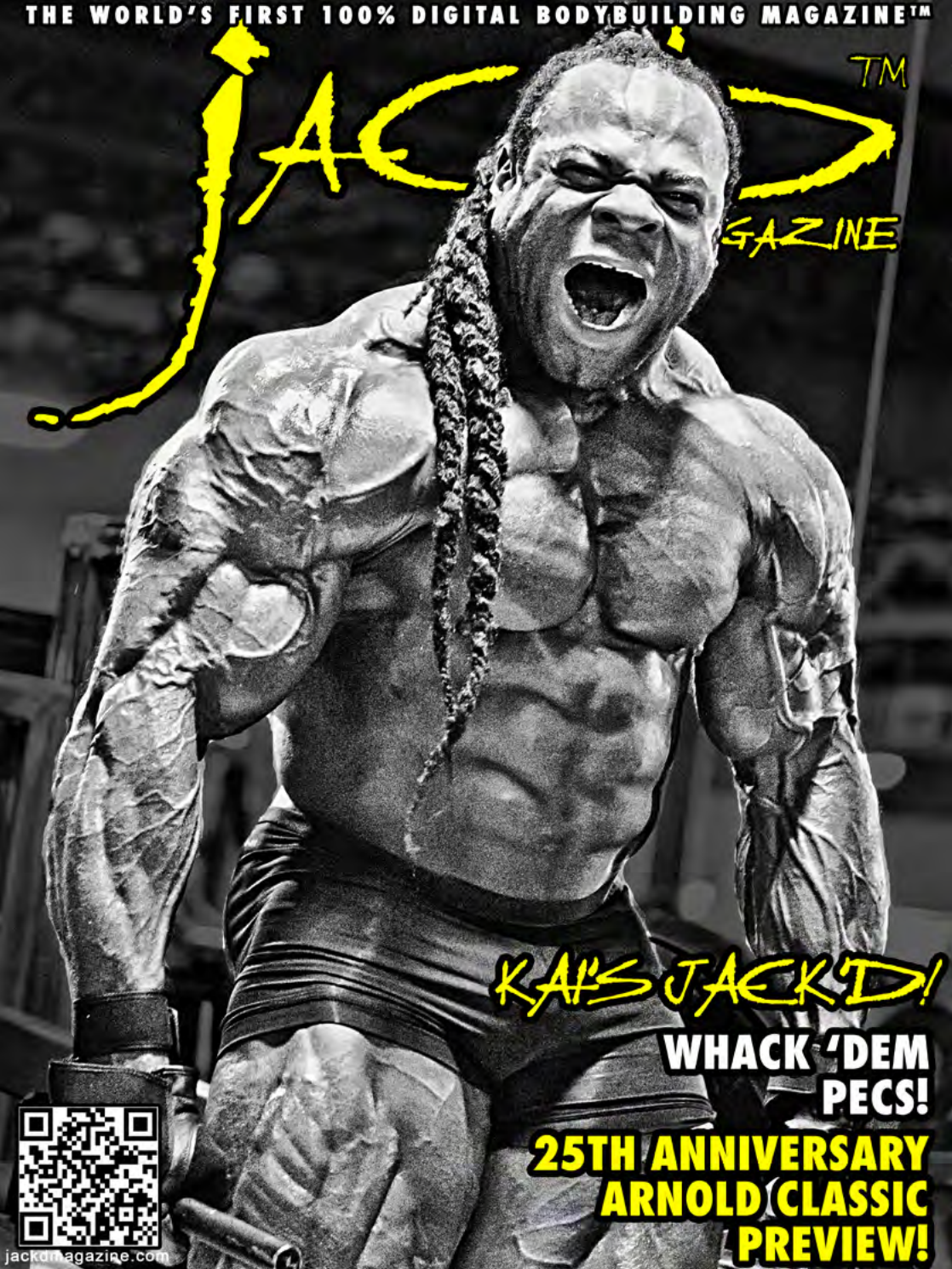


THE WORLD'S FIRST 100% DIGITAL BODYBUILDING MAGAZINE™

# JACK™

MAGAZINE



**KAI'S JACK'D!**

**WHACK 'DEM  
PECS!**

**25TH ANNIVERSARY  
ARNOLD CLASSIC  
PREVIEW!**



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WINTER 2013



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**JACK'D**  
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DISCLAIMER: Consult your physician before beginning, altering or making any kind of changes to any exercise or diet program. JACK'D does not accept any responsibility for injury sustained as a result of following the advice or suggestions contained within the content of this magazine.



# THE EDITOR

derek hart



WELCOME

the world's  
first free  
100% digital  
bodybuilding  
magazine

Welcome to the second edition of JACK'D MAGAZINE!

I'd like to personally thank you for the great support with our premier issue featuring Jay Cutler on the cover! JACK'D truly is the new evolution in bodybuilding magazines. Getting the first issue published wasn't an easy task and we'd like to thank everyone who helped make it happen. From programming issues to editing, and re-editing our content, JACK'D was launched to overwhelming fan support! Since this magazine is FREE and will forever be FREE, you, the readers of JACK'D make it happen. Without support through your downloads, "Liking" us on FACEBOOK and, through emails etc. we wouldn't be able to provide you with our magazine. And when I say FREE, I mean FREE! Don't you hate it when you download a supposedly "FREE" app to something only to be asked to pay for the content once the app is downloaded and installed in your device? If it states it's FREE then it should be FREE! But enough of my rant because I could go on forever about this.

JACK'D MAGAZINE will forever be grateful to all our subscribers – you are the reason we are here. JACK'D is written and produced by fans of the sport of bodybuilding for the fans of bodybuilding. No stiff suits who have absolutely no clue about the sport but have an endless resume in the so-called "real" marketing and publishing world ... this is bodybuilding, we're a whole different breed! So enjoy this issue of JACK'D and as always, if you have any ideas you think would be great for the pages of JACK'D send them our way; we're always interested to hear from fans of bodybuilding and especially fans of JACK'D Magazine!

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**COVER:**

MuscleMeds Athlete  
Kai Greene

# CAN YOU HANDLE IT?

Are you searching for the most powerful pre-workout available? The truth is, DARK RAGE is so freakin' strong most guys can't even handle one scoop... can you? Forget about 1,3-DMAA – it ain't JACK SH\*# compared to the powerful pump inducing, mind altering, blood volumizing and hair raising pre-workout DARK RAGE. The question isn't whether DARK RAGE will blast your training into the muscle building stratosphere. Instead, the question is "Can You Handle It?"

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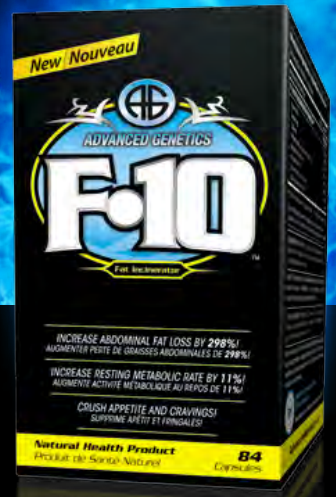


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# YIPPIE KAI-YAY MOTHER F#&KER! IT'S A GOOD DAY TO DIE HARD

» Holy crap, it's like I'm back in the 80's! Along with Arnie and Stallone releasing a bunch of upcoming films, Bruce Willis is about to battle it out with the bad guys again in the new addition to the Die Hard movie franchise called A Good Day To Die Hard!

Back from the original Die Hard blockbuster released in '88, to the last installment Live Free or Die Hard in '07, these movies are a must see for every action movie fan!

**CLICK ON THE POSTER  
TO PLAY TRAILER!**

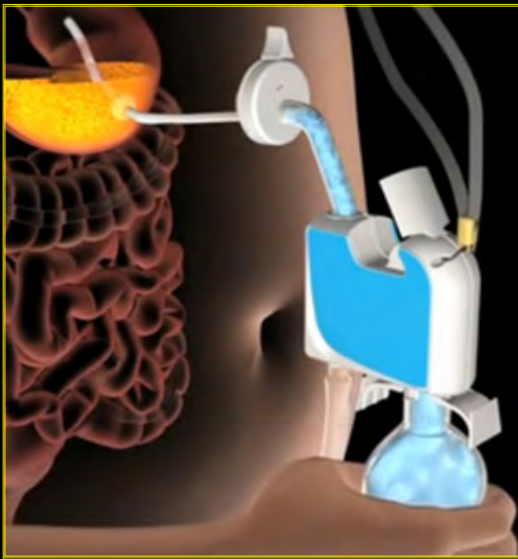


# NO NEED TO DIET, NOW YOU CAN PUMP THE CALORIES DIRECTLY FROM YOUR STOMACH!

If you think you've seen and heard it all when it comes to lazy people and their quick fixes to try and replace a healthy lifestyle including diet and exercise well you're wrong. A new procedure has been invented to help obese people lose weight called AspireAssist which gives patients control over their weight loss by a method known as Aspiration Therapy.

Basically doctors insert a tube into the stomach and patients "aspirate" (drain) their stomach contents into the toilet after each meal, reducing the number of calories absorbed by the body.

Now you don't even need to watch your diet or train, all you have to do is eat what you want, go to the toilet and empty your stomach out - it's as easy as 1-2-3! Calories-schmalories, eat whatever you want, whenever you want and then flush all the unwanted fat and calories away. Just think of it, now at the Olympia you can pound back a Quadrouple-Bypass Burger from The Heart Attack Grill (see article in the premiere issue of JACK'D), throw down a ton of fries, wash that down with a beer, go to the sh\*tter, turn this puppy on and suck the crap out of your stomach - looking good has never been so easy!







A highly muscular man with a goatee, wearing a black tank top with orange trim, is sitting on a gym machine. He is looking directly at the camera with a serious expression. The background shows gym equipment like a barbell and weights.

**It's  
MONDAY,**

**you know what  
that means...**



# CHEST DAY!

WHACK  
'DEM  
PECS!

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**W**ell, after a weekend of partying it up at your favorite hang-out, or if you're a bit older, spending time with the family, it's Monday - back to work and the grind of everyday life! It also means that when you hit the gym the inevitable is going to happen, every single flat press, incline press, decline press, dumbbell press bench, etc. etc. is occupied; why - it's Monday and that means it's universal chest day! WTF, why is it so many bodybuilders feel that Monday is the day to train chest? Is there some unwritten law 'Thou Shalt Train Chest On Mondays? Seriously, take a look around when you hit the gym on a Monday and you'll see what we're talking about; just like Friday is universal get your arms pumped up before you hit the clubs at night, day, on Monday every piece of chest exercise equipment is being used! Screw that, f\*ck the trend and hit your legs on Monday (see our leg article further along in this issue) and save your chest routine for Tuesday!

THIS CHEST ROUTINE IS . . .



It's extremely, and we mean extremely, important to properly stretch and warm up prior to going hard and heavy.

### THE WARM UP:

So, now it's Tuesday and after blasting your legs yesterday, if you can still walk that is, it's time to smash your chest! Brief lesson in physiology here first; your pecs consist of two muscle groups, which tie into various parts of your shoulders, (no, we're not going to get that deep into the physiology of it all), and this is why it's extremely, and we mean extremely, important to properly stretch and warm up prior to going hard and heavy. Trust us, you don't want to witness someone tearing their pec, let alone hear your own pec pop as you're pressing 3-4 plates a side; imagine that weight falling on your chest! We find that though a lot of the top pros warm up slightly differently prior to a chest workout, it usually goes something like this, starting with a little dynamic stretching: 2-3 sets of light dumbbell exercises like flat bench flies, shoulder flies, stretching out your pecs on the peck deck machine for 1-2 sets, with a light weight and good stretch at the ass end of the movement. Anything and everything that can help warm the area up dynamically so you don't tear

yourself to shreds. Just make sure that you have stretched and are warmed up before you hit the heavy weights. Hell, stretching and warming up your chest could and will be an article on its own; but we're more interested in training heavy, and blowing past all your physiological barriers in this article.

### THE ROUTINE:

Now that you're warmed up, you can start with an actual set of pec-deck flies to stretch out and warm up the pecs some more, but with heavier weight – remember, you can never be warmed up enough. Here, we are going to be doing 3 sets, starting with 2 sets at a light weight, which you can do for 15-20 reps, with a good stretch at the end of each rep. The count should be something like 2-2-4-2. Two seconds up to the top of the movement, hold for another two seconds, lower for 2 seconds to the very bottom of the movement to stretch the chest, and to get the blood flowing for 4 seconds, then repeat. On the third set, you're going to push yourself hard and change things up a little. Your first



rep is going to be with your one-rep maximum weight. And not a sloppy max, a good, decent one-rep-max lift. Using a 1-2-2 tempo, you explode driving the weight up and holding the weight at the top for a count of 2 and then slowly lowering the weight to the starting position so you don't pull or tear anything. Since you can only do one rep at this weight, lower the weight by 20% and then repeat the movement for as many clean reps as possible. Continue this type of weight subtraction until you are at lightest weight possible on the machine. Then, at this point, rep out as many as you can. Who cares how it looks, it's not the weight but how you lift it remember... your chest will be screaming for you to stop, but don't until you reach absolute failure.

Now that you're thoroughly warmed up, it's time to hit the big weights! Depending on which area you'd like to hit with maximum intensity, you'll start with either the flat bench or the incline bench. For sh\*t's and giggles, let's start off with the flat bench. The first set will once again be a light weight to help warm up the area, 15-20% your one rep max is a good place to start for a good 15-20 reps. Once your done that, take a little minute or so break to rest a little, check out the hot chick at the pec-deck machine and then load up the bar with a weight that is your one rep max. You're going to need a spotter for sure on

## THE JACK'D WAY TO CALCULATE YOUR ONE-REP MAX:

Sure you can hop on your computer and type in some freaky equation to estimate what your one rep max will be when you lift ... or you can go to the gym, slap on some f\*#kin' weights and see what you can push up cleanly for one rep – it's not brain surgery!



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this one; so get your buddy to stop drooling over the girls and spot you – you're trainin' for f\*ck sakes ... hit on the chicks later!

