twice a day? That's even less than the regular slobs out there who don't even train! Are they just so lazy they can't be bothered to eat, or they really have such small appetites? I have yet to meet a really big guy who didn't get hungry every few hours. I know from personal experience that when you carry that much muscle mass, your metabolism chugs along a lot faster than a normal person's. It's like you have this voice inside your head— or maybe your belly— that starts screaming "Feed me, jackass! I need food NOW!"

But I will give these guys the benefit of the doubt, even though I do suspect that it's probably just a psyche-out technique; just like the huge guy who says he hardly trains or the shredded guy who says he eats junk all the time. They might be trying to create a 'mystique' or a legend around themselves just to get people talking.

Look at **Mike Lockett**, Team Universe and Junior Nationals champ. This guy was talking about how he hardly ate and when he did, he'd put away a whole bag of Twizzlers. Where is he now? Beats me. Maybe if he was eating good food every two to three hours like the rest of us, he would be doing pro shows by now.

Look, I'm not a scientist and I don't have a degree in nutrition. But the proof is all around us. Countless bodybuilders have made much better progress once they started eating more, even when they didn't change anything about their training. How many guys have talked about making shitty gains until they figured out how to eat? I've personally talked to hundreds if not thousands of them at contests and in gyms. That's all the proof I need, and I don't give a shit if a few knuckleheads want to try and make it sound like you don't need to eat to grow. That's bullshit.

My First Contest Diet

My diet back when I started competing was very simple— too simple. Breakfast was chicken breast and oatmeal, and every meal after that was chicken breast and steamed broccoli. It might sound too simple, but you know what? I got in pretty good shape, and I won the show. It just goes to show you that contest diets don't have to be overly complicated like a damn calculus formula to get the job done.

Latin Bodybuilding Hall of Fame

A lot of Latinos tell me that I'm a big inspiration to them. I also hear them say I am the greatest Latin bodybuilder of all time. I don't know about that, because there is actually a proud tradition of Spanish-speaking champions. So far I'm probably the best bodybuilder to come out of the Dominican Republic— usually we make awesome baseball players! This month, I wanted to recognize some of the great Latin bodybuilders of the past, and some of the best representing for us right now, too.

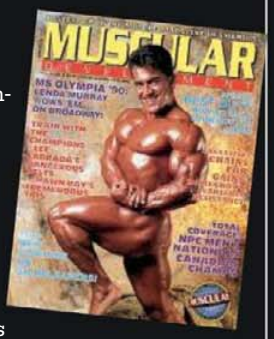
Sergio Oliva

'The Myth' was THE MAN! Sergio was so far ahead of his time with his crazy mass and tiny waist. He paved the way for future stars like **Lee Haney** and **Ronnie.** You could almost call him "The Prototype." Oliva was so dominant in the three years he was Mr. Olympia that in 1968, they just gave him the trophy because not one other man was willing to get onstage and compete with him!

Sergio could have kept winning and probably should have. He got the short end of the stick a couple times against **Arnold**. Once he was told by someone on the judging panel that they couldn't see him too clearly because the curtain behind him was black, and his skin was too dark. What a bunch of bullshit!

Lee Labrada

Mass with class, born in Cuba and raised in Texas; probably should have won at least one Mr. Olympia title in his day. Lee turned pro as a middleweight and went on to win seven pro shows, was runner-up to Lee Haney twice at the Mr. Olympia, and never placed any lower than fourth in the seven times he posed on the Olympia stage.



Labrada was one of those guys who was never the biggest physique

up there, but he more than made up for it with amazing shape, symmetry, and rock-hard condition. And what's equally if not more inspiring to me is that he went on to become an even bigger success when he retired with his Labrada Nutrition company.

Danny Padilla

'The Giant Killer' is in the Bodybuilding Hall of Fame, and with good reason. At 5'2" and 160 pounds, he proved that size wasn't everything. Danny was one of only two men ever to win both the IFBB Mr. America and Mr. Universe in the same year. The other was **Frank Zane**. He never won a pro show, but was top five at the 1981 Mr. Olympia.

Danny didn't have it easy in the sport. He actually left the AAU for the IFBB when AAU judges told him he was too short to be a bodybuilder! Danny also got screwed out of being in the movie "Pumping Iron." He left his home in Rochester, New York to train out at Gold's Gym (there was only one back then, you know) for the 1975 IFBB Mr. Universe. Once he got to the show in South Africa, the show was only a few minutes from starting, when the IFBB told him that instead of having a lightweight represent the USA, they wanted two heavyweights, **Mike Katz** and **Ken Waller**, plus the middleweight **Robby Robinson**.

Danny wasn't allowed to compete, and none of his training footage ever made it into the movie. He did prove he was a genuine Giant Killer two years later at the IFBB Mr. America, when he became the first lightweight to ever defeat the middleweight (**Roger Callard**) and the heavyweight (**Pete Grymkowski**, a huge dude for those days) for the Overall title.



Freddy Ortiz

Freddy was a 'NuyoRican,' what they call Puerto Ricans living in New York City – and there's a lot of them! At 5'5" and 190 with a tiny waist and the monster arms he was known for, Freddy was kind of like the **Lee Priest** of his generation. He won the short class at the Mr. Universe and won it twice at the Mr. America, and probably could have been a force at the Mr. Olympia. Unfortunately, he had a family to feed and bodybuilding wasn't paying any of his bills, so he never went as far as he should have. But, he did make the cover of the January 1967 issue of MD!

Elmo Santiago



Elmo was a great Spanish bodybuilder from the Bronx, and it was Elmo's Gym where I became a bodybuilder myself. You may even remember that it was a little contest he put on at the gym where I got my very first win as a teenager. Elmo himself competed all the way from 1952 to 1976, and in 1965 he was the NABBA Mr. Universe. And wouldn't you know it, he was an MD cover man for the February 1966 issue!



Gustavo Badell

Now we come to the modern era. The 'Freakin' Rican' is really from Venezuela, and for the first couple years of his pro career he wasn't exactly making a name for himself. He turned it all around in 2004 and 2005, when he took third at the Mr. Olympia two years in a row, and even beat guys like **Ronnie** and **Jay** to win the Challenge Round. Gustavo won two pro shows before he started sliding down the ranks. But I know he still has it in him to come back and show these young guys how it's done!

Silvio Samuel

I'm really not sure if I can call 'El Matador' a Latino or what. He lived in Africa and Brazil when he was younger, before moving to Spain. He represented Spain in weightlifting contests and he speaks fluent Spanish, so I'm gonna give him honorary Latino status, regardless. He's done really well for himself since he started competing in the IFBB just a couple years ago, and he is known for two amazing qualities: his round muscle bellies and showing up shredded every time.

Paco Bautista

No doubt about it, Francisco 'Paco' Bautista represents. He's from the motherland of all Latinos, Spain! He may not have the prettiest body around, but Paco packs a ton of *carne* (that's meat to you guys) on his frame and gets into sick condition. He's also defended his home turf well at the local IFBB show in Santa Susanna, winning that show twice. Paco needs to move to the USA and take his career to the next level.

Yaxeni Oriquen

I can't leave out the ladies! At this year's Ms. Olympia, 43 is the magic number for this lovely lady from Venezuela. Not only is it the age she is turning a couple weeks before the show, it's also how many pro shows she has competed in. That's a lot of damn diets! Some guys can get intimidated because she carries a lot of muscle for a woman, but if you ever talk to her she's actually a real sweetheart.

Rachel McLish (Elizondo)

I bet that because of her married name, most of you never knew that our very first Ms. Olympia was actually a *Tejana*— that's a Mexican from Texas, just like Selena. When women started lifting weights in the 1980s, it was mostly because they saw what it did for this hot and spicy enchilada. Rachel made muscles sexy for women, and in the movie "Pumping Iron II: The Women," she was the perfect nemesis for the hardcore new woman from Australia, my man Steve Weinberger's wife **Bev Francis.** ■



BRANDEN RAY

Straight Talk from 'The Brooklyn Knight'

By Branden Ray

There Is Glory In Defeat

The irony of bodybuilding is that weeks and months of training are all for a few moments, matter of fact, minutes onstage. Four quarter-turns and eight mandatories and for few, a new beginning but for most, it's back to the beginning. This was my first thought when my name was called for second at the USAs. I felt that I had climbed a mountain and lost my grip when I was almost at the apex. At that very moment of defeat, all one can feel is humility as the invasive question resonates: "What did I do wrong?"

I had to discover those answers quickly, because my climb would start immediately for the Nationals in November. Once I started my climb, I realized that my map to the top was more lucid. I had a game plan. I also realized that I didn't fall all the way to the bottom. I was starting at a much higher point. My conditioning held up, and everything started to come in earlier than my prep for the USAs. My skin was thinner, my hams never lost the split, and I didn't put on much water.

What I learned is that there is glory in defeat. The glory comes from learning from each experience, every prep, and every show. I learned how I reacted to certain foods, supplements, rest periods, cardio, etc. I will be better every time I step onstage, I promise you that.

Let's Do It!