### **FLAT BENCH:**

During this exercise we are going to decrease the weight by 20-25% with each set of reps you do. For example, let's say your one-rep max is 4 plates a side; your first rep would be with the 4 plates, the second set of reps immediately after the first, your spotter will strip a plate a side and you rep out as many as you can. Mostly likely 2 or 3 clean reps, then force another rep with the help of your spotter. Once again he'll strip off another plate each side and you'll smash out as many reps as you can, with the last being forced. Keep repeating; 2 plates, then 1 plate and after that press the bar until failure. It may sound f\*cked up, but that bar will seem the harder to lift than when you pressed 4 plates! Now you're done the flat bench. Take a few minutes to breath, puke if you have to; just don't let the hot chick who's now moved over to the dumbbell section see you do it.

### **INCLINE PRESS:**

Once your buddy's done his set, if he has the guts to keep up with you, move over to the incline

press and repeat the same type of series. Warm up with 15-20% your one-rep max, then press out your one-rep max, decrease the weight 20-25%, crank out some more and decrease until you're pressing the bar by itself. Don't worry about the fact you're pressing the bar, you're strength will sky-rocket doing this routine and your chest will be bustin' out of your tank top, thicker than a 72oz steak, so who gives a sh\*t what anybody thinks! They'll all be looking at you in awe soon enough when you're all JACK'D UP!

### **PULL-OVERS:**

Now at this point, you'll be pretty much wiped out and your chest will be so pumped up it will feel like it's going to tear open and the little Quatto dude from the original Total Recall will pop out (Quaid!!!!!!) and start talking to the hot chick who's now doing some still legged lifts right in front of you – awwwwwwww yeah! This is a no-frills chest routine, which will make your chest grow like crazy and make you strong like a crazy, Belgian-blue bull. And since you're so spent, we'll finish off the routine with something a little lighter so you don't puke out the pre-workout supplement you spent your hard-earned money on. Arnold credits dumbbell pull-overs for helping to create his epic glass-balancing chest









• MUST WE  
(no thong

• RETURN

• MUST USE

• CHA

• GLA





development – so let's do some pull-overs to finish the job! Start with a light weight so you can test your strength and range of motion; by this time anyway 25-lbs will feel like a thousand! We won't be doing a one-rep max with this exercise; this is to finish the routine off and get whatever blood you have left circulating around your body into your chest. Lie down perpendicular on the bench with your upper back being the point of contact on the bench. Flex and drop your hips so your body is at a 45 degree angle to the bench, which will help you target the chest and not your lats. Grab the dumbbell and hold it so both hands are supporting the inner plate of dumbbell – you don't want to drop it on your head and have it become an actual "skull crusher!" Position the

dumbbell over your chest, with your elbows bent about 60 degrees, and hold this position throughout the entire movement. Lower the weight behind your head slowly until you reach your full range of motion, pause for a second, and then lift back up to the starting position, and repeat to failure.

### **AND THAT'S A WRAP...**

There you have it, a hard-core chest routine, not done on Monday, which will leave your pecs screaming and pumped so much, the hot girl who's been following you around the gym inconspicuously can't help but be impressed and want to lay her head on your chest after 4-5 hours of pounding something else!

# WARNING:

## DON'T GO TO THE GYM WITH THE FLU



**I**t's flu season and this year's a bad one! Emergency rooms are packed, people are calling in sick to work (actually for real) and it seems everyone and their uncle has had this flu and it continues to spread. One way it spreads is by people thinking with an old-school mentality ... I'll just go to the gym and sweat it out. I hate to break it to you, but that doesn't work. All you're doing is spreading your

sickness to the people around you, especially this time of year when all the "newbies" who made a New Years' resolution to get fit flood the gym and the place is rammed. "Nah bro, I won't get anyone sick ... I'm careful." Well not careful enough; obviously if you train sick you don't know exactly how to treat the flu, so we're going to help you. The following are ways you can help battle the nasty bug and keep yourself from catching and/or spreading the flu.





## **PREVENTION: Here are a few tips you can follow to help you prevent catching the flu – especially at the gym.**

### **Make sure you are fully hydrated:**

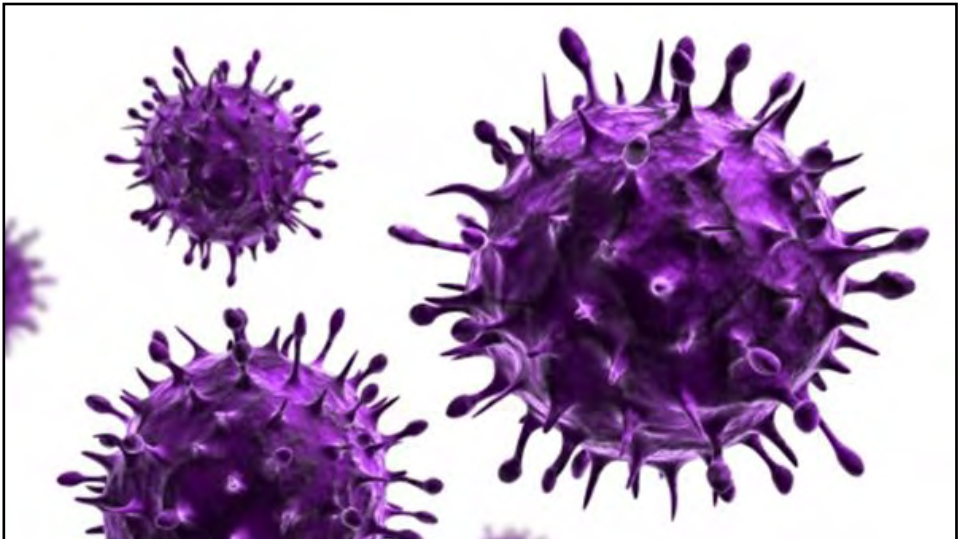
Drinking plenty of water not only helps your muscles while you train, it also helps flush the body of toxins. Being dehydrated inhibits the immune system from doing its job of attacking the flu virus. As well, drinking water also helps wash cold and flu viruses from your throat to your stomach where they cannot survive; so plenty of water intake is a plus when it comes to helping prevent the flu. Bring your own water, don't share it with anyone and don't drink water from the fountain. People like to wash out their shaker cups full of their stinky backwash there as if it were the kitchen sink.

### **Avoid being around those who are sick:**

If you see someone in the gym who's decided to come in and "sweat it out" and is hacking their lungs all over the place, blowing their nose then touching the equipment and all that kinda' crap, don't go by them. If they're doing an exercise you planning to do, switch up your routine – it's not worth it. Remember, when a person coughs or sneezes while sick, they are expelling their virus via water droplets up to an area of 20 feet ... hold your breath!

### **Practice Good Hygiene:**

When you're at the gym or any public place during cold and flu season, or any time of the year for that matter, do not touch your face. Repeat – **DO NOT TOUCH YOUR FACE!** This means no wiping off the sweat with your hands, no scratching your nose or rubbing your eyes, scratching your ear ... do not touch your face. If someone's sick and is training, they're likely infecting everything they touch. So



**click to play video on how the  
flu virus attacks the body...**

if you're grabbing all of the equipment they've touched and then rub your eye, well then chances are you've just infected yourself.

## Not all viruses are airborne:

There is one you have to watch for called the norovirus. This is a nasty little bugger which will have you, how can I say it nicely, expelling your insides from both ends at the same time for 24-48 hours! It's no joke. If you know someone who's had it, just ask them what happened and if you've haven't been practicing preventative hygiene, you will now. That being said, using only sanitizer is not enough. Sure it will help in a bind, but nothing beats washing the hands after you train. Sanitizer does not kill the norovirus; washing your hands properly using soap helps. We're not talking about running your hands under a tap for a few seconds here, you need to lather the soap well, and rub your hands vigorously for at least 20 seconds remembering to scrub all surfaces; the back of your hands, wrists, between your fingers and under your fingernails. This will help prevent you from catching anything nasty; flu or noro.

# START →



1. Wet hands



6. Turn off taps with towel



5. Towel dry

# HAND WASHING STEPS



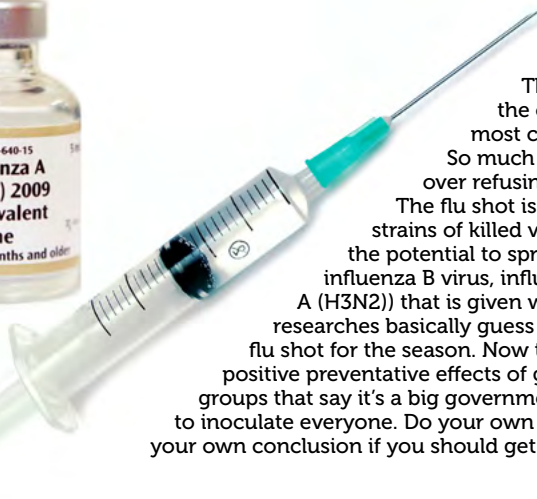
2. Soap (20 seconds)



3. Scrub backs of hands, wrists, between fingers, under fingernails.



4. Rinse



The next preventative measure is the one that has always caused the most controversy – getting the flu shot.

So much so that people have lost their jobs over refusing to get it. So why such the hype?

The flu shot is an inactivated vaccine (containing 3 strains of killed virus determined by research to have the potential to spread that given season – a strain of influenza B virus, influenza A (H1N1) virus, and influenza A (H3N2)) that is given with a needle, usually in the arm. Yes, researchers basically guess which strains they should use in the flu shot for the season. Now there has been research showing the positive preventative effects of getting a flu shot, and there are those groups that say it's a big government and pharmaceutical conspiracy to inoculate everyone. Do your own research on the flu shot and come to your own conclusion if you should get it or not – we'll leave it at that.

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Vick's VapoRub helps break up congestion in your airways and lungs.

**RECUPERATION:** If you're unfortunate enough to come down with the flu here are some steps you can take for speed up your recovery. If you get the norovirus however, you won't be anywhere but your bathroom for a day or two so try to take in as much food and fluid as you can hold down ... sorry about your luck. Oh, and make sure you stay home for at least 2-3 days after you stop showing symptoms, you're still contagious. Now back to fighting the flu.

At the first sign you may be coming down with something, like a scratchy throat, load up on the Echinacea, Vitamin C and Garlic. All three have been show to help fight off a cold, or at least lessen the symptoms once it takes a hold of you. Vitamin packs are also good depending on your food intake, just to make sure you're not depleted in any area.

### Take some Oil of Oregano:

You can find it at many health food and supplement stores if it's not already sold out. The liquid is best with a concentration of over 80%. Oil of Oregano is just as it sounds, concentrated oregano in a liquid, it's strong, tastes nasty, burns like wasabi and kills many types of bacteria and virus. Since it is so strong it's suggested that you dilute it with a bit of water and then rinse out your mouth for about 30 seconds or so, gargle for as long as you can and then swallow. The sh\*t works.

### Brewer's yeast isn't just used for beer:

Brewer's yeast contains B vitamins, chromium and some protein. It helps stimulate intestinal enzymes for relieve of diarrhea, fights bacteria in the intestines and helps improves immune response to viruses that infect the lungs and reduces the risk of getting a cold or the flu and helps symptoms dissipate more quickly if you have it.





## Once again drink plenty of water and rest:

For the same reasons as discussed previously. You need to keep your system flushing out whatever it can to help speed up the healing process. Stay home! Don't go to the gym, work, out on a date, anywhere; you need sleep and rest your body! Going to the gym and pushing yourself to lift crazy weights is not what you want to do when you have the flu. You're not going to sweat it out; you'll just infect more people. The stress of training on your body while it's in a depressed state is not good. You don't kick it when it's down. Think of it this way, would you blast your chest (on Tuesday remember) and then go in the next day and hit it again, then the next and so on. This is what you're doing to your body if you train while fighting the flu; it will prolong the healing process. I'm sure you'd rather fight off the flu as quickly as possible so you can get back in there and train at 100% so you keep on making gains in the gym!

## Nothing beats a steaming-hot bowl of Grandma's chicken soup to make you feel better when you're stuck at home in bed with the flu!

Since your now resting at home, here's a simple trick – use Vick's Vapor Rub. This stuff will help clear your sinuses and help break up the tons of phlegmy crap that's building up in your respiratory tract. We're not talking a little dab of Vick's on your chest, you need to cake the sh\*t on like you would your peanut butter and nutella sandwich on your cheat-day! Cover both your chest and your back and it will help while you sleep. Make sure you were a raggy shirt or two when you do it as it'll be the only thing protecting your sheets and your furniture from being covered by Vick's. You can also try the home-made vaporizer method. Boil some water and add it to a large bowl, throw in a chunk of Vick's, then lean over the bowl and cover your head and the bowl with a towel, trapping in all of the vapory goodness. Or you can use a vaporizer, but this is a hard-core magazine, so we do it to the extreme!

And last but not least, there's the tried and true, grandma's chicken soup. The soup itself, depending on how grandma makes it, contains some healthy vegetables, some chicken, some pasta for energy but most of all it is salty and hot. The hot, salty broth will help soothe the throat as well as kill bacteria and virus that are hangin' in your mouth and throat. So grandma knows... she always knows.

So there you have it, the steps you can take to help prevent yourself from catching the flu and what you can try if you're unlucky enough to catch it. But if you do catch it stay home and DON'T GO TO THE GYM! We don't want to catch your sh\*t and have it affect our gains in the gym – we're training for a show!

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# ULTIMATE GREAT MEAL

## COLUMBUS

**Holding countless, competitive food-eating records, I know a thing or two about eating! Let me take you around Columbus and show you where to eat at the Arnold Classic. By Furious Pete**

**I**t's almost March and you know what that means, the Arnold Classic is just around the corner – the biggest, baddest bodybuilding sports festival of the year takes over downtown Columbus Ohio. And when I mean it takes over Columbus, I mean it! There's not a free hotel room within a 100 miles of the place. But after a full day of feeding your face at the tradeshow with free samples of protein shakes, pre and post-workout drinks, energy drinks, protein bars, you want something different for dinner right? I know after I work all day at the [bodybuilding.com](http://bodybuilding.com) booth (stop by and say hello) I want something different too. So that's why I'm going to recommend some places I like to go to eat while in Columbus and I might just set a few records along the way.