I am now training with **Shawn 'Flexatron' Rhoden**, Overall Winner of the North American Championships. I was impressed by the pics of Shawn at the weigh-ins of the show, and knew that he was going to take the show. I didn't know that he lived five minutes away from me until a friend of mine asked if I knew him. As soon as Shawn and I finally met, we were like, "Let's do it!"



"Life's but a walking shadow, a poor player, That struts and frets his hour upon the stage, And then is heard no more."
—Shakespeare's 'Macbeth'

PHOTO BY PER BERNAL

NEW COLUMN!



Shawn is an incredible training partner and a much-underrated poser. He's been helping me a lot on my presentation because he didn't just come from nowhere—he's a veteran of the sport and has a wealth of knowledge. We are both coached by Hany Rambod, so we apply the FST-7 training principle. Here are the muscles and exercises that we apply FST-7 to:

Hams: seated leg curls
Calves: calf raises on leg press
Chest: cable crossovers
Back: Hammer Strength low row machine
Tri's: skull-crushers
Biceps: machine preacher curls

I've also narrowed my grip on chin-ups and have been doing a lot more behind-the-neck lat pulldowns, which has made a huge difference in my back development. **Shawn Ray** gave me this tip when we were in San Diego for the '619 Muscle' event at Powerhouse Gym (shout-out to Pete for an incredible event!) The advantage of a slightly wider than shoulder-width grip versus a very wide grip is that the lats are stretched more when you're hanging. The behind-the-neck lat pulldown is like mimicking a rear double bicep. I don't go heavy, and focus on contracting my traps and rhomboids. This is great for anyone trying to add muscle and detail to their upper middle back.

Go, Big K!

My highlight of the year was watching my girlfriend, Kristy Hawkins Ph.D., qualify for the Olympia. While many believe that bodybuilders do nothing but eat, train, and sleep in order to be successful, I've witnessed Kristy wake up at 6 a.m. to do 45 minutes on the StepMill, work in the lab from 9 p.m.-8 p.m. standing up most of the time and not missing a meal, then squat 315 pounds for 10 reps, and leg press 24 plates and still knock out another 45 minutes on the StepMill.

I admire her determination that has brought her much success. She will be the youngest competitor at the Ms. Olympia, but already has more than 10 years of competing under her belt. The discipline of her academic life carried over into bodybuilding, and vice versa. She's hardcore at everything she does, and is just getting her feet wet in her career and on the pro stage. I look forward to being a firsthand witness to all that she's destined to achieve.

Many people heard me screaming like a nut at the show because I was so proud of her second-place finish behind her idol, the great **Lisa Aukland**. My support is genuine because I'm a fan of bodybuilding, male or female, and she looked awesome. My support is biased, however, because I get to see the canvas of the artist before the masterpiece is presented.



Developing the 'Meat' of the Hamstrings

One of the biggest mistakes that I always see people make in the gym is allowing their toes to turn outward when doing lying leg curls. You will never develop the 'meat' of the hamstrings if you do your leg curls that way. You must keep your feet straight and almost flex your anterior tibialis (front of your lower leg). This assures that you're hitting the bicep femoris (outer), semitendinosus (middle) and the semiembranosus (inner). If you notice, some of the best side poses are done by people with great hamstring development. Hanging, sweeping hams make the ham-glute tie-in so much more impressive.

Let's Support the Ladies

I saw many other guys there to support their significant others competing in fitness, figure, etc. We depend on them so much because we usually turn to babies when we're dieting. So I'll end it by saying fellas, let's support the ladies because they always show us love, and a strong woman helps a strong man become even stronger! Either way, when that hour that we strut on the stage is done, we always run to the ones we love. ■

By Rodney Roller

RAW POWER!



The IFBB North American: Things did not go as planned.

When we last spoke, I had just won the Heavyweight over-40 division at the NPC Masters Nationals, but missed out on a pro card there. That prompted me to keep on going and try again at the North American, being held six weeks later. There was a bit of a conflict only in that my family and I always spend a week at our vacation home on Lake Champlain in Vermont every August. I typically diet every summer, whether I'm competing or not, and then break the diet on my vacation so we can all relax. I've never had to maintain a strict training, cardio, and diet regimen up there until this year.

But I managed. It was an hour's drive every day to the nearest decent gym, and I got my cardio jogging around the local hilly terrain. About halfway through the week I developed shin splints, and that was the end of my cardio. It wasn't a big deal, since I was already dieted down. I had been 225 at the Masters Nationals and planned on tightening up about five or six more pounds for the North American.

I got back home a week before the contest, and my trusted friend, IFBB judge Maz Ali took a look at me. He was very happy with what he saw, and we decided to cut way back on fat and carbs for the next few days to really dial everything in perfectly. We also decided to only carb load for one day.

In the past, I've noticed that I look great after that first day of loading, then tend to start spilling over. The amount was also reduced from my typical 1,000 grams of carbs on that day to 300. I would rather err on the side of caution. Being that I am short and thickly-developed, I can afford to be a bit flat, as long as I'm super-sharp. But with that type of physique, being just a little off makes a big difference.

The show was moving fast, and I started pumping up as soon as the light-heavyweights lined up to go out onstage. I had waited until then because I didn't want to lose my pump, especially since I didn't have an abundance of carbs in my system. But then something totally unexpected happened. After the light-heavies, an intermission was called. My pumping up had been for nothing.

By the time I got onstage after pumping up again, 90 minutes had passed. All the carbs in me were long gone and I couldn't get a pump to save my life. I'm known for my crazy vascularity, but you couldn't see one frigging vein on me! I went out onstage flat and washed-out looking, and you probably know the rest. I wound up seventh place in the Masters Heavyweights and didn't make top 15 in the Open.

Life Goes On— And It Tastes Pretty Good!

While the carb-up fiasco had something to do with it, the real issue was that I had been dieting for 24 weeks by the North American, and my mind and body were both burnt out. On the long drive back home, I stopped at pretty much any place that had ice cream and indulged my sweet tooth. Once I was back home, I got some of the excellent pizza from Columbo's in Lincoln Park, New Jersey that I had been craving for months. I made a tray of chocolate-chunk brownies (yes, I can bake) and had about half of that nice and hot with scoops of vanilla ice cream on top. And one man I really wanted to visit was my buddy Moe over at Sam I Am Bagels in Totowa, New Jersey. This is a place where I actually get a lot of my diet food, since I don't have time to cook all that stuff and my wife is busy enough with our three small children. Every morning I would go in there and get my breakfast, a big 8-egg-white omelet with chicken, spinach, and fresh tomatoes, and also my next few meals, usually chicken breast salads.

Now every time I'm at this place getting my diet food, there's all this other delicious stuff: fresh-baked cookies and muffins in all these amazing flavors. The smell alone would be killing me! I kept telling Moe, as soon as my contests are all over; I'm coming back here and eating all this crap! And so I did. I also had some of the breakfast sandwiches that were forbidden on my diet, with things like pork, ham, and cheese. Freaking scrumptious!

PHOTOGRAPHY BY PER BERNAL

NEW COLUMN!





As I write this, my next culinary adventure is going to be baking a pecan pie from a secret recipe a 90-year-old lady from Hackett's Farm apple orchard up in Vermont was nice enough to share with me. I grew up in South Carolina, and my late mom used to make the most incredible fresh pecan pies.

How do you train to support both the power and the hypertrophy aspects that make you so unique in the world of bodybuilding today? There are so many guys who are strong but not so impressive in terms of muscle mass, and also plenty of huge guys who aren't as strong as they look. Very few like you, who are both!

I have always been the type of person that if my lifts are not going up, then I always felt I wasn't pushing hard enough and thought I wasn't growing. In other words, I equated strength increases with mass gains and did my best to keep pushing for more all the time. Even though in my videos you see me lifting very heavy weight for low reps, I typically train very heavy, but keep my reps in the 8-10 range.

I also do a lot of drop sets with much lighter weight and stretch and contract the muscle fully, to completely exhaust the muscle. There is the misconception out there that I am all about moving big weights and not so much into working the muscle hard— not the case at all. As I've said in one of my interviews, I train like a bodybuilder, not for power. I just happen to be a strong bodybuilder.



When I look at the powerlifters and strongmen today, many of them have a sloppy appearance—like they don't train at all. They just look like big fat dudes. How do you avoid that look, or do you put on significant weight in the off-season?

I'm 5'6" and I just competed at the Masters Nationals at a weight of 225. I probably could have been a little drier and detailed at 218 or so. During the off-season I basically eat whatever I want, but I always keep a close eye on my waistline. I generally eat very healthy and still take in all my protein, and other supplements like the Eponox, Novatest, Epoblast, a multivitamin, a multi-mineral and digestive enzymes. However, I love sweets and pizza so I will have the shit food, too, when I feel like it. But I do have one rule I don't ever break— I will always keep my abs visible.

I have been as heavy as 270 in the past, but felt like shit all the time and could hardly tie my shoes. Never again do I want to feel like that! Last year I stayed a comfortable and fairly lean 255, and felt great. It's really all a matter of personal preference. I have to look and feel a certain way or else I am simply not comfortable. Apparently other guys aren't as concerned, or maybe not concerned enough to say no to the Chinese buffet and cheesecake!