» CONTINUED



For those of you who don't know too much about me, my name is Pete Czerwinski and I grew up just outside Toronto, Ontario Canada. I battled back from a life-threatening eating disorder to become one of the world's greatest eaters today – smashing records and freaking people out everywhere I go. (To learn more about Pete's story visit [www.furiouspete.com](http://www.furiouspete.com)) It started back in February of 2008 when I smashed the 72oz steak world record (which is the Mount Everest of competitive eating) and was contacted by the Association of Competitive Eaters. Since then I have done over 50 contests to date, have won over 95% of them and have my name in the history books as having the longest undefeated streak in history (18 contests). So when it comes to eating and recommending places to eat, I'm your man.

While in Columbus and after you spend a day at the Arnold Classic you have to visit the Ohio Deli, home of the Dagwood Challenge, located at 3444 S High St., Columbus, OH 43207. The Dagwood, named for Blondie's husband Dagwood in the long-running comic strip "Blondie", is 2.5 pound monster of a sandwich packed with tons of deli meat. You've got ham, turkey, beef, garlic mayo, lettuce, tomato, Swiss cheese, American cheese, crazy fresh onions, pickles; the sandwich is huge and it's topped off with an additional 1 lb. side of fries. The kicker is that you have to eat it all in under 30 minutes to get yourself on the wall of fame and a t-shirt that says "I devoured The Dagwood". If you lose you receive a T-Shirt that says, "The Dagwood Kicked My !\*\*"

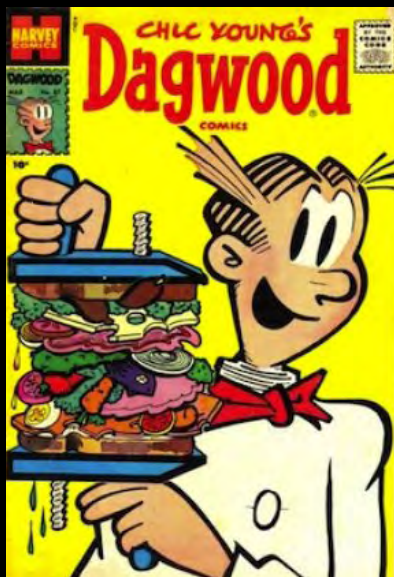


Photo: Wikimedia Commons



Along with the Dagwood being the size of a small house, it tastes amazing – when you take the time to savor every morsel of this deli delight. When you're trying to complete the challenge, or any type of food challenge, you usually don't get to savor and enjoy what you're eating. I say on your first visit, do what I did, take the time to enjoy the Dagwood; how each type of meat complements the other and with the garlic mayo dripping down the side as you take your first bite. Ladies and gentlemen, you have yourself a winner! The Dagwood is a great tasting sandwich and not too many people can actually finish it, let alone with a pound of fries in a time frame of 30 minutes. Many people try to tame this





**click here**  
**to see Pete smash**  
**the Dagwood**  
**Challenge record!**  
**WARNING** this  
**video is not for the**  
**faint at heart...**  
**I crush it!**

beast, many fail. Man vs. Food's Adam Richman was able to finish it just under 30 minutes, and everyone knows that Adam loves, and I mean looooooooves his food. So the question is; would I be up to the challenge after enjoying this great-tasting sandwich? Answer – Can Ya Give Me a Hell Ya!

Now for anyone who's seen any of my videos where I smash eating records, or just eat for fun, when I do a challenge I'm 100% focused and I don't eat for taste. Competitive food eating is about breaking records, and that's what I'm all about! My style is unique, and when you watch the video you'll see what I mean; not only did I eat the Dagwood with its 1 lb. side of fries in under 30 minutes, I smashed all the records and topped that baby off in just over 3 minutes – 3:22 to be exact! Don't believe me, watch the video and see for yourself. Not only did I devour the Dagwood, I annihilated it!

After you're done tackling the Dagwood, you can head down the street to the



» CONTINUED

# THE POWER OF BEEF AT THE SPEED OF WHEY

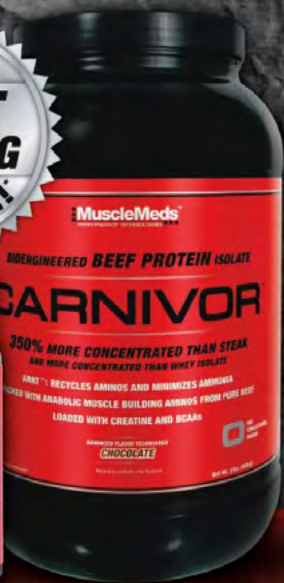
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Thurman Café, 183 Thurman Ave, Columbus, Ohio, 43206; home of the Thurmanator Burger. Two juicy 12 oz. slabs of American beef overloaded with ham, mozzarella, American cheese, lettuce, tomato, mushrooms, sauteed onions, pickle, peppers, and mayo with chips and a pickle spear. Along with the Thurman Burger, the menu includes a variety of uniquely named sandwiches with including the original Thurman Burger, The Macedonian Burger, The Thermandelpia Steak Sub and many more; the perfect place for any burger lover, and if you visit my website you'll see I love my burgers. The Thurman Café has traditional pub grub as well, everything ranging from Chicken Strips (Canadians bring your plum sauce, there's no such thing in the US) to incredible tasting hot dogs, crazy-ass hot wings to salads so you can bring your lady. The Thurman Café has it all and I highly recommend.

There you have it, 2 places in Columbus I love to eat while at the Arnold Classic. So many people just stick to the hotel and convention center and never get to see the awesome places to eat Columbus has more to offer. Check them out for yourself; you'll be glad you did.

**--->**  
**think you**  
**have the**  
**ultimate**  
**challenge for**  
**Pete?**  
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**email and**  
**maybe your**  
**challenge**  
**will be**  
**featured in**  
**one of his**  
**videos!!!!**



**>> CONTINUED**





**check out some of the other  
crazy sh\*t Pete's done  
across the US while on the  
Furious Pete World Tour as he  
hits up LA, NYC and Vegas!**



# FURIOUS PETE

**Wireless access needed to view the following video by  
Furious Pete as he hit's up places to eat in LA, NYC and  
Vegas on his World Tour ... you don't want to miss this!**



**»»END**



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# MYOSTATIN

## Friend or Foe?

As a bodybuilder you may find it hard to believe that such a growth-inhibiting protein exists but it does and it's holding you back from the freaky gains you dream of!

Standing in front of the gym mirror, at the end of your workout - sweat pouring out of your body and muscles all pumped-up - you love hitting those side chest and double biceps poses. As an experienced bodybuilder, you have been working hard at improving your physique and your muscles feel full and ready to grow bigger than ever. This notwithstanding, would you believe me if I said that you are genetically programmed to stop growing at a certain point? And that the culprit of this muscular crime is a circulating tissue-specific growth inhibitor protein produced by your very own muscles in direct proportion to their mass?<sup>1,2</sup>

This certainly sounds like a paradox. As a bodybuilder you may find it hard to believe that such a growth-inhibiting protein exists.<sup>1,2</sup> It is like having a foreign spy operating from within the CIA as a high rank officer. Just imagine what this might do to National Security!!





## THE BELGIAN BLUE ARE RENOWN FOR THEIR ENHANCED MUSCLE MASS RELATIVE TO CONVENTIONAL CATTLE THANKS TO A MUTATION IN THE MYOSTATIN GENE.

the existence of negative growth regulators, secreted by individual tissues, which circulate throughout the body and act to control the growth of the tissue producing the specific regulator.<sup>7,8</sup> More recently, scientific evidence has shown skeletal muscle to be the first example of a tissue whose size is controlled by this type of regulatory mechanism, and myostatin appears to be the first example of the negative growth regulators that scientists had been long looking for.<sup>1</sup>

The myostatin protein circulates in the blood in a latent form as a full-length precursor, which is cleaved into an amino-terminal pro-peptide and a carboxy-terminal mature region: the active form of the molecule. Once activated, myostatin has high affinity for the activin IIB receptor (Acvr2b) which, similarly to other receptors for TGF- $\beta$  family members, binds multiple ligands.<sup>22,23</sup>

Experiments in rodent models have demonstrated that in adult animals myostatin is expressed in all skeletal muscle, with a preference for fast over slow twitch fibers.<sup>9</sup> Furthermore, myostatin sequence and function are highly conserved across species.<sup>2,12,13</sup> For example, the amino acid sequence of myostatin in mice is identical to the sequence in humans,<sup>12</sup> and so is the pattern of mRNA expression.<sup>2,12</sup> What happens when Myostatin levels are reduced or its activity blocked?

In mice, experimental inhibition of myostatin activity induces significant muscle hypertrophy. By deleting (knocking out) the myostatin gene, researchers have been able to create "Schwarzenegger" mice that

This protein does, in fact, exist and scientists have named it Myostatin, meaning that it keeps muscle growth under control. Do not be alarmed because myostatin has important roles within skeletal muscle physiology as it contributes to muscle development during growth and muscle homeostasis in adult life. Also, there are ways to make your muscles more efficient from an energetic standpoint by modulating, via training and proper supplementation/nutrition, myostatin activity and circulating levels.

## WHAT IS MYOSTATIN AND WHAT DOES IT DO?

A member of the transforming growth factor beta (TGF- $\beta$ ) family, myostatin is a secreted protein that acts as a "negative regulator" of skeletal muscle mass. Expressed in developing skeletal muscle during embryogenesis, the myostatin (MSTN) gene controls the final number of muscle fibers that are formed. During adult life, myostatin protein is produced by skeletal muscle, circulates in the blood, and acts to limit muscle fiber growth by binding a specific cell-bound receptor (called the "activin type II" receptor) to affect myogenesis and regulate quiescence, activation and self-renewal of satellite cells, i.e., the stem cells resident in skeletal muscle.<sup>1,3-6</sup>

The existence of circulating tissue-specific growth inhibitors such as myostatin was hypothesized over 40 years ago in the pioneering work of Bullough<sup>7,8</sup> who, in the attempt of explaining how the body controls the size of individual tissues, theorized

have two-to threefold greater muscle mass than their wild type littermates. The increased muscle mass appears to be the result of enlarged muscle fiber (i.e., hypertrophy) and increased fibers number (i.e., hyperplasia).<sup>9</sup> Furthermore, myostatin knockout mice are about 40% leaner than their wild type littermates, despite maintaining a normal body temperature and daily caloric intake. Researchers have speculated that the increased leanness is probably a secondary consequence of increased muscle mass and metabolic rate; alternatively, the knockout mice might have less fat tissue because the increase in the number of muscle cells (myoblasts) may have happened at the expense of adipocyte progenitor cells' population.<sup>10,11,23</sup>

Spontaneously occurring mutations in myostatin coding sequence, on the other hand, have been linked to hypermuscular and leaner phenotypes in cattle and humans.<sup>13-15,18</sup> For instance, mutations in the coding sequence of bovine myostatin have been reported in two breeds of double-muscled cattle, Belgian Blue and Piedmontese, which are renown for their enhanced muscle mass relative to conventional cattle.<sup>13-15</sup>

The conservation of sequence and function across species suggests that inhibition of myostatin in humans is likely to have a similar effect to inhibition of myostatin in mice.<sup>3</sup> Loss of function mutations in the myostatin gene in a human subject were first described by Schuelke and colleagues in a 2004 case report in which they detailed the identification of a mutation of the myostatin gene in a child born with muscle hypertrophy.<sup>18</sup> The boy had muscular thighs and strong upper arms, but was otherwise healthy. Schuelke and colleagues report that the variant was not found in a screen of 100 controls and may have arisen in the child's modern ancestors (suggesting that the muscling feature may be expressed to some degree in carriers), thereby providing strong evidence that myostatin does play an important role in regulating muscle mass in humans.<sup>18,19</sup>

### IS ANTI-MYOSTATIN DOPING A REALITY?

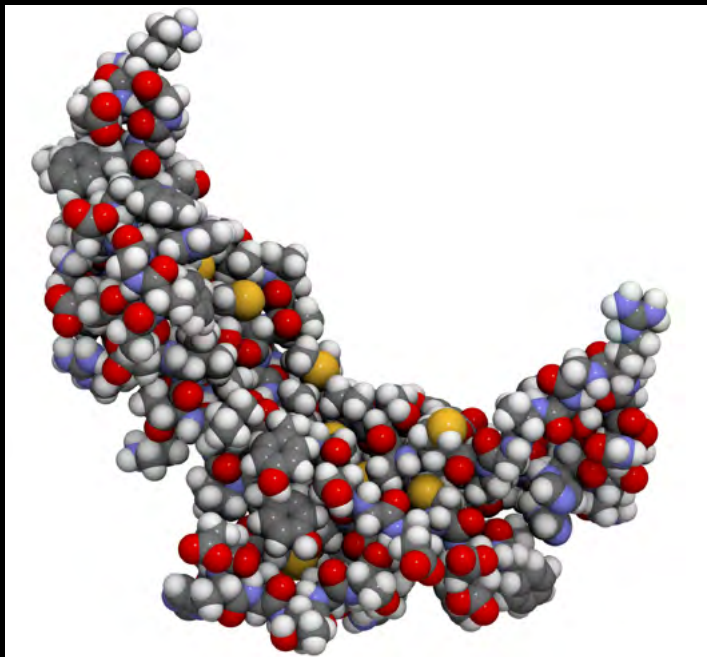
Clinical evidence collected during the past decade, has evidenced myostatin over-expression in a variety of human diseases, among which: muscular dystrophy, inflammatory myopathies, cachexia (muscle atrophy associated with chronic diseases such as AIDS and cancer), sepsis, burn, muscle immobilization and sarcopenia (age-related muscle loss). Surprisingly, it has been found that in

all these conditions a correlation exists between elevated myostatin levels and muscle loss.<sup>2,3,16-17,20</sup> From a clinical standpoint,

**HERE IS THE GENE CAUSING ALL THE BUZZ, MYOSTATIN. INHIBITING THIS GENE COULD BE THE BIGGEST THING TO HAPPEN TO BODYBUILDING EVER!**

therefore, the relevance of blocking the myostatin system seems obvious because it would not only ameliorate disease-associated muscle wasting but also facilitate muscle repair and growth.