What kind of training regimen would you recommend to an intermediate bodybuilder who wishes to develop the power and size you have gained?

I always stress to beginners to learn the basics and learn to do them with perfect form. Too many beginners get caught up in the numbers game and never truly learn how to do a particular exercise correctly. They never learn that key mind-muscle connection that separates bodybuilders from the other 95 percent of people in the gym. Without it, you simply will never look like a bodybuilder because you won't stimulate the muscles to grow to that extreme degree. Trust me, with proper form (and if you have the genetic makeup for power) the weight will come. If not, don't worry so much about the strength.

As I've said, I just happen to be very strong. I take pride in it, but at the end of the day I'm a bodybuilder and the strength has no bearing ultimately when I'm up onstage and judges are scrutinizing my physique. They couldn't care less if I can bench press 200 pounds or 600!

Next Up For Me

It's been a couple weeks since the North Americans, and I'm back up to 250 pounds. I was a little bummed after the show, but I talked with Steve Blechman and he really lifted my spirits. He said, "Rodney, I didn't bring you on with MD to be the best competitive bodybuilder— we have those guys. You're a freak, and you're strong as a bull— the readers love that stuff." So now I'm getting really psyched to do some more intense, hardcore training videos with Robbie for MD TV. If you liked the ones I've done before, you ain't seen nothin' yet!

As for shows, I'll probably do the Masters Nationals again next July. This year was a great training year for me in that I didn't have any injuries, and I was able to add a good four pounds of quality muscle. I should be able to pack on another four to six more pounds before it's time to start dieting again for that show. Did I say diet? That's a word I don't even want to think about right now!

Thanks to Steve Blechman, Maz Ali, Gerard Dente, and as always, my wife and kids for putting up with me through all this madness.

My Best Gym Lifts

Bench press:	640 x 1
Incline dumbbell press:	210s x 10
Military press:	405 x 10, 495 x 3
Overhead dumbbell press:	200's x 10
Squat:	675 x 1 (ass to floor)

Calling All Freaks!

Are you a freak? Do you train hardcore and bust your ass in the gym? If so, we are looking for the most insane hardcore, no-bullshit training videos you have. Each month I will be selecting a "Freak of the Month". If chosen, you will receive a FREE one-month supply of all Xero Limits products and other promotional items, and then myself and MD will come out and film you training. Also, you will be featured in this column as the "Freak of the Month" with a pic and your bio! So, if you think you have what it takes, post up your pics and videos in my "Calling All Freaks!" thread!

Got a question for Rodney Roller? You can ask him directly on the MD website and have Rodney personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Spotlight, for Rodney 'Raw Power' Roller.



BRANCH WARREN— THE TEXAS TITAN

I read about how you started eating a lot more carbs this year— you said you were taking in 600-800 grams a day dieting for the Arnold, and you planned on doing the same for the Olympia. That seems like a LOT of carbs, even for a man your size! How does that not slow down your metabolism?

The assumption you're making there is that we all have similar metabolisms and we all respond to carbs the same way— not true. In my case, eating higher carbs has sped my metabolism up even more. I do less than 30 minutes of cardio a day now when getting ready for a show, whereas I used to do as much as two hours.

With low-carb diets, I never came in full. I would be hard and dry but lacked fullness. I nailed it at the Arnold this last year and that's how I'm doing it for the Olympia. What I'm trying to say is that until you've tried both higher and lower carbs, you really don't know which one is best for you and your particular body.

My Web Store: DVDs, Cool Workout Wear, and Heavy-ass Chains!

I've already mentioned that you can find my own signature line of GASP workout and casual wear on www.thebranchwarren.com. I also want to let you know that you can watch the trailer for my new workout DVD "Train Insane" on it. And after getting so many inquiries about where to find those big chains I use for weighted dips, I decided to sell them. The shipping on these suckers ain't cheap, but that's a small price to pay for massive new beef on your pecs, triceps, and front delts!

An Excellent Weekend in the Windy City



When Rob and Darlene Mayo first contacted me about guest posing at their NPC Continental USA Championships in the Chicago suburb of St. Charles, one thing gave me pause— the date! It was being held exactly three weeks out from the Mr. Olympia. Normally I do not travel that close to a big show. At that point, the meals and their timing are so critical that it's just not worth the stress and aggravation. But I said if they could make sure this wouldn't be an issue, I was down for it. They came through, setting Trish and I up with a one-bedroom apartment for the weekend. After they took us food shopping, everything was just like home— meals all on time (thanks to Trish, of course), and my Mr. Olympia prep was on track. Guest posing at the show was a blast. The sold-out crowd really appreciated seeing a top pro in contest condition, and the Illinois fans let me know it.



I also had the chance to train at a place called Jakked Hardcore Gym in nearby Montgomery. The midwest was the last place I expected to find a place that reminded me of Metroflex, but Jakked felt just like home! It has the big warehouse doors, hard rock music cranked up, dumbbells up to 210, even a big old Rottweiler wandering around. I'd never heard of this place before, but it definitely earns that 'hardcore' title in its name. ■

Got a question for Branch Warren? You can ask him directly on the MD website and have Branch personally answer your question! Go to musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for Branch Warren.

PHOTOS COURTESY OF ROB & DARLENE MAYO

MARK ALVISI

MARK of a CHAMPION

By Mark Alvisi

Life After Dieting

With the USA behind me now, I can finally relax and eat some of the things I wasn't able to for the whole prep period. One thing I really enjoy is simple pasta with meat sauce. What Italian doesn't appreciate that? I'm really not eating much junk at all, believe it or not. I'm so used to eating clean that it's second nature to me now. It's just a relief to not have to be as strict and precise with everything I eat. When I'm dieting, everything I eat is weighed or measured. Now I can chill out on that, and even eat out at restaurants more.

I had to cut out shakes for the 12 weeks of my diet, but now I'm having two MyoFusion shakes from Gaspari Nutrition every day— delicious! I'm also back to using Size-On both before, during, and after training, which I couldn't do before because of all the carbs. Mainly, I've been getting my life back in order. After the USA I was in L.A., Tampa, Dallas, and then an appearance up at a huge Max Muscle retail store in Lincoln, Nebraska with Zivile Raudoniene and UFC legend Tito Ortiz. I'm a fan of Tito's and had met him once before through a friend of mine in Las Vegas, but this was much better because I got to hang out with him while we sat there for five hours signing autographs.

Since then, I've been home just doing all the chores and errands that I fell behind on with all that traveling going on. I'm staying in very decent shape at about 235-240, and I can still see my abs and obliques. I put on 35 pounds in two weeks after a contest a couple years ago and vowed to never do it again. Talk about uncomfortable—the water retention had my blood pressure so high that it felt like my head would explode if I bent down to tie my shoes!



I was hoping you could give us a brief summary of what your carb-up process looked like for USAs. I felt you came in with the perfect combination of fullness and dryness, which enabled you to beat the incredibly conditioned Lee Banks. How many days did you spend depleting/carbing up? How much did you cut back your carbs and how much did you add back in? And, what did your water intake look like? I know Hany is fan of carbohydrates, so I'm pretty much assuming you did a carb-up.

I don't think you have to be a 'fan of carbohydrates' to know that eating them before a contest is critical to filling out the muscles. Even the guys who do the no-carb diets have some carbs in those final days. I started depleting my carbs on the Friday before the show, which was exactly a week before my prejudging (big pro qualifiers like the USA and Nationals are held over two nights).

Still, I never went anywhere near zero— my carbs were ranging from 100-150 grams from that Friday all the way until the end of the following Tuesday. On Wednesday, I started to load. My protein was alternating from meal to meal with tilapia and filet mignon, and my carbs would be either red or white potatoes. I ate every two hours and got about 75 grams of carbs at each meal. It averaged out to about 600-700 grams a day.

I kept that up all the way until the end of the contest, because past experience has shown that my metabolism revs super-high in those last couple days and I drop weight very fast if I'm not careful to keep loading the carbs. I started cutting my water on Thursday afternoon. From then until Friday morning, I had about a liter of water in all. From that point on, I would only sip when I was extremely thirsty and had cotton-mouth. You saw how dry I got for the show— you don't get that look without a little suffering! For me, that's the hardest part of the whole process. Going without water is a very unnatural thing to put your body through, and you feel like total crap.

PHOTOGRAPHY BY PER BERNAL

What split do you think would be better for overall growth?

Day 1: Chest and triceps
Day 2: Back and biceps
Day 3: REST
Day 4: Delts
Day 5: Legs
Day 6: Repeat

Day 1: Chest and back
Day 2: REST
Day 3: Triceps and biceps
Day 4: Legs
Day 5: Delts
Day 6: REST
Day 7: Repeat

I pick about three mass-building exercises per muscle group, and sometimes finish off with an isolation movement.

I like the second one, except that training chest and back in the same workout is too much. I would do them on different days. You could either combine chest with shoulders, or pair up both chest and shoulder days with one of the upper arm muscles (biceps or triceps). Why not try this?

Day 1: Chest and biceps
Day 2: Legs
Day 3: REST
Day 4: Back
Day 5: Shoulders and triceps
Days 6 and 7: OFF

That gives you three full days of rest a week, and rest is really when your muscles recover and grow. It also gives you weekends off from the gym so you can have a life!