Interestingly, the above mentioned research has also recently produced



speculations about anti-myostatin doping applications to mimic the effect of resistance training which, by suppressing myostatin expression,<sup>24,25</sup> allows muscles to grow in size.<sup>26</sup> A key piece of research throwing gasoline to this fire was published in 2007 by Welle and colleagues, who reported significant mass increases (up to 25%) by artificially inhibiting (knocking down) myostatin gene activity in mature muscle,<sup>21</sup> demonstrating therefore that the dramatic effects of myostatin suppression are not limited exclusively to developing muscle.

To date, several methods have been perfected for therapeutic myostatin manipulation (some of them currently under pre-clinical or clinical investigation); just to name a few:

- **The (recombinant) myostatin propeptide, which binds to myostatin to prevent it from having an effect. Although wild-type myostatin propeptide is unstable in vivo, it can be altered to extend stability.<sup>30-33</sup> Mice treated with the propeptide have shown increased repair and regeneration of both muscle and bone in cases of deep penetrant injury.<sup>39</sup>**
- **Myostatin neutralising antibodies.<sup>19,33,34</sup> Research showed less muscle loss when antibodies were injected in sarcopenic mice,<sup>34</sup> and a trend towards increased muscle mass in subjects participating in the phase I-II clinical trial of Stamulumab (MYO-029), an anti-myostatin antibody.<sup>27</sup>**
- **Applying follistatin in gene therapy to inhibit myostatin.<sup>34,35</sup> Follistatin is a glycoprotein that binds to myostatin preventing myostatin from binding to its receptor.<sup>36,52</sup> Clinical trials are underway for delivering the follistatin gene into the muscle of patients with Becker muscular dystrophy (BMD) and sporadic inclusion body myositis (sIBM) via a virus called adeno-associated virus (AAV). This virus occurs naturally in muscle and does not cause any human disease.<sup>40</sup>**
- **Stimulating over-expression of a gene coding for a myostatin protein without its cleavage site to inhibit the production of myostatin.<sup>19,37</sup>**
- **Since the actions of myostatin inhibit muscle growth, myostatin blocking methods might be potentially utilized as doping strategies.<sup>19</sup> As a consequence, myostatin inhibitors are on the WADA list of prohibited doping substances.<sup>38</sup>**

While the data suggest myostatin blockade could likely increase muscle mass in humans, whether this in turn would translate into improved athletic performance is unknown. However, results have been recently found in the phase I-II clinical trial of the anti-myostatin antibody Stamulumab (MYO-029), that support increased muscle size in humans.<sup>27</sup>

### **ARE THERE ANY DIETARY INTERVENTIONS THAT MODULATE MYOSTATIN ACTIVITY IN MATURE MUSCLE?**

Interestingly enough, there are some dietary manipulations that, in combination with regular training, might positively modulate myostatin activity to a bodybuilder's advantage. The most promising dietary aid in this respect is a follistatin concentrate derived via a proprietary process from fertilized chicken egg yolk.<sup>45-51</sup>

### **NATURALLY-OCCURRING FOLLISTATIN CONCENTRATE FROM FERTILIZED CHICKEN EGG**

As previously mentioned, follistatin is a glycoprotein that binds to myostatin preventing it from binding to its receptor; it has been shown that transgenic mice over-expressing follistatin exhibit dramatic increases in muscle mass comparable to those seen in myostatin knockout mice.<sup>36,52</sup> One of the most bioavailable follistatin sources is found in







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the yolk membrane of fertilized chicken eggs, where it is produced at the base of the blastodisc, or the germinal disc from whose cells the embryo is going to form.<sup>46</sup>

Pioneering research by Colker et al., has perfected a method for concentrating follistatin from such a source without destroying its biological activity. Such a method preserves oral follistatin bioavailability, allowing it to appear at detectable levels in human plasma to produce pharmacokinetic activity.<sup>45-51</sup> In a small scale trial, the effects of dietary supplementation with a 10g bolus dose of this yolk-derived follistatin concentrate on serum myostatin concentrations were tested in 10 adult male volunteers.

It was found that, in comparison to baseline levels, at 12-18 hours post-ingestion, the powdered egg yolk concentrate caused a dramatic 46% drop in serum myostatin levels, allowing it to return to normal levels within 24-30 hours.<sup>46</sup>

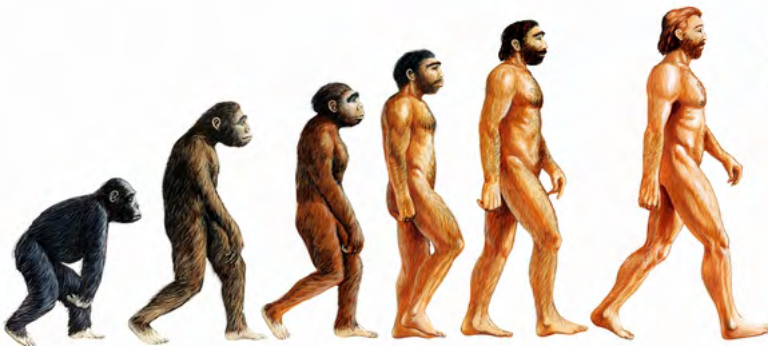
## CONCLUSION

Myostatin has important roles within the physiology of healthy skeletal muscle; besides contributing to muscle development during growth and muscle homeostasis in adult life, it also appears to be a key element to maintain muscle energetic efficiency, proper muscle metabolism, and adequate responses to exogenous mechanical stimuli, as it has been shown in studies reporting that resistance exercise induces decreases in myostatin levels accompanied by commensurate increases in mechano growth factor (MGF), i.e., a splice variant of IGF-1 gene that is expressed in response to mechanical stimulation.<sup>54</sup> The possibility, therefore exists that myostatin modulation may be necessary for muscular growth factors to produce their anabolic effects. By naturally keeping myostatin under control via proper training and dietary manipulations, chances are that you will develop a healthy hypertrophic muscle.



**ABOVE IS A MYOSTATIN DEFICIENT DOG CALLED A BULLY WHIPPET. UNLIKE THE ORDINARY WHIPPET WHICH IS THIN AND LEAN THIS ONE IS DEFINITELY NOT YOUR ORDINARY HOUSE PET.**

## WHAT'S NEXT...





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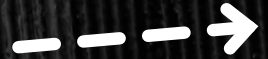
BETTER  
BODIES  
GYM ISSUE

**FRIENDS  
DON'T  
LET FRIENDS  
SKIP  
LEG DAY!**





# LEGS!



## Workout to help you build a crazy set of wheels!

If you're a true friend and training partner, there's no way in hell you'll ever let a buddy get lazy in the gym and neglect some of the biggest muscles in the body by skipping leg day! Nothing, and we mean nothing looks more stupid than a JACK'D up dude struttin' around with a scrawny-ass pair of chicken legs!

It's the winter and you have about five months to get your ass in gear and train for the summer; hittin' the beach, the pool, or wherever you show off to the ladies. Sure a great six pack of abs, a thick chest, broad shoulders and set of pumped-up guns grabs their attention as they check you out from head-to-toe, but when they get past the waist and you got yourself a pair of baby-chicken legs, well, you've just blown your chance! Come on, we've all seen it and laughed to ourselves; JACK'D up dude

at the beach struttin' his stuff with a pair of legs a 12 year old boy would make fun of. I mean, if your bi's tape out at a bigger measurement than your thighs, you got some work to do! There's nothing funny about it and for that very reason ... friends don't let friends skip leg day!

First off, before you start lifting heavy, ride the bike for 5-10 minutes to warm up the legs and get the blood flowing. Then, stretch out your legs with some dynamic stretching exercises to loosen

up, so you don't tear your hammys' and need a mechanical lift to sit your ass on the sh\*tter.

**Dynamic Stretching:**  
Before you begin, make sure you warm up properly first with the following dynamic stretching moves:

- Hip Circles**
- Free squats**
- Ankle bounce**
- Walking Lunges**
- Frankensteins**
- Rear Leg Swings**





**BETTER  
BODIES  
GYM ISSUE**



## THE QUADS

You're going to start this routine with single leg extensions; single extensions to make sure one leg isn't overcompensating for the other, so that you hit both legs equally. The first 2 sets will be with a weight that you can execute a range of 20-30 clean reps with. Sit on the machine with you back right against the back support pad and adjust the seating so that your knee is in the position; it will be bending in line with the machine. Grab the handles and lift the weight with one leg to the top of your range of motion without

locking out, while keeping the other leg down at the starting position. Hold, then slowly lower the leg to the starting position and repeat for 20-30 reps; and then repeat with the opposite leg. A cadence of 2 seconds up, pausing at the top of the movement for 2 seconds, then lowering slowly for another 2 seconds is a good place to start.

Single leg extensions will be followed by squats – now we're talkin'! With this exercise we'll be doing 2 light warm-up sets, feet shoulder width apart, with a weight you can comfortably do 10-15 clean, ass-to-the-ground

reps and 2 heavy sets with a weight you can pump out 8-10 reps, with the last being to failure. Keep your back straight and lower yourself down as if you're going to sit down on a chair. Remember, as stated, we're talking good, clean, back straight, ass-to-the-ground reps with a cadence of 2 seconds down, pause for a second, then explode the weight up. None of this crap of loading the bar up with 6 plates a side and pumping out 10, bend your knees 10 degrees sh\*t! We've all seen it ... the hero stacking the plates and pumpin' out these types of reps screaming at the top of his lungs – yeah, every gym has one! Anyway, do the squats properly and you'll start seeing the benefits to your leg development in no time!

**SIDE NOTE:** some people put a two-by-four under their heels while squatting for some sort of mystical support – don't! 'Nuff said!

Next we'll be pumpin' out Front Squats for 3 sets of 10-15 reps. Front Squats are a great complement to the back squats you just did and differ from regular squats by helping alleviate the weight from compressing the spine. They also help you develop good form when squatting (which will improve your back squats), they help build up your core big time and most importantly, front squats help smack the shit out of your legs, as they are a quad dominant exercise.

Choose a weight where you can properly handle 10-15 reps. If you've never tried front squats before, start with the bar and learn how







**LEG PRESS**



to balance it on your upper chest so you don't f\*#k yourself up by trying the same weight you use for regular squats – that's an accident waiting to happen! Step up to the bar and position it so it's resting on the top of your chest, cross your arms and grab the bar with your hands so your right hand is holding the bar by your left shoulder, and your left hand is by your

right shoulder and lift the bar off the rack. Stand with your feet shoulder width apart and squat down with proper form just like the regular squat. Front squats are good in the fact that if you don't use proper form, you will drop the weight, and you will look like an ass. So make sure you try the bar by itself first if you've never done them before, and work your way up in weight –

if you hurt yourself you can't train, if you can't train, you can't grow and you'll end up having chickenleganitus!

On every second workout, substitute the Front Squat for Hack Squats. Choose a weight you're able to pump out for 3 sets of 10-15 reps. Set yourself up on the machine, feet shoulder width apart and about a foot in front of

**HINT:** Point your toes when doing leg curls to isolate the muscle to make 'em scream!



your torso with your toes pointing forward. Un-rack the weight and cross your arms in front of your chest like you did with the front squat. Then sit your ass to the bottom and explode by pressing the weight up back to the starting position. Use a 2 second down, 2 second pause, 1 second up cadence. Smash out 10-15 reps and repeat for 3 sets.

After the Front or Hack Squat (depending on the day) we'll hit the Leg Press. Here you'll want to do 3 sets of 20 reps – your legs will be pretty pumped up and screamin' at this point, so what are we going to do, kill 'em some more! At least you'll be sitting down

for this exercise – yeah, as if that's any consolation for you. Keep your feet shoulder width apart, toes pointing forward and positioned so you can lower the weight all the way down to your chest. Nothing fancy here, no different positioning for your toes, no single leg presses or any of that crap. Picture it; you see some dude pumpin' out some heavy sets doing a single leg press, he loses his footing and has the machine come crashing down on his opposite knee which is positioned out front of the seat, smashing and ripping it to shreds! Seen it ... puked ... would never do a single leg press, or watch anybody do a single leg press again. Freaky sh\*t!

## HAMMY'S

Now that you have that image in your head, let's hit the hams! Start off with a single Lying Leg Curl. Don't worry, can't smash your knee up on this one! Do 3 sets of 15 reps. Here's a few hints to really help target the hams directly. First of all, don't lie your body down on the bench. Grab the sides of the pad with your hands and hold your upper body up by sitting on your elbows, then while you're doing the exercise, drive your hips into the pad as if it were Megan Fox (or whoever gets your soldier to salute) while curling the weight. Do it in a controlled manner with 1 second up, squeeze at the

**HINT: Single-leg extensions help isolate each quad so one doesn't over-compensate for the other.**





**DON'T FORGET YOUR CALVES! NOTHING LOOKS AS STUPID AS A DUDE WITH A CRAZY SET OF WHEELS WITH A PAIR OF TOOTHPICKS BELOW THE KNEES!**







# LEG TRAINING TIP:

## FRIENDS DON'T LET FRIENDS USE THE SMITH MACHINE!

# WHY???

It's an unnatural movement. Try replicating the form that people use on a Smith machine, with a free bar, or even with no weight. You'll find yourself flat on your butt. You're locked into a fixed bar path, you inhibit hamstring co-contraction, you have more shearing across the knees, etc.

**Never mind that it's not even biomechanically a squat, but this sums up why YOU SHOULDN'T Smith Machine squat!**

Most bodybuilders who use a Smith machine perform squats while holding their trunks vertical, a technique that minimizes the involvement of the hamstrings. Also, leaning back against the bar increases the stability of the trunk, further reducing the involvement of the hamstrings. This is not desirable, as hamstring activation is a direct antagonist to quadriceps activation at the knee, and this "co-contraction" neutralizes the harmful forces of the upper and lower leg bones.

With a Smith machine, the bar is on a track, and this increased stability decreases the requirement of the body's neutralizer and stabilizer muscle functions. Therefore, the strength developed on such machines has minimal carryover to a three-dimensionally, unstable environment such as occurs during the freestanding squat. This is an especially important fact to those who use weight training to improve sports performance. The bottom line is that free-weight exercises should always precede machine exercises, and athletes should limit their machine training to no more than 25 percent of the total work performed.