I was wondering how a high-level bodybuilder keeps himself organized, especially with the diet. I have to really keep track of my diet. I guess it helps when I write everything down to keep track of everything. I hear some guys keeping everything on Excel spreadsheet, but I'm not really familiar with the program

I'm old-school, man— I write all that stuff down in a notebook! You can be more organized and make it look all nice and neat on your computer, but it serves the exact same purpose. As long as you are putting the information down somewhere, you're good.

I am 16 and eating absolutely everything I can, as I am trying to grow. I get about 4,500-5,000 calories a day, and 350 grams of protein. That's coming from four solid meals a day, as well as three weight-gainer shakes. Lately, my stomach and sides have been killing me. About an hour or so after I eat, I have this weird ache in my sides that concerns me. Have you ever experienced anything like this? Any ideas on what the problem may be and how to fix it?

It could be any number of things. It may be stress on the kidneys from a lot of water retention. I would maybe reduce your sodium and add in some cardio to see if it helps. I'm assuming you may be really bloated, which can be very uncomfortable. Also make sure you drink over a gallon of water a day! It's even more important to stay hydrated when you have a high protein intake, because the kidneys are working harder than usual.



I loved the video on MDTV of you at the Metroflex. I was wondering if you normally train with a workout partner or prefer to work out alone? How long do you stay at the gym?

I definitely do prefer to train with a partner. Having that person there to spot you and help make things safer gives you that extra confidence to go a little heavier and do that extra rep or two without having to have that fearful voice in the back of your head saying, "Easy there buddy, you might get hurt!"

In the whole off-season between the Nationals and when I started my diet for the USA back in April, I did train with a partner. But once I started dieting, our schedules just didn't mesh anymore. He has a regular day job, and my whole schedule revolved around my cardio, my meals, and my weight-training workouts. A lot of people don't realize how critical meal timing is in contest prep, or even in bodybuilding in general. You want to train after your last meal has had time to mostly digest, but you can't let too much time go by between that meal and the workout or else you risk slipping into a catabolic state.

So rather than go out of our minds trying to coordinate all that, I just trained on my own. I was doing 45 minutes of cardio twice a day, and my weight training workouts were anywhere from an average of 90 minutes to as long as two hours if I was breaking up the workouts to hit two different body parts in a day, such as the day I do quads in the morning and hamstrings and calves later on. On those days, I was in the gym close to four hours in all. And yes, it was getting to be a bit much, even for someone like me who loves the gym!



I have noted reading the Q&As that you recommend doing cardio in the morning on an empty stomach. You recommend this as the best way to decrease body fat. It is very difficult for me to gain lean muscle mass. I currently do not do any cardio, since I have been focusing on gaining lean muscle mass. With my recent gains in muscle mass I have noted that my waistline has grown as well.

I have not taken any body fat measurements, but it does not take a genius to know I have gained fat, along with muscle. I do not want to risk losing any muscle. If I do cardio in the morning on an empty stomach, do I risk losing muscle mass? If the answer is yes, what I can do to prevent losing muscle mass while at the same time decrease overall body fat?

There are two key things you can do to minimize your risk of losing lean muscle tissue when doing A.M. cardio. First, your final meal of the night before should be something that digests pretty slowly so you get a sustained, time-release effect of amino acids. Red meat is perfect, and so are whole eggs or casein. Something like egg whites or chicken breast would not be as good.

In the morning, you don't want to eat anything before your cardio because this would detract from the fat-burning effects. What I do after taking my fat-burner product (I cycle between Mitotropin and Cytolean V2 from Gaspari Nutrition) is to have 10 grams of L-Glutamine and 5,000 mg of BCAAs. These have zero calories, but do safeguard against getting into that dreaded state of negative nitrogen balance and the horrible catabolic environment that no bodybuilder ever wants to be in.

Full Circle with My Mentor

One of the coolest things about attending the Europa Supershow in Dallas was watching Dave Marinelli compete in the 202s. Back in 2001, Dave was the head trainer at the gym I had just joined in Florida. He was the one who talked me into competing in my first show, and trained me for it. He was joking around with me at the Europa, saying, "Look at you kid, you're bigger than me now!" I was only 162 pounds when I did that first show, and I just won the USA at 216 and was probably up to about 230 by this weekend. ■

Got a question for Mark Alvisi? You can ask him directly on the MD website and have Mark personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for Mark Alvisi.

EVAN CENTOPANI

BEAST From The EAST!

By Evan Centopani

Off-season Report: September 2009

I can't say that I 'officially' started my off-season on a certain day that I had marked down on my calendar— it just sort of evolved as I gradually got back into normal eating and training again after my contest was over and I had taken a break. I'm currently 285 pounds, and one major change I am making is that I am doing cardio three or four times a week. This is something I never did in the off-season before. But now I realize it actually helps my training.

Maintaining better cardiovascular fitness means I can train with more intensity without being limited by getting out of breath so easily. It will also help me stay leaner than I was in my previous off-seasons. Don't get me wrong, I'm not trying to stay shredded all year. That would severely limit muscle growth. But looking back at 2008, there's no need for me to carry as much extra weight as I did. For one thing, staying leaner will allow me to really see what gains I'm making. With extra body fat, you never really know how much of what's under there is actually new lean muscle tissue and what's fat and water!

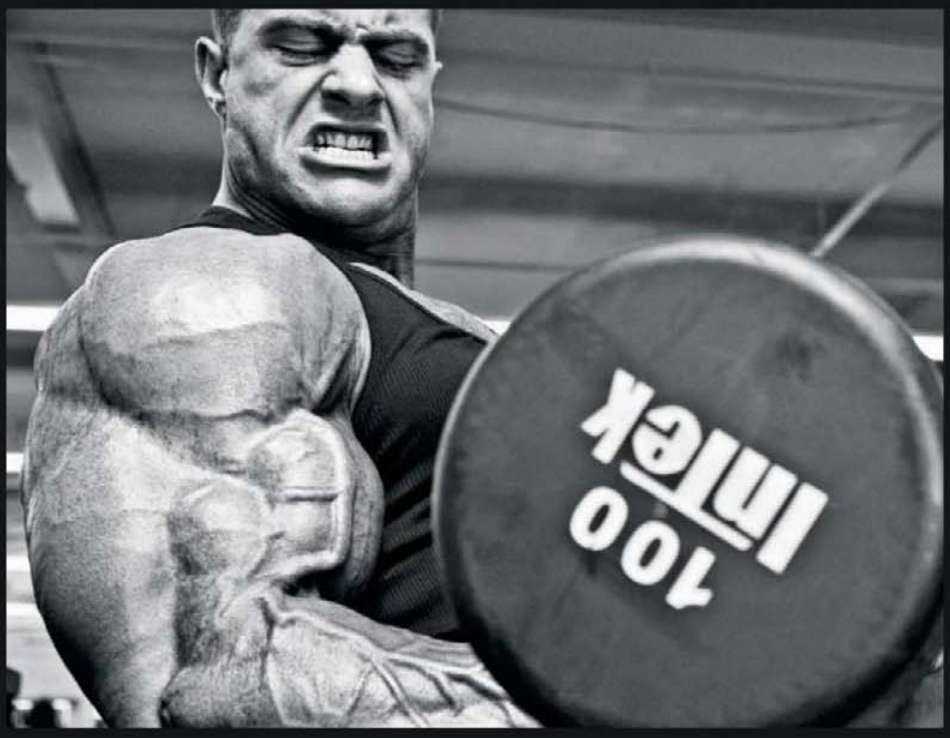
Staying leaner will also help me come in bigger and fuller next time I compete. I had a lot of weight to drop to get in shape for the New York Pro, and now I know I could have been even bigger there if I had started my diet with less fat to lose in the first place. I had to cut my calories too much, and it did cost me some muscle mass. Live and learn, my friends!



PHOTOGRAPHY BY PER BERNAL AND BILL COMSTOCK

I remember during your last off-season you mentioned that your lower back would be tight in the mornings. Mine has been tight all day lately, off and on. I am eating a lot of carbs and just finished a jug of Volu-Gro from Nutrex, which is Waxy Maize and Creatine. Do you know of anything I could do to alleviate the pain? I just had a deep tissue massage last week, but it does not feel like an injury; it feels almost like a constant muscle pump but it is really irritating.

The best thing I could recommend would be to keep your diet clean, drink plenty of water and do cardio regularly, three or four times a week. I feel like the cardio is especially helpful because it gets your blood flowing, helps to flush metabolic waste products out, and just helps circulation and recovery in general. I know the lower back thing sucks— it's a real pain in the ass.



I just have to say your arm on the cover of the September MD issue looks HUGE! They're so big they look computerized. Did your arms grow easy off the bat or did they start off slow, then blow up?

Thank you. I had above-average-sized arms before I ever picked up a weight. I wish I could attribute it to something spectacular and ingenious I did in the gym that I could pass on to you, but honestly, it's mainly genetics. My arms have always grown ahead of everything else. But if it makes you feel any better, my chest and my legs have always taken a lot of brutally hard work to see gains in.