**SMITH MACHINE = BAD**

**UNATURAL MOVEMENT,**  
you're locked into a fixed  
bar path inhibit hamstring  
co-contraction

**BAD FOR THE KNEES**  
more shearing across  
the knees which can  
lead to injury







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# The Importance Of Proper HYDRATION

**P**roper hydration is one of the most critical things a bodybuilder can do to help optimize the functioning of their body but it is also important for how amazing the body can look – and that's what bodybuilding and a healthy lifestyle is all about isn't it? It's amazing how many people train their asses off, only to stunt their potential by not taking in enough fluids. And the easiest and best fluid to get is WATER! Water is the most important nutrient you can put into your body, it's needed for all biological processes and essential if you want your body to work like the well-oiled machine it is. Without getting enough daily water, your metabolism will be negatively affected as well as every cell in your body, particularly muscle-cell volumization, which can affect your strength and muscle growth.







## WATER IN THE BODY BREAKDOWN:

The human body is anywhere from 55% to 78% water depending on your body's size, percentage of muscle and so on. Below is a breakdown of major organs in the body and their relative percentage of water mass:

- **Muscle consists of up to 75% water! Being fully hydrated will help the muscles work more efficiently and the more muscle you build, the more water you'll need to consume.**
- **Fat is approximately 25% water**
- **Your brain consists of 90% of water, so water will help keep the brain functioning at optimum levels**
- **Bone consists of 22% of water**
- **Blood consists of 83% water**

### WATER AND THE BODYBUILDER

There are many reasons why you should drink plenty of water: food digestion, fat metabolization, increasing protein synthesis and muscle-cell volumization, preventing injuries, protecting the joint. The list could go on however these are just a few of the positive effects water has on the body which

is extremely beneficial to bodybuilders and anyone who goes to the gym.

Water is essential for food digestion and helps flush the by-products of metabolism and fat breakdown in the body. Proper water intake also helps prevent constipation so you're not struggling to have your daily bowel movement and end up so backed up you blow out your corn-hole!

Bodybuilders consume a high amount of protein and creatine to pack on muscle mass, a byproduct of these is the increased production of urea and creatinine, which can wreak havoc on the body's renal system if not excreted. Proper water intake helps flush out these by-products, keeping your renal system in top shape!

Another potential stress on the kidneys comes from the byproduct of fat metabolism – aka ketones. Proper water intake helps remove this waste product allowing the fat burning process to occur at an improved rate as well as protecting your kidneys.

## WATER IN THE BODY:

BRAIN 90% WATER

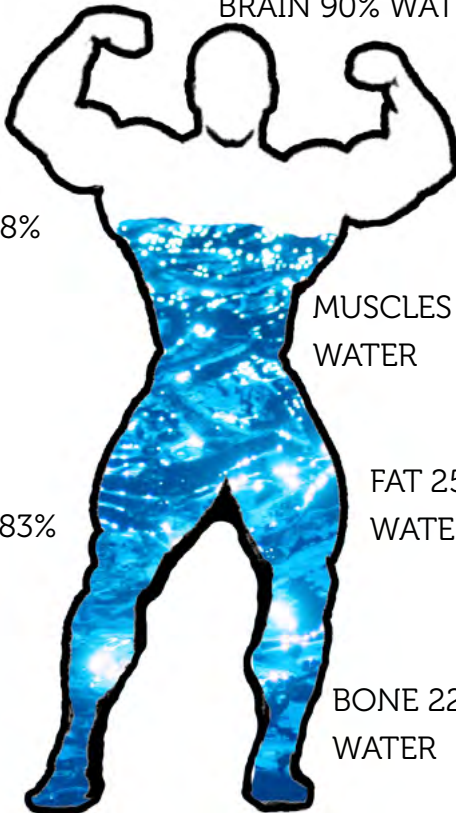
BODY 78%  
WATER

MUSCLES 75%  
WATER

BLOOD 83%  
WATER

FAT 25%  
WATER

BONE 22%  
WATER





Water is also an awesome appetite suppressant... it has no calories and will help keep you feeling full – unless you mix in a ton of Kool-Aid, loaded up with sugar like you did when you were a kid!

Bodybuilders, who train regularly, burn calories at a higher rate, as their muscles store glycogen in greater quantities to help fuel their intense workouts. Every 1 gram of glycogen holds approximately 3 grams of water. So if you're fit from kicking your ass every day at the gym you'll need more water to keep up with your increased glycogen stores. When the body is fully hydrated your workout performance will be improved as the body is better equipped to deal with increased physical demands. Drinking plenty of water with your creatine has an amazing cell volumizing effect, and no this is not subcutaneous as the old myth suggests. The cell volumizing effect occurs in the muscle helping to increase protein synthesis, but this also causes an anabolic stimulus increasing the amount of nutrients that enter each cell, resulting in bigger, stronger muscles!

Interestingly, drinking cold water or fluids is also a way you can burn calories. Consumption of cold water causes your body temperature to drop slightly, and in order to raise your temperature back to optimum levels, your body will burn more calories. We're not saying you'll get shredded by drinking cold water, but why not do everything you can to pop your metabolism into over drive? Since your brain is 90% water, being fully hydrated helps you think better, feel more alert and help you concentrate and focus. Water also helps alleviate headaches, and not surprisingly having a headache may be a sign you're dehydrated and need to drink some fluids. You'll look younger when your skin is properly hydrated. Water helps to replenish skin tissues, moisturizes skin and increases skin elasticity.

**Always take a bottle of water wherever you go to ensure you don't become dehydrated.**

Proper hydration helps keep your joints and muscles well lubricated, so you'll less likely get cramps and sprains while your ass is to the ground doing sets of heavy squats. The discs between the vertebrae in the spine are dependent on water. Without adequate water intake the risk of having a slipped disc, compressed discs or injury is greatly increased.

Drinking plenty of water helps fight against flu, by helping to improve your immune system and flushing toxins and sh\*t out of your body, especially during flu season (see article on training with the flu in this issue).

#### HOW MUCH WATER DO YOU NEED?

It's been drilled into our heads from grade school that a person needs about eight 8 oz (250 ml)





glasses of water every day, known as the '8 by 8' rule (this is about 1.9 liters or 64 oz). This '8 by 8' rule remains popular because it is easy to remember however it is not supported by hard evidence and therefore you need to ensure that you are getting more water than just this. The Institute of Medicine sets general recommendations of 3.7 liters (125 oz) of total water for men and 2.7 liters (91 oz) of total water for women every day. This water can come from both beverage and foods, so you can see it is quite a lot and there is big difference from the 8 by 8 rule. Now, these amounts are estimates and change based on illness, health conditions, the temperature of your training environment and the intensity of your activities. You can lose as much as 64 oz (2 liters) of water every day, through sweat, waste removal, respiration, spit, and that's not even on your intense training days, where you can lose even more. You'll need to replace all of this water and then some because if you lose more water than you take in, you will become dehydrated and that's when all the bad sh\*t can happen. So then how much do you really need?

For every day water intake you can follow the suggestions to help figure out how much water to drink. The method based on energy is probably a good place to start for a bodybuilder.

#### Based on wt:

- 100 mL/kg for 1st 10kg,
- +50 mL/kg for next 10kg,
- +20mL/kg for each kg over 20kg.

#### Based on age:

- 20-55 years old 35 mL/kg,
- 55-75 years old 30 mL/kg

#### Based on energy:

- 1 mL/kcal

Now these are estimates for the amount of water you should drink on the average day. These will change as it all depends on a number of factors, the type and intensity of your training, how long your train for, the environment where you train and so on. For short bouts of exercise you may need another 8-16 oz (250-500 ml) of water intake which would increase with the intensity and duration.

If you're training in hot and humid weather you'll sweat more and need to increase your intake. Even training at higher altitudes has been shown to increase the amount of urination leading to more water requirements – there's no set rule.

Generally however, if you drink enough fluid so that you rarely feel thirsty and produce 24oz (1.5 L) or more of colorless or light yellow urine a day (See the "What Color Is Your Pee" article in Issue #1), your fluid intake is probably adequate. If you're concerned about your fluid intake or have health issues, check with your trainer, dietician or doctor. He or she can help you determine the amount of water that's right for you.



**Properly hydrated muscles will allow you to lift heavier weights in the gym.**

## HOW TO TELL IF YOU ARE DEHYDRATED

First let's get this out of the way, if you're feeling thirsty, you're already dehydrated and the body is asking, or begging you, for water! This is why you need to continuously drink water throughout the day so you don't become dehydrated and feel thirsty. This is especially true on the days you train. You need to stay hydrated! As mentioned, the color of your urine is a good indicator of your hydration level. If it is a darker yellow then you are likely to be dehydrated. If it comes out like a thick sludge, then you got something else goin' on down there and need to see a doctor! The color of your urine should be slightly yellow but this can vary from pale to deep amber. If you notice changes in color this is a good indication of changes in your hydration status.

Dehydration can also stimulate cortisol secretion. Cortisol is responsible for the breakdown of muscle tissue that is then used as an energy source. The body releases cortisol during exercise but if you add onto that being dehydrated, this could result in an even greater increase in cortisol levels, you could end up losing even more of your precious muscle mass because you did not drink enough water! Keeping fully hydrated helps remove this increased risk of cortisol related catabolism almost entirely!



**Your body will thank you for keeping it hydrated by having bigger, fuller, stronger muscles.**

Signs of dehydration include having dry skin or cotton mouth, being fatigued, headaches, constipation, being dizzy or light headed and even hunger. Signs of severe dehydration include:

- **Extreme thirst**
- **Extreme fussiness or sleepiness (especially in infants and children; irritability and confusion in adults)**
- **Very dry mouth, skin and mucous membranes**
- **Lack of sweating**
- **Little or no urination — any urine that is produced will be dark yellow or amber**
- **Sunken eyes, like some bodybuilders you see on stage that went overboard on the diuretics**
- **Shriveled and dry skin that lacks elasticity and doesn't "bounce back" when pinched into a fold, once again some bodybuilders on stage**
- **Severe cramping**
- **Low blood pressure**
- **Rapid heartbeat**
- **Rapid breathing**
- **Fever**
- **In the most serious cases, delirium or unconsciousness**

## **IF YOU EXPERIENCE ANY OF THESE SYMPTOMS, SEEK MEDICAL ATTENTION.**

Too many bodybuilders have screwed up their lives and have even died from messing around with diuretics to dry out – it's not worth it!

Now, any article on hydration would not be complete if we did not at least provide a list of symptoms that can occur if you become over-hydrated. Yes, it is possible to drink too much water leading to water intoxication however this usually only occurs when your body isn't functioning properly (chronic illness, malnutrition, kidney disease). Symptoms to look out for include:

- **Edema (swelling caused by fluid in your body's tissues. It usually occurs in the feet, ankles and legs, but it can involve your entire body.)**
- **Increased blood pressure**
- **Digestive problems**
- **Behavioural changes**
- **Decreased heart rate**
- **Shortness of breath (Dyspnea)**
- **Fast weight gain**
- **>2-3 lbs in 2 days**
- **>5 lbs in 7 days**
- **Seizures and/or coma**

## **CONCLUSION**

Water is the most important nutrient available to the human body and as you now know, vital for excelling as a bodybuilder. It is present in every single cell, every biological process and needed for us to live. Being fully hydrated keeps you feeling great and the body working but more importantly it assists bodybuilders to increase protein synthesis and cell volumization, increase fat loss, help protect from injuries and keep the body working at optimum levels, so you can train harder and maximize your gains! Remember to DRINK YOUR WATER!!!







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# Bruce's Stats



## Name

**Bruce Patterson**

## Height/Weight

Height: 5'10"

Contest Weight: 240 lbs

Off-Season: 280 lbs

## Favorite Exercise

Anything to do with chest and biceps.

## Favorite Supplements

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## ADVANCED GENETICS ATHLETE BRUCE PATTERSON

**Background:** I grew up in a small town with 3 brothers and a sister. My dad bought us the old Weider bench with plastic, cement filled weights and every time we pulled it out to train it became a competition. In my teens I was involved in boxing, wrestling, track and football and the one thing that was the same about each of these sports was the weight training. I realized not only did my body respond well to bodybuilding - I loved it! There is something to be said about being able to sculpt your body the way you want.

**Idol / Influences:** When it comes to bodybuilding idol I would have to say Arnold. I know it's nothing new for Arnold to be a bodybuilder's idol but there was something about how Arnold seemed to mould any situation to his benefit. It was more his strength of character I idolized. As for influences if I were to name a man who had the most influence over my bodybuilding career I would have to say that man was Robert Kennedy.

**Best Lifts:** Bench 550 lbs, Squat 650 lbs

**Hobbies:** I enjoy trying new beers - especially the really dark and strong ones. I used to have many more hobbies but now I have 3 kids so my time is limited.



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# WOULD YOU TRUST YOUR HARD-EARNED GAINS TO A MOUSE?

SILK Amino Acids, are claimed to be the next big thing to take over the bodybuilding industry! After years of searching for the ultimate bodybuilding supplement have we hit pay dirt with this wonder product?

Ok, I'm sure you've all seen the ads out there that say they are based on clinical research claiming to "build muscle, increase stamina, speed recovery and boost testosterone", but what they don't tell you is that these amazing, breakthrough research results were shown with mice! You heard that right, not actual bodybuilders slugin' it out in the trenches, day in and day out, just little, cute, furry, mice. Awwwwwwwww.

Let's dig a little deeper into Silk amino acids (SAA's) and why they are just another example of hype that you should be wary of when reading the outrageous claims. First of all, you may be asking what and where do SAAs come from? Well, SAA's are obtained from the cocoon of the silk worm, either by piercing the cocoon with a needle and extracting the silk, or boiling the cocoon causing it to unspool so the thread and amino acids can be harvested. This thread can be almost a mile long and consists of two types of protein, fibroin and sericin. The fibroin is the protein that makes up the bulk of the silk strand while the sericin is the sticky protein that holds it all together. Regardless of the method used to process the cocoon, the poor little silkworm is killed; which is the reason some animal rights groups are all up in arms over the entire process. Because the sericin is so sticky, it must be removed from the silk (the fibroin) in a process known as "degumming" so it can be harvested for things like



SILK WORM COCOONS BEING HARVESTED IN ORDER TO SEPARATE THE SILK COCOON INTO THREAD AND SLIK AMINO ACIDS WITH A PROCESS CALLED DEGUMMING.

clothing; you know, those sexy little silk teddy's your girl wears for you for all of 10 seconds before you rip them off!