Please be so kind as to settle this quandary for me. Some bodybuilders say that if you want to be big, you have to lift big. Others say that the weight is secondary to feeling the muscle work and getting a pump. What do you think?

You need to challenge yourself and put out serious effort, but weight itself is simply a means to an end. The weight is not the goal, even though it seems like that's the way most guys in the gym think. If you are a powerlifter, then obviously your goal is to move as much weight as possible. This is bodybuilding. Nobody gives a shit how much weight you can lift when you're up onstage and the judges are comparing your physique to the guy next to you. If your legs suck but you can squat 600 pounds and the guy next to you has awesome wheels but never uses more than 315, guess what? Your 600-pound squat means jack shit.

Why do I take my deadlifts from a rack and not the floor?

Someone posted a video clip of a big Russian dude named Konstantinov doing deadlifts off the ground with close to 800 pounds for four reps, as part of a suggestion that I start doing my deads this way. That set was impressive as hell. But to be honest, I really don't make the weight my focus. I don't like lifting from the floor because I feel it puts my back in a compromised position. Johnnie Jackson is definitely strong as hell and he has a great physique but I don't think being able to deadlift all that weight really amounts to all that much on a bodybuilding stage.

When you're onstage, no one gives a shit how much you deadlift, how much you bench, what your measurements are, etc. You just look how you look and it's either good enough to win or it's not. I appreciate the advice people have been trying to offer me about how I can deadlift more weight. So far, I haven't felt like my back development has been dependent upon the weight I use. But if I ever hit a wall and my development slows down and I can't attribute it to anything else, then maybe I will make weight more of a focus and start setting poundage goals.





Do you keep a training log or another way of keeping track of your lifts? I have been for about three years now and I'm at a sticking point in a lot of my exercises, (incline bench, flat bench, bent rows, to name a few). I have juggled new exercises and am stuck with those, too. It's getting discouraging seeing the same weight and the same reps every week. Do you think I should abandon the book altogether and maybe lift by feel and not worry about beating the book?

I was never one to write things down. I have said at various times that I was going to start, but I never do. I feel like every day is different, every year you're a different person etc., so who cares what you did a year ago? I don't think it's realistic to think you are going to get stronger every workout week after week, year after year, forever. That just doesn't make sense to me. Otherwise you would see people bench pressing two thousand pounds and squatting two tons!

I think training intensity and just pushing yourself is most important. Again, if this wasn't bodybuilding, then I'd say that is your game and you need to make it your concern. But just as a powerlifter doesn't try and look a certain way or work on capping off his delts or thickening his upper pecs, why would a bodybuilder try to lift a certain weight? My advice is to ditch the book for a while and see what happens. You can always go back to it.

Do you guys notice a theme this month yet? The idea is to use the weights to work the muscle, not use your muscles to work the weights. My buddy Justin Miller said that, and he is a smart man when it comes to all this stuff!

Do you prefer cardio post-workout or do you feel it should be done at a separate time of the day? Usually I do either the elliptical or the StairMaster for 30 minutes, then I have my amino acid stack, dextrose, and glutamine. I have mixed emotions as to when I should do my cardio. When do you feel is the right time to do it and why?

I think cardio is best first thing in the morning and/or at night before bed. Post-workout is tough because if you train with the type of intensity necessary, a) post-workout cardio is too draining, and b) it leaves you waiting way too long between meals. After intense training you should eat— and the longer you delay that meal the more you compromise your recovery and growth.

My Current 8-Day Split:

Day 1:	Quads	Day 5:	Off
Day 2:	Off	Day 6:	Hams and Calves
Day 3:	Chest & Triceps	Day 7:	Biceps, Delts, Abs
Day 4:	Back	Day 8:	Off

I have a question about pullovers, an exercise we don't seem to hear much about. In the off-season, do you like to use pullovers for either back or chest, and what type of pullover do you do? Do you do the old-school Nautilus machine like Dorian and Mike Mentzer used, straight bar cable pulldowns, or a dumbbell?

I think dumbbell pullovers are good for the back, but you have to really get your form down so the triceps aren't doing the work; it's not easy. I'd use a Nautilus machine, but all we have at my gym is a Bodymasters model and it's too narrow for me to fit into! I want it to work so bad that every now and then I'll try and squeeze into it, only to find that I still don't fit. I guess that's a good thing, because the idea is to get wider across the back and shoulders as a bodybuilder, not narrower.

I wanted to know your opinion of Dorian Yates' training style. Did you ever try anything like that in the past? And also, what do you think of supersets? Everybody in my gym is doing supersets all the time, including an old guy and his trainer, and they both look really good. I don't mind doing one superset in my training, but all they do is supersets, and they're always saying "Come on Maxime, do supersets, that's the best way to gain muscle!"

I think that pretty much any training technique can work



if done correctly and for a certain period of time. Training to failure, high-intensity, volume, supersets, drop sets, etc. are all great if you work hard and use good form. Just give different things a try and eventually piece it together in a way that incorporates everything into a formula that works well for you. Just keep in mind that everything works well for a certain amount of time, and then the only way to start seeing results again is to switch things up.

How often do you 'cheat' during the week? Meaning, how often do you go out and eat something that's not on your diet, like sushi, buffalo burger and fries, fajitas, stuff like that? I have been eating out a lot lately. It started with a couple of weddings and cookouts and now I've been doing it about three times a week. I'm gonna cut it out very soon. Do you think something like this is a good shock to the metabolism?

If we are talking about the off-season here, which I assume we are, I cheat whenever I feel I need it or whenever I really crave something. That usually ends up being two or three times a week. I think that, depending on your metabolism and your caloric needs, throwing in some different foods here and there is a good thing. I wouldn't do it just to do it, like scheduling a certain amount of cheat meals that you feel like you have to eat, but if you feel you need it or would benefit from it, you should have it.

Funny-ass Post of the Month!

This appeared on my Q and A thread on the MD site, written by a member named 'Sticknasty' in response to his frustration at another member hitting me up with a million trivial questions, wanting to know every little detail about how I eat. I thought it was so hilarious that I had to put it in my column:

"Sorry Evan, but I'm going to have to spill the beans on your diet so we can get back to the important questions. Every meal, Evan consumes 75 grams of protein from sources such as soy milk, cat food, and processed meats. For carb meals, Evan consumes 100 grams of high-quality carbohydrates from cupcake icing, Skittles, and an occasional bowl of Cinnamon Toast Crunch. When Evan does not consume carbs, he instead opts for sticks of raw butter (not the trans fat kind) until he feels his serum testosterone levels rise to exactly 821 ng/dl. (This is proven to maximize growth potential).

I'll be happy to field any other questions into Evan's diet, but can we please get back to the important questions such as, what kind of shoes Evan wears and where he gets his hair cut? And Evan, how much wood could a woodchuck chuck if a wood chuck could squat five plates for reps?"



Training Camp: Great for Kai— But for *Me*?

By the time you read this, the Mr. Olympia will be over— but I can tell you that none of the other competitors went to the lengths **Kai Greene** did to prepare for that show. He and Oscar Ardon, who is also my coach, secluded themselves in Las Vegas for seven full weeks leading up to the contest, to put 100 percent focus into the prep, with absolutely no distractions.

I've been asked if I would want to do something like that. I'm not sure, to be honest. On one hand, Oscar is a powerful presence, and having him around 24/7 would be an amazing resource. On the other hand, I don't know if I would want to isolate myself away from my family, my girlfriend, my friends, and just 'normal life.' Balance is important to me, and I don't know how healthy it would be for me personally to live and breathe nothing but a contest for that long. In Kai's case, I do think it was an excellent move— but you reading this now know better than I do how it all panned out in the end.

Special Thanks

I have to say a huge thanks to Universal Nutrition and the whole bunch over there— Mike, Phil, Eric, Greg, Michelle, and Jason. I feel so fortunate to be part of your team. Thanks to Steve Blechman, as always, and my girlfriend, Erica. And I also want to give a shout-out to Larry at Bridgeport Lobster in Bridgeport, Connecticut. This is where I have been getting all my seafood lately: cod, tilefish, and red snapper, scallops, and oysters. I have been eating a lot of fish lately because I feel I digest and assimilate it better than other protein sources like red meat. If you're a bodybuilder and you have been avoiding fish for whatever reason, you don't know what you're missing! ■

Got a question for Evan Centopani? You can ask him directly on the MD website and have Evan personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for Evan Centopani.

DENNIS WOLF— THE PEOPLE'S CHOICE

The Big Bad WOLF

By Dennis Wolf



I shattered my kneecap just over two years ago and haven't been able to train legs properly since without it getting very sore. So I just stopped training them altogether. I know you damaged your knee a while back too, so any tips or input on how to train legs with an injury like this would be appreciated. Also the injury was a multi-fragmentary fracture of the right patella.

P.S. Best of luck in the Mr. O this year— hope you do some damage!

I am writing this a couple weeks before the Olympia, but this issue of MD won't be out until the show is over— so let's hope your wishing me good luck helped! But seriously, thanks for your support. Sorry to hear about your knee. An injury like that is very serious and you can't simply jump right back into normal leg training any time soon. Of course you should consult with a doctor and probably a physical therapist about rehabilitating the knee, but I will tell you what I did since you asked.