In the past sericin was thrown away as a waste product after the degumming process, now it's broken down by hydrolysis into SAA's and is supposedly the greatest thing since sliced bread! SAA's are used in a variety of consumer products marketed largely to women for hair and skin lotions bearing the terms "sericin," "silk amino acids," "silk protein" or "hydrolyzed silk protein." Silk protein has been suggested to have the ability to moisturize the skin, repair free radical damage to the skin and penetrate and strengthen damaged hair by binding to keratin, forming a protective layer, giving it a silky look and feel that your lady desires. So now your sexy goddess can be all silky smooth with glowing skin while she attends to your every desire wearing that silk teddy.

So how does this benefit you, the hard-core bodybuilder, other than a crazy night of sex? Let's look into that shall we. Can SAAs actually



help build muscle or in any other way enhance your performance in the gym? Well, the long and the short of it is, uuuuhhhh, we're not quite sure. Why? Because no tests or research has

**THE LITTLE GUY BELOW IS SWIMMING UP A STORM THANKS TO HIS GAINS IN MUSCLE SIZE, STRENGTH AND ENDURANCE FROM SILK AMINO ACID SUPPLEMENTATION!**



ever been done on actual human beings – only mice! Would you want to gamble your hard-earned money on something that hasn't been proven at all in humans? F\*#k, I don't think so! What's with all the hype then? One, and only one, Korean study suggests that if you're a laboratory mouse and you are made to swim regularly for 30 minutes a day, sometimes to the point of exhaustion while having a weight attached to your tail, you're in luck! In this study, the mice were given a food supplemented with a solution of SAAs dissolved in water. The test mice getting the SAAs compared to the control, were shown to have increased performance, increased muscle mass, stamina, testosterone, etc. etc. the list goes on and on. Sounds too good to be true! (You can find an abstract of the study by Shin et al. here and link to a free copy: <http://www.ncbi.nlm.nih.gov/pubmed/20118552>).

Some additional interesting information about this study is that three of the 14 authors have affiliations with Worldway Co., Ltd. Which is the Korean company that supplied the SAA's used for the study – you know, the study with the amazing results for increases in mass, strength, testosterone etc. in the mice. These three authors are also listed as inventors on Worldway patents related to the production of silk peptides ... you get where we're going with this? Did their involvement in the study 'bias' the results in any way? Something smells fishy here and you can only guess if the results are accurate. Hell, if you're a mouse, or ever plan on having a "mousinoplasty" turning yourself into a half man, half mouse, then the results of the Shin study may seem intriguing. However, man or mouse, it's too early to tell if SAA's can really help you build muscle or in any

**TAKE A BITE OUT OF SCIENCE THAT HASN'T BEEN PROVEN TO WORK IN HUMANS; YOUR MUSCLES AND MONEY ARE WORTH MORE THAN THAT! STICK WITH PRODUCTS PROVEN TO WORK IN CLINICAL RESEARCH DONE ON ACTUAL HUMAN BEINGS.**



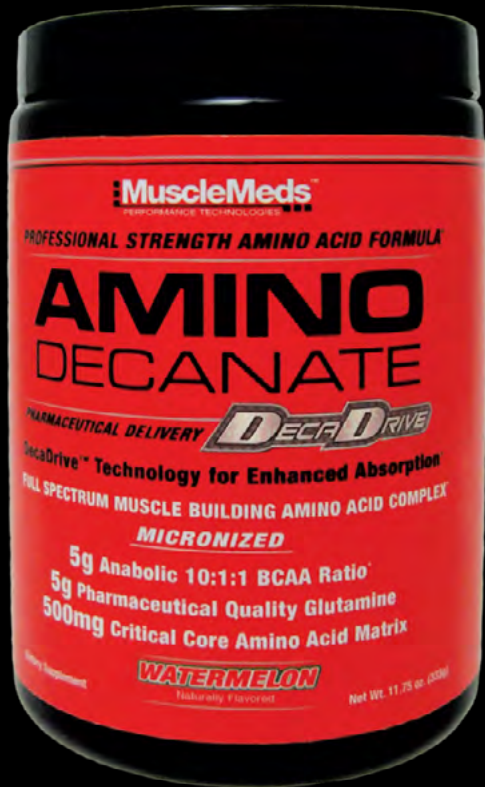
other way enhance your performance in the real world, WHY? Because they have not been tested in humans! Repeat ... no research has ever been done on humans to measure the effectiveness of SAA supplementation on performance in the gym! Also, the tests done in the Shin study were not representative of the type of hard-core training that you do, the mice were swimming not lifting!



It's also important to point out that the SAA preparation fed to the swimming mice in the Shin study was obtained from silk protein hydrolysate prepared with acid. According to the authors, it mainly consisted of alanine, glycine, serine, valine, threonine and minor amino acids, in descending order of quantity. This raises an important issue: If you see a supplement bearing a label that states "Silk Amino Acids" and specifically lists alanine, glycine, serine, valine and threonine, you have to ask yourself, "Is this just a mixture of ordinary alanine, glycine, serine, valine and threonine that is being mislabeled as 'Silk Amino Acids,' or are the ingredients actually derived from a silk protein hydrolysate identical to that used in the Shin study?" This is yet another example of information asymmetry raising its ugly head. Only the company who's selling the product knows the truth while the consumer is left in the dark from the marketing hype.



**SILK AMINO ACIDS HAVE BEEN SHOWN TO WORK IN MICE BUT NO RESEARCH HAS YET TO BE DONE ON HUMANS. YOU MAY JUST END UP PISSING YOUR MONEY DOWN THE TOILET?**



What does this all mean? Until SAAs are tested by independent researchers in humans, it's a crap shoot as it is only a guess whether the stuff will work or not. Specific research needs to be geared to prove or disprove any muscle-building, recovery-enhancing, testosterone-boosting or other performance-related benefits to healthy people in a gym or training environment. So do you want to risk spending money to try the stuff out only to have no gains whatsoever and end up pissing your money down the toilet? No, we don't think you do!

So instead, stick with BCAA's, proven time and time again in scientific research to improve your muscles' ability to tolerate high-intensity exercise, stimulate muscle protein synthesis (the essential element of building muscle) and protect muscles from damage and loss of force-generating capacity caused by heavy training. One amazing product that fits this bill is AMINO DECANATE from MUSCLEMEDS; the makers of products such as CARNIVOR, N.O. BULL and METHYL ARIMATEST.



AMINO DECANATE is MUSCLEMEDS newest scientifically advanced amino acid formula designed to trigger maximum anabolic effects and prevent rate limiting amino acid deficiencies and catabolism often experienced during intense workouts.

Unlike SAA's, AMINO DECANATE is shaking up the way bodybuilders view amino acids, not just with some positive results on swimming mice. The MuscleMeds Research and Product Development Team designed AMINO DECANATE to supply the body with 19 critical amino acids needed to support high intensity

acids, your muscle growth and performance comes to a screeching halt. This phenomenon is known as the "Rate Limiting Amino Acid Factor." Each serving of AMINO DECANATE provides all of these critical amino acids for peak muscle building, maximum performance and optimal recovery. To enhance the bio-availability and potency of this already highly anabolic formula, AMINO DECANATE features MuscleMeds exclusive DecaDrive Delivery Technology!

DecaDrive Delivery Technology is based on pharmaceutical delivery methods using the

## EACH SERVING OF AMINO DECANATE CONTAINS

- 5g Anabolic 10:1:1 BCAA Ratio
- 5g Pharmaceutical Quality Glutamine
- 500mg Critical Core Amino Acids
- DecaDrive Delivery System

workouts and trigger maximum anabolic and anti-catabolic effects. New research shows, that's research done on humans not mice, that while BCAAs and glutamine are the major players in muscle growth, 15 other amino acids known as Critical Core Amino Acids (CCAAs) also play a significant role. In fact, once you are depleted of any of these amino

compounds PEG (polyethylene glycol) and Decanoate (as sodium caprate) to help increase amino acid infusion. PEG is an intestinal absorption enhancer, used to increase the solubility and dissolution of amino acids, thereby promoting proper conditions for maximizing routes of absorption. Decanate is another clinically tested intestinal absorption



**DECA D DRIVE**  
DELIVERY

enhancer. Its principle mode of bio-dynamic action includes increasing the paracellular permeability by enlarging the tight paracellular junctions (openings), thereby allowing greater uptake and transport of amino acids into the bloodstream. AMINO DECANATE's amino's are also micronized to reduce their particle size and further boost intestinal transport through these pathways. The end result is increased dissolution and solubility, enhanced transcellular and paracellular absorption leading to more effective amino acid utilization by your muscles, resulting in incredible gains in muscle size and strength.

DecaDrive Delivery: Figure 2  
Figure 2 illustrates the enhanced absorption of amino acids using DecaDrive Delivery. As you will note, the decanoate increases the space between the tight junctions of the paracellular pathways. In addition, by reducing particle size

and improving dissolution with PEG, the uptake of amino acids in the intestines is enhanced through both transcellular and paracellular routes of absorption.

### AMINO DECANATE FEEDS THE CITRIC ACID CYCLE FOR MAXIMUM MUSCLE AND PEAK PERFORMANCE

If that weren't enough, AMINO DECANATE'S formulation helps to enhance the body's way of producing energy through the Citric Acid Cycle (TCA cycle). This is the body's most critical energy producing biochemical cycle that takes place inside of the mitochondria of cells. When you train, this effort increases the demand for cellular energy, needed to produce muscle contractions and support a variety of cellular functions. The Citric Acid Cycle accelerates to produce the extra energy your muscles and body need for performance. In turn, this

## Maximum Bio-Availability Accelerated Absorption

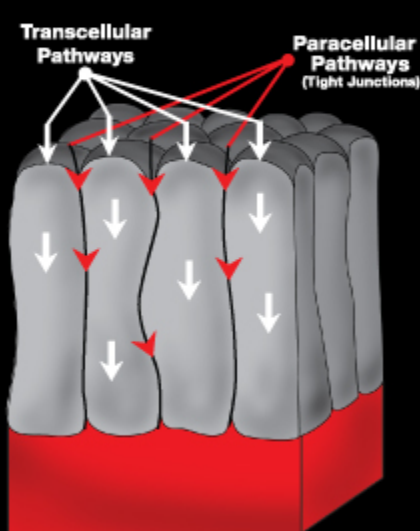


Figure 1: Small intestinal cross-section under normal conditions.

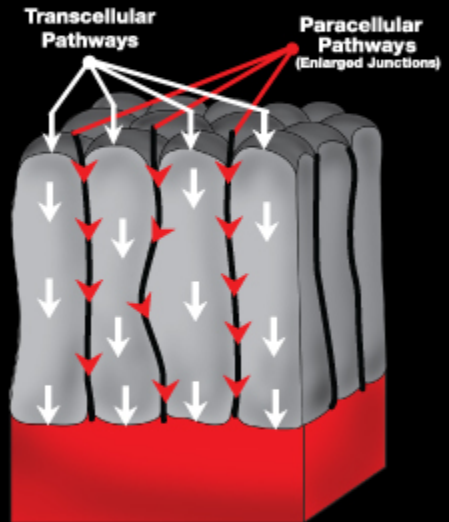
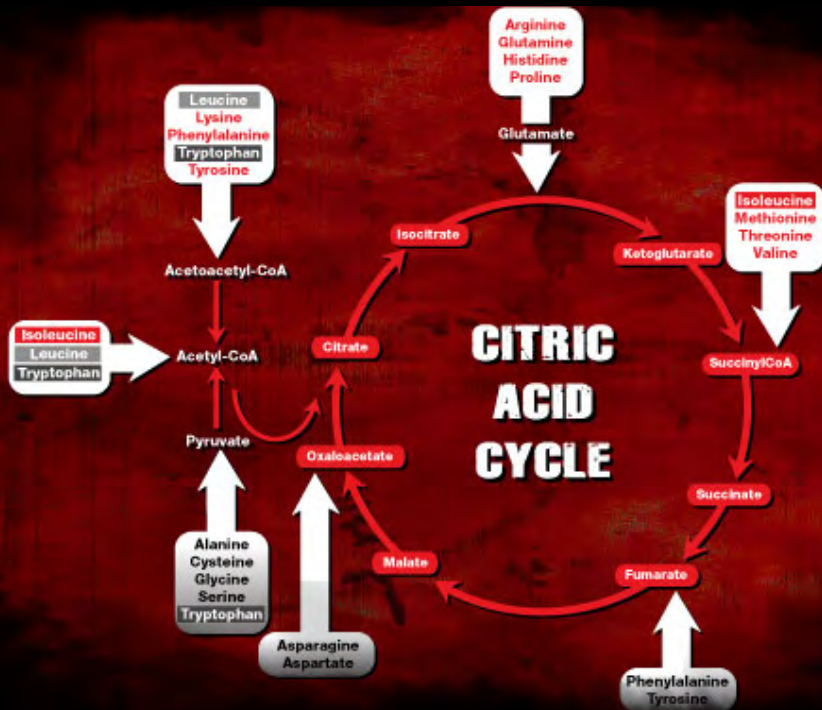
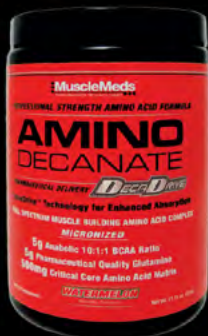


Figure 2: Small intestinal cross-section with administration of DecaDrive.



places a supply demand on the 19 critical amino acids involved in the Citric Acid Cycle. If these amino acids are not present it could have a negative impact on your performance and even muscle growth. AMINO DECANATE is precisely formulated to supply the 19 critical amino acids, to ensure optimal performance and maximum muscle building so all of your hard work in the gym isn't going to waste! This will allow you to build a strong, massive physique!