For a long time, about 12 or 16 weeks, I just did very light, very easy training for the legs. It was really just to get some blood flowing in the lower body and to maintain flexibility. Every couple weeks, I would increase the weights just a little bit, so my knee had the chance to grow stronger very gradually and I was not risking hurting it again. Every workout, I was very careful to notice if the knee was hurting or not.

You have to be vigilant in these cases, because hurting an injured area again can be even worse than the original injury. That's really all I did. You have to be extremely patient and you can't get discouraged. Injuries happen to just about everybody in bodybuilding, and it's up to you if you let them stop you or not. Look at a guy like **Branch Warren.** He's torn a biceps and both triceps, but now his arms are better than ever!

I remember reading years ago about **Kevin Levrone** winning the Arnold Classic only a year after tearing his pec— and I think **Victor Martinez** did that, too. So you just have to have a good attitude— this is the most important thing.



Dennis, I didn't know you came to India (guest posing at Aurangabad IFFB Asian championship). Damn, if it were closer to my home, I would have definitely attended that one; I am a huge fan of yours! Did you get to see some sights or was it just *"plane lands...guest posing... plane flies back?"*

I'm so sorry you weren't able to make it! I definitely did have a good time in India, but you are correct about how tight my schedule was. There was no time to go see any cool stuff in the place. All I really saw was the airport, the hotel, the venue, and that was it. Driving to the hotel from the airport and to the contest, I got a chance to at least look around and see what the country looks like a little, but not much else. I do want to get back there another time and actually see more of India. There is a lot of history there and a whole different culture

PHOTOGRAPHY BY PER BERNAL

DENNIS WOLF— The People's Choice

I am having trouble building up my chest. I have long arms, so most of the time my delts do most of the work. Do you have any suggestions on how I can use more chest than delts?

A lot of times in a case like yours, it helps a lot if you try using a wider grip. The range of motion isn't as complete, but it does seem to take the shoulders out of the movement. Trust me, I know all about shoulders taking over when you're trying to hit your pecs!

You also need to 'start from scratch' and work on your mind-muscle connection by using a much lighter weight, going very slowly with your reps, and focusing on squeezing the chest as you push up and feeling it stretch when you do the lowering portion of every rep. Don't worry about how much weight you use, because this is what stops most guys from ever training correctly and working the muscle properly. You are better off pressing 200 pounds and working your pecs very hard, instead of using 400 pounds and only working your shoulders and triceps!



German Bodybuilding Hall of Fame!

Since I hope to become the first Mr. Olympia winner from Germany (Arnold was Austrian— totally different country, though similar in many ways), this month I want to recognize some of the best bodybuilders who have come from Deutschland.



Gunter Schlierkamp

Gunter was a very good bodybuilder and still can be if and when he decides to come back. He was the IFBB Junior World champion as a very young man, then not much later won the IFBB Worlds. Gunter also has one of the biggest fan bases in the history of bodybuilding, and was on a lot of covers. He may be the most famous German bodybuilder we've ever had. And, he did have a couple years where he was placing very well as a pro— he even beat **Ronnie Coleman** a week or two after Ronnie had won the Mr. Olympia! Gunter is a very nice guy too, and he was hilarious in the movie "Beerfest."



Markus Ruhl

Markus may be the freakiest bodybuilder the sport has ever seen. If you ever stood next to him at his biggest and saw the crazy thickness in his shoulders, chest, back, and arms, you would have found it hard to believe this was a real human being. Ruhl also had and still has many loyal fans all over the world. Every time he would come out onstage the whole place sounds like thunder when they yell *"RUUUUUHHHL!!"*



Ralf Moeller

Ralf was an OK bodybuilder; he did compete at the Mr. Olympia at least one time. But he was very tall and it would have taken him a lot more muscle mass to look as big as the guys he was trying to beat back then, like **Lee Haney**, **Mike Christian**, **Lee Labrada**, and **Rich Gaspari**. Instead, he became a very successful actor in Hollywood. Ralf had a nice part in the movie "Gladiator," which I bet just about all of you have in your DVD collection. He was also in "Beerfest," as well as the "Conan" TV show and a few Jean-Claude Van Damme movies. He always plays a bad guy, which is funny if you ever met Rolf— talk about a gentle giant!



Jusup Wilkosz

Jusup was a good friend of **Arnold**'s and was himself a very good bodybuilder. He was third place at the 1984 Mr. Olympia, the first year Haney started winning, and was top three in many other pro shows in the early and mid '80s. Jusup only competed for six years as a pro, but his conditioning was ahead of his time.

DENNIS WOLF—The People's Choice

You Know We WOLVES are Carnivores!

Whether it's the off-season or contest dieting time, I eat four meals with meat in them, along with two protein shakes. The only difference in the off-season with my diet is that I have more fats and carbs. If you want to eat like the Big Bad Wolf, here's the simple formula:

Steak: twice a day, 10-12 ounces
Chicken breast: twice a day, 10-12 ounces
Protein shake: twice a day, 60-70 grams (adjust for your own bodyweight/protein needs)

Dieting Does *Not* Turn This Dr. Jekyl into Mr. Hyde!

I know that some bodybuilders experience a personality change when they are on a contest diet, especially near the end. They can turn into what you Americans would call 'a-holes'! But that doesn't happen with me. The main effect I feel is being tired a lot of the time. That's perfectly natural when you are eating a lot less food than usual and doing more physical activity (in my case, cardio— something I hardly ever do in the off-season). I just need a little more time on my own when I am dieting, and my wife is very understanding. She helps me so much with the cooking and knows how important my workouts and rest are at this stage. Maybe if I didn't have such a wonderful wife as my 'team,' I would be in a terrible mood during my diet!

Can't Live Without OXYGEN!

I'm not talking about what's in the air we breathe; I am talking about Oxygen Gym in Kuwait! This has become my favorite gym in the world now. For a pro bodybuilder, it's paradise. There is every piece of the very best lines of equipment you could ever hope to train with, and the owner treats us like movie stars. I filmed part of my new DVD there so you guys can check it out for yourselves, and I am going back there to stay and train for another week at the end of October. I know not many of you ever get the chance to visit Kuwait, but this is the gym you have to train at if you ever do.

New DVD In The Works

Right now I am working on my second DVD, and it's going to be much better than my first one. We filmed part of it in Kuwait four weeks out from the 2009 Mr. Olympia, and I am going to do some more filming in the USA. This will definitely have a lot more stuff in it than my first DVD. You will see me training in Kuwait with **Hide Yamagishi**, and also working out in Germany with some of my good friends. There is also cool footage of my regular day-to-day life. There is even a part where you see me driving some very expensive cars— not mine, but I wish they were!

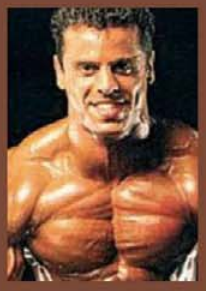
Got a question for Dennis Wolf? You can ask him directly on the MD website and have Dennis personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for Dennis Wolf.

Achim Albrecht

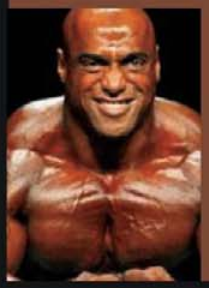


I never met Achim, but all the people who train at my gym know him. He was one of the first really huge guys to come along in the early '90s around the same time that **Dorian** and **Nasser** came on the scene. Achim, like me, was known for having very wide and round shoulders. He made ninth place at his first pro show— the 1991 Mr. Olympia, when Haney won for his eighth and last time. But Achim only competed a few more years and then tried to be a wrestler or something.

Frank Hillebrand



Frank was kind of like Achim. He did very well at his first pro show, which was also the Mr. Olympia. He got seventh place at the 1990 Mr. O in Chicago, the only year they did steroid testing at the Olympia. Frank was known for his huge legs, but his upper body never quite matched them. He only competed a few more times and I heard he is a very successful personal trainer in Las Vegas.



Dennis James

I know you think I made a mistake, but Dennis was born and raised in Germany, even though his father was an American soldier (there are a lot of people in Germany like this because of the U.S. Army bases). But because he was always a U.S. citizen too, he turned pro in the USA. I am proud to call Dennis a good friend of mine, and I am also a fan. When I first saw him compete a couple years ago, Dennis was so crazy big and full that I could not say much more than "Wow!" If you like freaky mass, it doesn't get much freakier than Dennis James.

Ronny Rockel



Ronny is a very nice, quiet guy and I think sometimes this has hurt him onstage when maybe he doesn't seem as confident or hungry to win like the other guys. His physique is underrated, and I hope he gets more attention dropping down to the 202 class.