So unless you want to be a lab rat, don't waste your time or money on something that hasn't been shown to work on actual people, but only on a bunch of swimming mice. Stick with AMINO DECANATE – scientifically formulated to help you blast through your workouts, leading to gains in muscle strength and mass. Are you a man or mouse? Experience the seismic earth-shattering effects of AMINO DECANATE today!



# FULL SPECTRUM AMINOS WITH BCAAs

Available in 2 Great-Tasting Flavors:

**WATERMELON** **CITRUS LIME**





TRUST YOUR GAINS ON RESEARCH THAT'S  
PROVEN TO WORK - TRY AMINO DECANATE FROM  
MUSCLEMEDS TODAY AND EXPERIENCE  
THE RESULTS FOR YOURSELF!



## Locked In.

The mind-muscle connection... Every two-bit "guru" tries to sell you on the need to "feel the muscle working." But let me tell you, until you experience it yourself, you can't understand. It is spiritual. To go deep within and be so in tune with each synapse firing, each fiber splitting... Feeling and intuition taking physical form. Every transformative rep preconceived, from stretch to contraction. From concept to reality, the mind compels the body to grow anew. This extraordinary union of brain and brawn, free of distraction and diversion, is an intangible quality that sets apart the best. Here's the secret I know... That this crystal clarity is always just one tiny, potent, black scoop away. Bang back a shot of Animal Rage and you're switched on, turned up and locked in. The powerful intensity, energy and performance activates coursing through your veins. This is concentration in concentrated form, bringing thought and action together in a glorious moment of unbridled force. This isn't just working out, this is the mind-muscle connection, redefined. This is training on a higher plane. This is Animal Rage.

[forum.animalpak.com](http://forum.animalpak.com)

[www.animalpak.com/Rage](http://www.animalpak.com/Rage)





# TRUE OR FALSE???

THIS IS WHERE WE SEPARATE TRUTH FROM ALL THE B\*S THAT'S FLOATING AROUND THE BODYBUILDING WORLD... OUR LEADING SCIENTISTS AND TOP MEN GATHER AROUND THE ROUND TABLE TO ANSWER YOUR QUESTIONS.



**Bodybuilding and athletic performance is influenced by training alone?**

**True/False**

**FALSE** – Hopefully, it was obvious but bodybuilding and athletic performance is influenced by more than just training alone! Yes, training is a huge part of your success, however many factors including genetics, attitude, rest and nutrition influence your ability to perform and build a powerful physique.

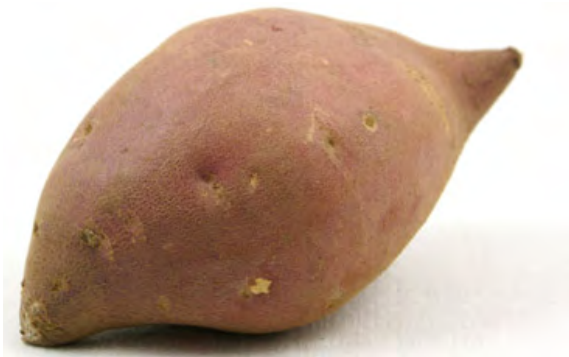
Although, genetics are beyond your control, you and only you play an active role in getting rest, having a positive attitude and eating the right food for your specific goals. A famous researcher once said "A proper diet can't make an average athlete elite, but a poor diet can make an elite athlete average" (Costill, 1983).



## Carbohydrates are the most important source of food energy for exercise?

### True/False

**TRUE** – This should have been a given, as carbohydrate is the most important source of food energy for exercise. In the body, carbohydrate is broken down to glucose. As the glucose circulates in your body it can be used for energy or stored as glycogen in the muscle and the liver. Glycogen is the storage form of energy that is broken down when needed. Much emphasis is placed on carbohydrate intake because the body has a limited ability to store it. While carbohydrate can always replace fat as a fuel, the reverse cannot be said. But remember, too much carbohydrate can be converted to fat!



VS



## Protein is only found in foods from animal sources?

### True/False

**FALSE** – Interestingly, you do not need to eat just animal products to get all the protein you need in your diet.

Whether it is from plants

or animals, protein is still protein; although they do differ in some aspects. Animal proteins are considered the best source of protein as they are 'complete' and contain all the essential amino acids (EAAs) that are easily used by the body. EAAs as you may know, cannot be made in the body and are therefore required in our diet. Plant or vegetable proteins are often called 'incomplete proteins', if they are missing 1 or more EAAs or are limited in their amount (there are a couple complete vegetable proteins). Therefore, care must be taken to choose a combination of vegetable proteins throughout the day, so as to complement any amino acids that may be missing. For most people the body handles both types of protein equally well, therefore choose whichever one you feel is right for you.

## Cardio first thing in the morning on an empty stomach is the best way to get ripped?

### True/False

**FALSE** - The time of day means nothing, your body burns calories and fat 24-hours a day, 7 days a week, 365 days a year. It doesn't matter when you exercise, more importantly, it matters how you exercise. The frequency, intensity, the type of training you do, etc. is far more important than when you train. Having to do cardio at ridiculous times in the morning and for a ridiculous amount of time is old-school thinking. Might as well break out the Crazy-Wear pants, high tops and mullets - hell, let's throw some striped spandex shorts in there just to make it complete! Steady state cardio is old school thinking as well, you shouldn't have to do cardio for 30 minutes or more either; see trainer Erik Ledin's section called My Two Cents later on in this mag to find out why!



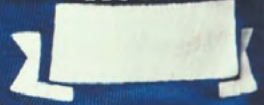


# Balls slip out. Tongues slip up. Some things you just want to forget...

Like coughing up the ball in the red zone – at home. Being tongue-tied when asking that girl to dance. But while a hit to the ego is temporary, victory is forever. Like streaking into the end zone as the clock runs out, or a smile and a softly whispered, “Yes.” You’ll always remember those moments, that indescribable feeling as the blood is pumping and the adrenaline jumping. Well, it’s like that every time if you hit the iron right. Your body never forgets the “pump.” To experience that unforgettable feeling, get in the game. From the first lift to the last rep, go big, live large and cast a big shadow.



CURTIS  
PATRIOTS



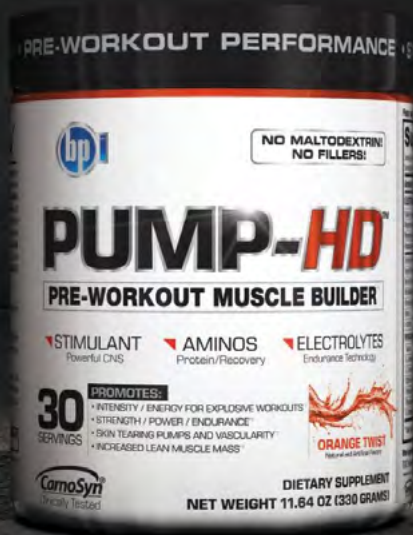
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\*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THESE PRODUCTS ARE NOT INTENDED TO DIAGNOSE, TREAT, CURE OR PREVENT ANY DISEASE.

†When combined with a proper exercise and nutrition regimen. Based on early-stage independent 3rd party in vivo and / or in vitro model scientific research data findings.

CUTLER  
ATHLETICS

4x

MIRACLES

*Jay Cutler*



In Loving Memory



Everybody wants to be  
a bodybuilder,  
but don't nobody wanna lift no  
heavy ass weights!

The Bodybuilding  
Bucket List



# Eight things every bodybuilder must do before kicking the bucket! You only live once, so might as well make the most of it and have a blast when you do!

Being a bodybuilder is about more than just lifting heavy ass weights, eating chicken and downing protein shakes. It's an all-consuming subculture that you live and breathe 24 hours a day, 7 days a week, 365 days a year. And much like ordinary folk have a "bucket list" of things they want to do, or accomplish before they, well, kick the bucket so to speak (i.e. go skydiving, join the mile high club, have a threesome with two Swedish blondes, swim with great white sharks ... whatever), bodybuilders too must run the gauntlet and complete certain important things in order to be considered a branded member of the iron game. Here now are 8 bodybuilding bucket list items that will define who you are! Get 'em done!

## (8) COMPETE!

If you've never stepped on the competitive stage before this is a must for any bodybuilder to get an appreciation of what it takes; a taste of what the pro's actually go through to attain the ultimate goal of Mr. Olympia. There are millions of weekend warriors out there that can lift crazy-ass weights or look JACK'D as sh\*t but have never taken the plunge and competed. Competing will teach you true discipline when it comes to bodybuilding, you'll have to monitor and fluctuate your diet, training and cardio so you become shredded while maintaining, or actually gaining muscle mass. Then, depending on the type of bodybuilding philosophy you and you follow, you'll carb deplete, drop your water, then carb and fat load all so those muscles pop



when you're hittin' your most muscular center stage as all your friends and family cheer you on - there's no better feeling hearing the audience cheer for you! It doesn't really matter if you win or not, although no one wants to lose - the fact that you had the dedication and drive to follow through and compete is its own reward. Plus you'll look awesome and feel like a million bucks when

everyone is in awe of the physique you've built. Struttin' down the beach with a shredded six pack having every girl at the beach stare at the ultimate trophy - you!

(7) Get To The Arnold Sports Festival in Columbus, Ohio

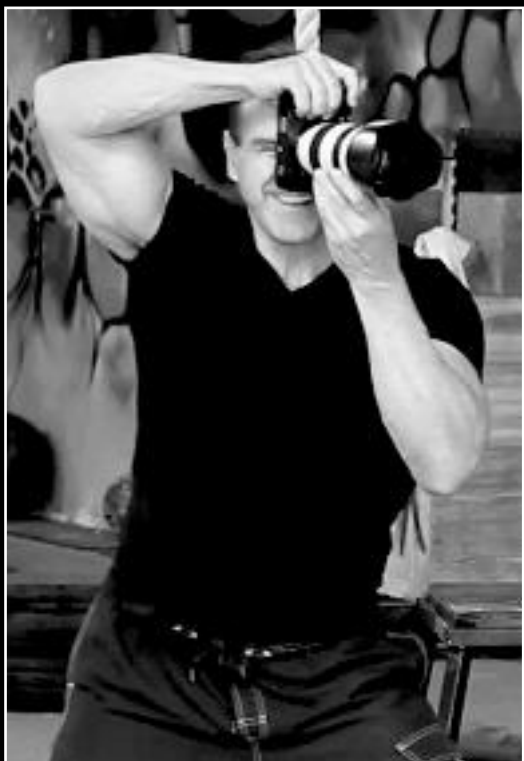
Let's face it, few people have had the impact on the sport of bodybuilding Arnold has. Between his Olympia titles, his countless magazine covers and inspirational photos, and his promotion of the benefits of weight training, to go alongside his A-list Hollywood status, he is THE spokesman for our sport. That in mind, give the man his due and make the trek to Columbus, Ohio the first weekend of March every year for The Arnold Sports Festival. The largest festival of its kind with wall to wall events and contests from a wide range of sports to numerous to mention (including bodybuilding, strongman, martial arts, boxing and arm wrestling to name a few) all weekend, and a huge expo to boot, circle this weekend on your bodybuilding calendar. Be sure to book your travel plans early and go with one

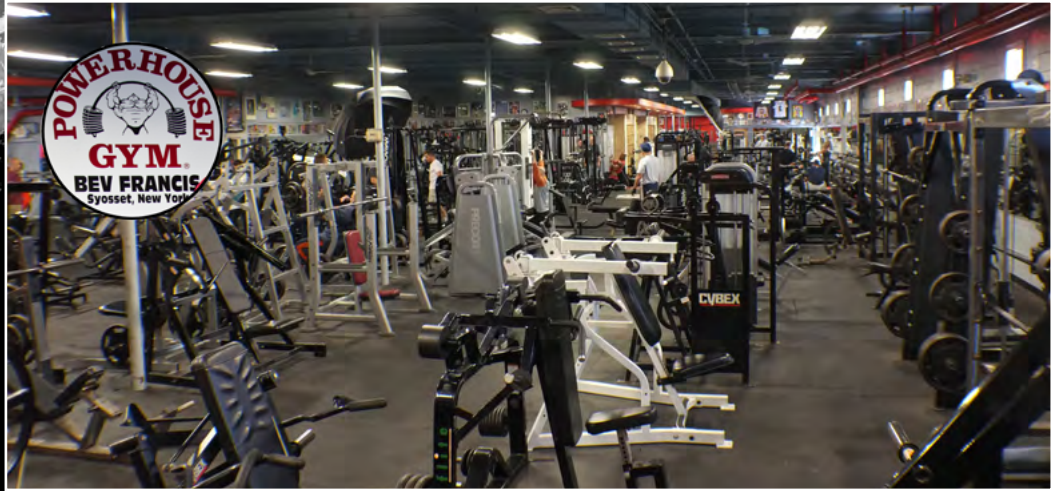


of the VIP tickets packages so you get the whole 9 yards experience. And make sure you're at the Expo on Saturday for a chance to meet the Oak himself!

(6) Get Your Ass In Shape & Get Some Professional Photos Done

Ok, enough of using your phone to rattle off shots of yourself posing in the bathroom. If you're in shape, cut, tanned and full, do the right thing and spring for a reputable physique photographer and get some professional photos done. These photos will last a lifetime and you'll have a legacy to show you kids, and grand kids. Not to mention that you'll have tons of content for Facebook, Twitter, on-line dating sites, you name it. Plus, if you got what it takes, the photographer may send your photos to some industry people ... and then





the sky's the limit; you never know, you may wind up on the cover of Jack'd one day. If you're not in shape, commit to getting in the best shape of your life and getting the photos done. This will likely be the best money you ever spend!

#### (5) Train In The East Coast Mecca, Bev Francis Powerhouse Gym

Syosset, New York is home to the huge East Coast Mecca, Bev Francis Powerhouse Gym. Much as Gold's in Venice is the spot on the West Coast, this Powerhouse Gym, run by Bev and her husband, IFBB Head Judge Steve Weinberger, is the hot spot on the East Coast with all the top dogs in the sport training here. We're talking about Victor Martinez, Kevin English, Frank Sepe and anybody who knows what's what on the East side. This gym is like Disney Land for bodybuilders with an absolute ton of the latest training equipment and a hardcore vibe that'll make you wana do 10 sets of 10 ass to the ground squats!