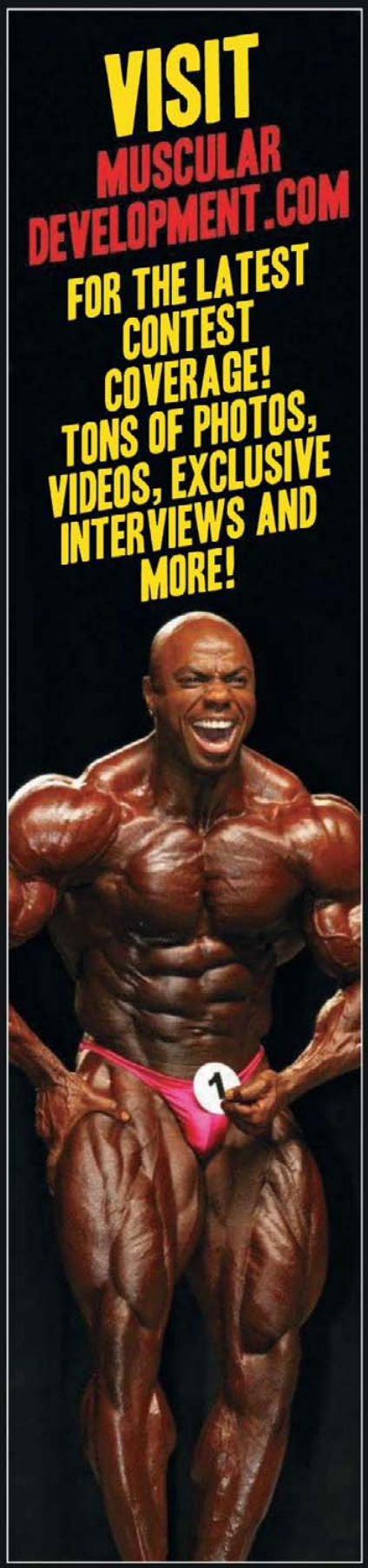
Anja Langer

I had to mention a couple of the best German women we've had. She only competed three times after winning the German Championships in 1986— but in two of those contests, she got second and fourth at the Ms. Olympia! I've met her twice and she is a really nice woman; maybe competing just isn't her thing.



Anja Schreiner

I can't say I really know much about Anja, but she was very good for the couple years in the early '90s when she competed. She won the Ms. International and placed third, sixth, and eighth at the Ms. Olympia. ■



Eric Fankhouser—North American Champion

but never could diet down with all that was going on in my life. After I saw your videos on musculardevelopment.com, I was motivated. I saw that you were able to balance all you had so I knew I could, too. I will be back next year to do your show again. I did not do very well, but I had a great time. Since I am trying to add size, do you think I should take some time or jump right in and do a few shows before yours next year?

Thanks for doing my show. It was great and I am glad you are going to do it again next year. I like to make the shows as good as possible; the show ran great because we had a great crew working backstage and working the entire event.

I also want to tell you congrats for stepping onstage after wanting to for so many years. I always tell people never put it off. You are never going to have enough time. If you always wait till you have enough time then you will end up running out of time waiting. As you could see from the videos online, balance is key in life. You got to give a little to get a little.

I say since it was your first show and you said you did not do too well, I would recommend you take some time off from competing. Focus on adding some size and then diet down for my show again next year. Then do as many shows as you can. Next year, introduce yourself to me so I can see if you made any improvements. Good luck and have a great off-season.

You have some of the best videos on MD's website. You always do some different exercises; the step-ups on the hack squat machine was a great exercise so I added it to my leg workout. Do you have any different back exercises to do, since I have never seen a back workout yet on MD? Thanks for your time.

Thanks, I hope you are enjoying the step-ups. I have never done a back training video on MD because Robbie was afraid that my back would not fit on his camera. I am kidding, but I will try to do a back training video next time they tape me. Back is one of my favorite body parts to train.

One of my new favorite exercises to do on back day would have to be the row/lat pulldown I just started to do. It's easy; all you need is a lat pulldown machine, but you do them standing, not seated. Just grab the bar standing up, take a few steps back and pull the angle right in-between a row and a lat pulldown. Make sure you get a good stretch and pull the bar to the top of your chest. Once you start to use some heavy weight, you might have to put your foot up on the seat of the pulldown machine so you have some leverage. I hope you enjoy that one, too. I will have a back workout up soon, if Robbie gets a bigger camera.

Training Journal

They say if one is good, two is better, right? Well, having two kids is better. The new baby is doing great, and Xavier is a great big brother. I thought having one kid was tough when it came to training; now having two does make it harder. It is just more motivation for me to train harder and to value the time I have to train more. I need a bigger house now; all this kid stuff is taking over my living room and bedroom. Nothing like falling asleep with a Ninja turtle in your back, and a pink blanket.

I have made some great progress over the last few months; my chest is getting bigger and my back is filling out. I am very happy to say I will be ready come this May. I am starting my contest diet in January and I can't wait till the end product is here in May.

I want to tell Steve thanks for having faith in me and letting me be a part of Team MD. Also want to tell Rick Bayardi thanks for helping out with my bodybuilding show, and letting me use his gym for all the training videos and the ABC events. Also thanks to Universal Nutrition/Animal who has been our main sponsor the last two years of the show— we could have not done it without you guys! Thanks. ■

hopefully he can figure out how to get his legs back up to match.

Pedro Barron— New 202 Star From Mexico

I was really at the Europa to see a guy I have been working with from Mexico named **Pedro Barron.** This man is one of the hardest-working bodybuilders I have ever had the pleasure of training. Whatever I ask him to do, he does. Instead of giving me lip or complaining like some pros I have known in years past, Pedro does it with a smile—until the pain gets to be too much, of course! He went into the show as a total unknown and still managed to place sixth out of 22 pros in the 202 division. I believe he has so much potential that I didn't want that to be the end of the season for him. I got together with a couple other people and we put the money together to send him to the Atlantic City Pro show being held a week before the Olympia. I wouldn't be a bit surprised if he ends up qualifying for the 202 Showdown at the O.



PEDRO BARRON



As for my other 202 pro, **Stan McQuay**, he's doing very well, too. The size and density he needs will be coming, because he is training like a man on a mission now that he's down in Venice— and I'm pushing him past the limits he had in his head for so long. When I started working with Stan, he had never pressed anything heavier than a pair of 105s for incline dumbbells— last week he did a good set with 150s! ■

Got a question for Charles? E-mail it to him at editor@musculardevelopment.com and you could see it answered right here in MD!



The PRO Creator

By Hany Rambod





I just learned that two of my clients, **Fouad Abiad** and **Ben Pakulski**, have signed on to become the newest members of Team MD. I'm very happy for both of them and I know they are going to be excellent additions to the magazine and the website. Fouad and Ben are up-and-coming stars with limitless potential, and it's going to be exciting to see what they are both capable of in the next few years. I've spoken to both of them and they are very enthusiastic about being part of MD.

I'm looking forward to working with Fouad and Ben, and improving the impressive packages they both brought to the fall pro shows they competed in. One thing is certain about these two: their best is yet to come. And thanks to Steve Blechman and MD, you'll be along for the ride as these two young guns get bigger and better!

I am shocking my calves with tri-sets every other workout. Here is the routine:

(5 of these tri-sets in 16-6 rep range)

- **Toe raises on hack squat machine**
- **Standing calf raises**
- **Standing reverse toe raises on a block**

Is this a good routine or just overkill? My calves are currently 16 inches cold. They grew half an inch in the past four months with my 'normal' workout.

I would try to push the reps past 20. Calves are one body part that typically responds better to higher reps, due to their high percentage of slow-twitch muscle fibers. Don't lower the weights to get the higher reps— just rest a few seconds every time you hit failure if you have to. This would be the rest-pause technique. The combination of high volume, higher reps, and heavy weight will help tremendously to stimulate growth in the calves, which can be a notoriously stubborn muscle group.

I've started using the FST-7 system for a couple of months now, and I'm loving it. In one of your videos on MuscularDevelopment.com, you mentioned something about Mark Alvisi and his prep— how he tends to harden up in the bottom half of his body first, and then his upper body starts sharpening up a bit later. You also noted how you have to be careful with his diet and carb intake, or his legs could lose size and look stringy.

I have the opposite problem. My upper body gets really lean very fast, and I can appear to have 5 percent body fat when looking at me from the waist up. But my legs and glutes still look soft. I have very well-developed quads, and they get lean eventually, but I still tend to carry a lot of body fat in my glutes and hamstrings. What do you recommend when prepping for a show, as far as dieting and training goes, so I don't start losing size in the upper body— as I diet my ass off to get the lower half ready?

The real key here is to never let yourself get too heavy in the off-season. If you can stay within 10-15 pounds of your competitive weight, you won't have to work so hard to get lean. Any time you have an excessive amount of fat to lose, you run a serious risk of losing lean muscle tissue along with that fat. By keeping your body fat lower in the first place, you will be able to dial in your legs while at the same time maintain the size and fullness of your upper body.

You should also look into a yohimbine-based fat burner. I'm a big believer in using yohimbine to get rid of stubborn body fat in the lower body. Usually it's women who have problems with shedding fat there, but there are also plenty of men out there with similar issues.

How many exercises should be done when training in FST-7 style for beginners, intermediates, and advanced trainers? And do they all use 7s for all body parts, or is that something that you do more of as you become more experienced?

Beginners should do just two 'base' exercises, which would be compound movements, plus one isolation exercise done in FST-7 style. Using chest as an example, you might do incline dumbbell presses and flat dumb-

PHOTOGRAPHY BY PER BERNAL

bell presses for your two base exercises, and incline dumbbell flyes for your 7s. A beginner should only use 7s for one body part a week, typically the area that needs the most improvement.

Intermediate trainers will do three base movements plus one isolation exercise for 7s. They should do the 7s for no more than two given body parts per week. Advanced trainers will also do three exercises in standard style, plus one movement for 7s, but they can now do 7s for all body parts. Also, advanced trainers might do a compound movement rather than an isolation exercise for their 7s.

What is the best fish to eat for bulking, and the best fish for cutting?

Due to its high caloric content as well as the amount of good fats you'll find in it, I recommend salmon as the top choice for off-season bodybuilders. If you're trying to lean out, tilapia is the best choice. It's a smaller fish with far less calories and a lower fat content, and its smaller size also lends itself to smaller serving sizes— important when you are attempting to stay in a caloric deficit. Tilapia is also less likely to have the dangerous levels of metal toxicity that you often see with tuna.

Of course, too much of any one fish over time can be a bad thing, so it's not advised that you eat either salmon or tilapia for all your meals every day. Another piece of advice I can offer is to buy your fish fresh whenever possible. Fresh fish tends to be less 'fishy' smelling and tastes better too. If fish ever smells overly 'fishy,' chances are it's not very fresh and you shouldn't buy it.

I've heard you talk before about protein shakes versus amino acids, and that you prefer your clients to take aminos. Why is that?

Amino acids get into your system much faster than protein shakes do. Most people tend to use shakes as meal replacements instead of eating solid food. As I have pointed out before, the human body simply processes real food better than protein powders. Time after time, I have noted that the more shakes a bodybuilder drinks as opposed to consuming more whole-food meals, the flatter and softer his muscles appear to be. Every time I have an athlete stop drinking shakes and eat all whole food, it's never long before he takes on a fuller and harder appearance.

The best thing about amino acids is that you can take them 30 minutes before a meal to help keep your body in an anabolic state, and then eat the meal itself. All the athletes I've worked with who do this have been very impressed with the results.

I know you advocate the use of GlycoCarn. I'm curious what dosage is ideal, and when you should take it?

This is one product that I have witnessed some very significant results with. Bodybuilders experience lower lactic acid levels, increased recovery, and pumps that literally last all day— as opposed to the hour or two (at most) you will see, even with the best arginine-based nitric oxide products. We're also experimenting with another application of GlycoCarn that nobody has thought of previously, and I will update you on that next month.

The doses I've seen as most effective have ranged from a gram and a half to 5 grams, depending on the bodyweight of the individual. A 120-pound figure competitor will obviously not need to use as much as a 250-pound bodybuilder. Typically, athletes will take half the dose before workouts, and the remainder during the workout. For more information on GlycoCarn, visit their website at www.GlycoCarn.com

My First Supplement

It's commonly known among my clients that I have been designing my own supplement formulas for some time now. Until recently, any talk of making these products available to the public was just that, as I had been too busy with other projects and job responsibilities for several years to devote the needed time. But recently, I teamed up with a company I'm involved with named Evogen to develop the first of several formulas for athletes. This flagship product is called EvoP1-Alpha, and it's designed to be used both pre and post-workout. It's one I tested successfully on a wide range of athletes, ranging from local to professional bodybuilders as well as figure, fitness, and bikini competitors.

Ingredients include ultra-soluble BCAAs, several forms of L-glutamine, creatine pyruvate, and a profile of B vitamins as an anti-stress pack. The formula comes pre-dosed with the exact amounts of each nutrient designed to elicit a truly sick pump while training, and then get you started on the recovery process immediately after the workout. I was adamant about acquiring only the highest-quality ingredients so the absorption rates are sky-high.

Best of all, EvoP1-Alpha is stimulant-free. The problem with most nitric oxide products is that they're loaded with caffeine. So you may feel a heck of an energy kick working out, but the vasoconstricting properties of the caffeine cancel out the vasodilating effects of the other ingredients. Sadly, the end result is that you hardly see any difference in your pump. That's definitely not the case with my product!

Another huge advantage to EvoP1-Alpha is that it contains zero carbs. Other products of this type often contain sugar, so using them while dieting would be counterproductive. EvoP1-Alpha is versatile and suitable for use, whether you're in off-season building mode or trying to shred up for a contest. You can visit www.EvoGenNutrition.com for more information. ■

Visit www.hanyrambod.com or www.fst-7.com for previous articles, news, an interactive forum, video clips, and member profiles and blogs. You'll also find updates on my current clients and who is preparing for upcoming contests. Free registration gives you full access to all of it. And now, due to popular demand, FST-7 shirts are finally available!

Got a question for Hany Rambod? You can ask him directly on the MD website and have Hany personally answer your question! Go to www.musculardevelopment.com, MD Forums, MD Staff and Pros, Q and A for Hany Rambod.

By Lee Priest

Were the '90s the Real 'Golden Era?'

Lee Priest:

The '90s were great. I came out to Venice Beach in 1993. Back then at Gold's, you could at any time see **Flex Wheeler**, **Chris Cormier**, **Jim** or **Mike Quinn**, **Gary Strydom**, **Berry DeMey**, **Paul DeMayo**, **Mike Matarazzo**, **Aaron Baker**, **Tony Pearson**, **Mike Christian**, **Samir Bannout**, and countless other pros and top amateurs.

Very soon after that, I started splitting my time between Gold's and World Gym on Main Street, a few blocks away. I became a good friend of Joe Gold and soon fell in love with his unique gym. It was an older crowd there, but somehow even in my early 20s I fit right in. You would see **Arnold**, **Lou Ferrigno**, **Tom Platz**, **Ralf Moeller**, **Eddie Giuliani**, and **Don Ross**, who was the senior editor of MD at the time. I can't leave out master lensman Artie Zeller, who even then would follow us around, taking photos.

Often I would get in there at 5:30 or 6 in the morning and train on the outside deck as the sun came up. Arnold would roll in around 7 or 8, and Artie was usually right after him, along with Joe Gold and Eddie. There was no music allowed. All you heard was laughing and clang of the weights— unless you dropped a weight, in which case Joe would roar at you to get the fuck out of his gym! Joe took to me so much that he hand-made me a set of dumbbells from 150 to 200 pounds, solid steel, nicely spun and with the World Gym logo engraved into them. After my workouts, I would go to breakfast every morning with him to the Firehouse or the café at the Marina Pacific Hotel.

Those were the days— so many great memories. Where's the time machine? I want to go back!

Ron Harris:

I can make the argument that the early-to-mid-'90s were the true 'Golden Era' of bodybuilding. I arrived in Venice in 1991 at 21 years old and immediately immersed myself in the rich bodybuilding culture that was 'The Mecca.' The sport really was more exciting back then in many ways. Though bodybuilding was never really mainstream, it had a solid TV presence. I was the Associate Producer of "American Muscle Magazine" on ESPN, a one-hour magazine format show that was the brainchild of my boss, Lou Zwick. Everybody who was anybody in bodybuilding was on our show at one time or another: **Flex**, **Shawn**, **Kevin**, **Dorian**, **Matarazzo**, **DeMayo**, **Priest**, and others far too numerous to mention. We had workouts, contest coverage, profiles, cooking, even fashion segments.

Did I say fashion? Unlike the understated workout wear of today, back then it was all about wild patterns, bright colors, and stripes. Bodybuilders had their very own style, with string tank tops, lycra tights and shorts, huge tops from T-Micheal, Crazee Wear, and Body Alive that could help little wannabes like me appear to be the size we yearned to be. On TV you also had our rival show "MuscleSport USA," plus "The Flex Magazine Workout," and one-hour ESPN specials for events like the Mr. and Ms. Olympia, USA, and Nationals.

Nowadays, the top athletes are scattered to the four winds, but back then Venice Beach was the place to be. Walking into Gold's Venice back then was like stepping into a real-life bodybuilding magazine. And because we didn't have the Internet or even lifestyle DVDs showing every banal fact of their lives, the pros had a genuine mystique about them. There was more drama and anticipation leading up to the big contests, and to get the results, you either had to be there or wait a couple months for the coverage to come out in the magazines.

It was common back then for anyone working the front desk at every Gold's, World, and Powerhouse Gym to have the results handy the next day for the inevitable flood of calls from members eager to know who won and who placed. Steroids were around of course, but they weren't talked about much— certainly not in the magazines. That meant that most guys getting into bodybuilding put the emphasis where it should be— on proper training, nutrition, and rest.

Finally, the shows were loaded back then. Today, it's rare to even have teenage and women competitors at all in most local and regional shows. Back then, there was no shortage. So as much as we have far more access to information with the Internet as well as supplements that are vastly superior to the stuff we bought back then like Cybergenics and Hot Stuff, I would take the 'old days' of the early-to-mid-'90s any day.

Lee, if you find that time machine— I'm hopping in that motherfucker with you! ■

We hope you've enjoyed this issue

of Muscular Development magazine!

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