#### (4) Rock The Olympia Weekend in Las Vegas, Nevada

The Mr. Olympia contest is the pinnacle of the sport of the bodybuilding and the annual Olympia weekend held in Sin City is the biggest event of the year on the bodybuilding calendar with anyone and everyone involved in the sport in attendance. Make sure you role with one of the top end VIP packages so that you can experience everything that the weekend has to offer, including all the





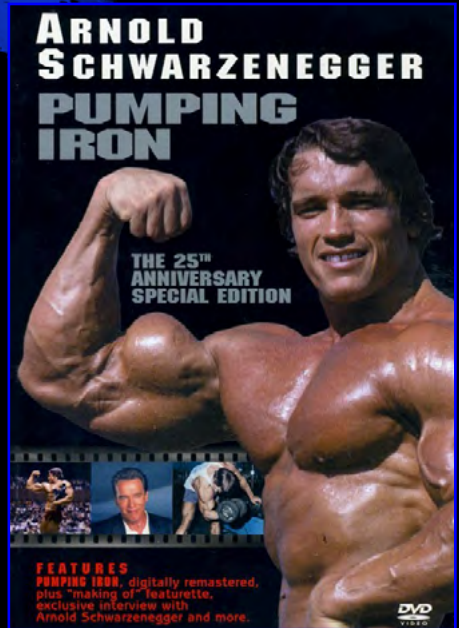
various contests, the accompanying trade show, the seminars, the press conference and the meet-the-athletes events. The vibe and atmosphere all weekend long is like nothing else and must be experienced!

### (3) Own Your Own Copy Of Pumping Iron, The Movie

Brass tacks here gentlemen; if you don't own your own personal copy of Pumping Iron, we're sorry to say, you ain't a true bodybuilder! If that means you, it's a quick and easy fix ... get a copy! Preferably, the 25th anniversary special edition, as it's digitally remastered and has some cool features, including an interview with Arnold. Get it, watch it, love it ... and appreciate the movie that launched our sport.

### (2) Experience Metroflex Gym In Arlington, Texas

We're getting serious now boys! Owned by legendary trainer and mentor Brian Dobson, Metroflex gym is located in Arlington, Texas and is home to 8-time Mr. Olympia Ronnie Coleman, Branch Warren and Johnnie Jackson ... ya, it's true, they breed 'em bigger in Texas! This place is the hardcore holy grail of gyms. With no air conditioning, no fancy equipment, no towel service, no chit chatting between sets, no spray bottles and no f\*#@#ing around, this place bleeds intensity, especially in the over one hundred degree summer Texas heat. Complete with a blaring stereo system, wall to wall motivational graffiti and enough free weight for an entire Olympia line-up, Metroflex is the kind of gym that must be truly seen to be experienced. Photos and words don't do this place



justice. As a true bodybuilder, you gotta train at Metroflex at least once, no exceptions.

### (1) JACK The West Coast

Venice Beach, California, the sun, the surf, the sand, the boardwalk ... and home to the West Coast Mecca, Gold's Gym. Located on Hampton drive in Venice just a stone's throw from the beach, Gold's is still the epicenter for the physique culture on the West Coast. On any given day you'll see a who's who list of top bodybuilders, other professional athletes, actors, models and trainers, not the least of which may include the likes of Charles Glass, Chris Cormier, Mike O'Hearn and if you're real lucky, maybe even Mickey Rourke. Any bodybuilder absolutely must make the trek to Gold's in Venice, pay the day rate and train your ass off in that incredible environment wearing a Jack'd T! Once you're done training, hit up a shake, stop by the Max Muscle store (also on Hampton) and chill on the coach for a bit, then grab a meal at the Firehouse, hit up the famous Venice boardwalk and then make your way down to Muscle Beach in Santa Monica for some 'finishing' work. That, my friends, is what we call Jackin' the West Coast! Ah yeah!

#1 JACK the West Coast and Venice Beach!







# **THE MOST EXCITING MUSCLE BUILDING BREAKTHROUGH THE WORLD HAS EVER SEEN!**

*"The revolutionary muscle building breakthrough of the century!"* – MUSCULAR DEVELOPMENT Magazine

*"A new breakthrough in muscle building and body transformation science."* – FLEX Magazine

*"A monumental advancement in muscle enhancement and performance nutrition. MHP is once again leading the industry into a new frontier."* – PLANET MUSCLE & BODYBUILDING Magazine

*"I've never experienced anything like MYO-X. This stuff has extremely powerful muscle building and recovery effects."* – Victor Martinez, IFBB Pro Bodybuilder

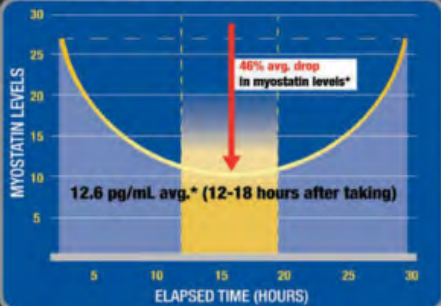
*"If you're looking to get bigger and stronger, you need MYO-X. It truly activates muscle growth and speeds recovery faster than anything I've ever taken."* – Brian Shaw, World's Strongest Man

## **SCIENTISTS DISCOVER "DOUBLE MUSCLING" GROWTH FACTOR PROTEIN**

"Double Muscling" is a real scientific term used to describe the extreme muscle hypertrophy found in mammals, including humans, lacking myostatin (a member of the Transforming Growth Factor  $\beta$  superfamily of secreted growth factor proteins). Myostatin is a powerful negative regulator of skeletal muscle mass that restricts muscle growth. While scientists are not attempting to duplicate double muscling, they have been eagerly searching for a way to reduce myostatin and increase muscle building for the treatment of muscle loss. Every bodybuilder on the planet would also want to have lower levels of myostatin to enhance their muscle building potential. And now they can with the world's first natural myostatin inhibitor, clinically tested MYO-X. While MYO-X will certainly not eliminate myostatin or duplicate double muscling, it is clinically proven to significantly reduce myostatin to decrease muscle loss and increase muscle building capacity.



## MYO-X MYOSTATIN INHIBITION CURVE



## Clinical Study Reveals Unprecedented 46% Reductions In Myostatin In Just 12 Hours!

MYO-X's key active ingredient, MyoT12®, has been shown in a clinical study to reduce serum myostatin in study subjects by an average of 46% in 12-18 hours with just a single serving! 100% of all human clinical test subjects showed significant reductions in myostatin. The average serum myostatin declined to 12.6 pg/mL with every subject responding positively. This was a staggering average 46% drop in myostatin from baseline across all subjects. Finally, at the 24-30 hour time point with a mean value of 28.1 pg/mL, the average myostatin level completely normalized.†

## Real Examples of Myostatin Deficient "DOUBLE MUSCLING" Effects



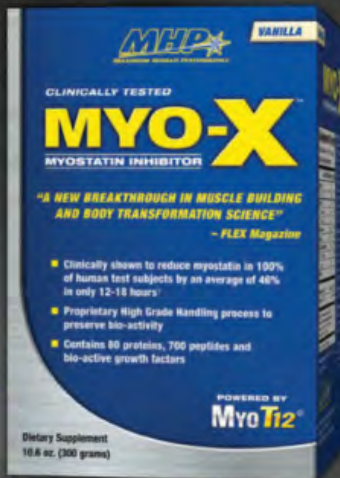
Documented cases of myostatin deficiency in mammals, including humans, display astonishing muscular growth and reduced body fat levels. Researchers have been studying the rare accelerated growth of a German child deficient in myostatin since he was first referenced in the *New England Journal of Medicine* in 2004, while the tremendous muscularity of the Belgian Blue bull and "Bully" Whippet dog breed are other prime examples of "double muscling" due to the absence of myostatin in animals. While you will not experience the full double muscling phenomenon, reducing myostatin will prime your body for maximum muscle gains.

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- Manufactured using a proprietary High Grade Handling process and contains a magnified concentration of 80 proteins, 700 peptides and numerous biologically active growth factors.

**"Research has shown that a reduction in serum myostatin levels is likely to result in clinically significant muscle gains.**

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## **IF YOU'RE DOING 30 MINUTES OR MORE OF CARDIO A DAY TO GET SHREDDED YOU'RE DOING IT ALL WRONG!**

When I try to de-program, I mean talk to (lol) clients to explain some of my issues with the high volume steady state cardio approach that seems to be the default fat-loss strategy in both competitive and general fat-loss circles, I often try to explain the issue by contrasting efficiency and inefficiency and what we as physique-conscious people want to be.

Now anyone who has known me for a long time knows that I have NEVER subscribed to this philosophy and I've been in this industry for over 10 years; the one that says when fat loss stalls or you hit a plateau, you simply add more cardio.



The problem is that there's an adaptive response to steady state cardio in which over time your body becomes what we call an "efficient fat burner". This sounds good and if you're a performance/endurance athlete it is, but if you're a hard-core bodybuilder, you want inefficiency, not efficiency.

The analogy I always use is to contrast a big V8 Cadillac Escalade (or some similar gas pig) and a 4-cylinder Honda. Ideally you want to be a big V8 Escalade and not a 4-cylinder Honda. Think about it, which one is more fuel efficient? Which one burns less fuel for a given amount of 'driving'? \$20 in a Honda goes a long way (my wife's first car incidentally). My wife drives an Escalade today and trust me, \$20 doesn't last very long.

Are you seeing where I'm going with this analogy? The Honda (dude on the treadmill or stationary bike doing lots of steady state cardio) is a fuel efficient vehicle (an efficient fat burner). It burns very little fuel for a given distance of driving (length of time doing SS cardio) relative to the Escalade which



**This is what it's all about!**

burns a lot more fuel (calories/fat/whatever) for the same distance (length of time doing SS cardio). For optimal fat loss, don't you want to be the Escalade? Don't you want burn more calories for a unit of time rather than less calories so you get shredded faster?

This is exactly why you have first-time competitors doing just fine on nothing more than 30 minute cardio sessions during their prep or something similarly moderate. Then the next time they need 45 minute sessions and then 60 and then the next thing you know we're talking 90 and 120 minutes per day! I've even heard 3 and in some cases 4 hours per day? WTF?!?!?!?

Why are people training with this type of insanity? Because that original 30 minutes doesn't burn what it used to (improved efficiency) and now it takes progressively more and more to get the same caloric expenditure you used to get on less, so instead of focusing on more important things, like planning your trip to the Arnold Classic, you're stuck doing cardio! Not so good and not what you want. You're programming your body to become more efficient at storing fat in the long run as you are essentially teaching your body to expend less energy by making your body more fuel efficient!

Over time your body adapts and becomes better and better at storing fat rather than expending it.

At that point it really should be no surprise as to what happens when you come out of your caloric deficit (magnified if it's even lower calories) and reintroduce even normal calories ... after doing all these hours of mindnumbing steady state cardio you become a fat slob!

Efficiency - you gain weight!

If you're adopting this strategy while dieting and eating in a deficit getting ready for a show, where you'll step on stage to show the world what you got, do yourself a favour and change it! Don't fall into this trap, because that's all it really is, a metabolic trap. Because once you're a Honda (from all your past SS cardio) it's hard to become an Escalade again; and don't you think an Escalade gets more chicks than a Honda!



VS



# PERIODIZATION OF THE UNDULATING TYPE

Periodization -- a word thrown around all the time, often unnecessarily complicated in its explanation. There seems to be all sorts of definitions floating around for this fancy term, some more complex sounding than others. Here however, we're going to keep it simple because quite honestly, that should always be the goal -- simplifying things whenever possible. To that end, periodization is basically defined as the planned variation of training variables in an exercise program. Consider it a blueprint of sorts. More specifically, it is an organized approach to training that involves progressive cycling of various aspects of a training program during a specific period of time. There are a number of different ways to periodize your training, but suffice it to say it simply involves the manipulation of loading parameters -- sets, reps, tempo, rest intervals, etc. -- as well as a finely tuned management of training volume.

The application roots of periodization come from the world of sports and more specifically Olympic sports, but going back even further, the



theoretical roots stem from Canadian scientist, Hans Selye's adaptive response model, the General Adaptation Syndrome (GAS). The GAS is a theory which suggests that the body adapts to stress in three different phases -- the alarm stage, the resistance stage and the exhaustion stage. These stages of response represent the scientific rationale for periodization as we know it today. In essence, periodization models were designed with two goals in mind: firstly, to avoid exhaustion and secondly, to bring performance to a peak.

If you look around your gym, more often than not, you probably see the same people doing what appears to be the same routine week in and week out, month in and month out ... if they have a program at all. Some people simply go into the gym with no plan whatsoever and just do whatever comes to mind on that day. Is it any coincidence that these same people generally never look any different? They're no more muscular, they're no leaner, they're





lifting the same weights they did a year ago. Clearly, their random, unplanned approach to training, simply isn't working. Hopefully you're not one of them.

## Common types of Periodization

Research on periodized versus non-periodized programs clearly show that the former trumps the latter in every aspect -- strength and power, muscular endurance, muscle and performance. There are a number of different periodization models, the most known probably being the original model of linear periodization. With linear periodization, the reps are decreased with a simultaneous increase in load/intensity with each successive 'phase' which generally last three to four weeks. For example, phase one 15 reps, phase two 12 reps, phase three 10 reps, phase four 8 reps, etc. We'll consider this more of an "old school" approach as it has a number of different drawbacks as it relates to hypertrophy and strength retention. An improvement on this model was the alternating model of periodization where the trainee switches between higher reps and lower reps at each phase, For example, phase one 15 reps, phase two 8 reps, phase three 12 reps, phase four 6 reps, etc. The different phases would be characterized by high loads/low volume (intensity phase) and low loads/high volume (volume phase) and this model addresses a number of

the linear model shortcomings.

However, another periodization model that has gained in popularity in recent years is one termed Undulating Periodization. This is basically a non-linear model that takes the fluctuation of training variables one step further by adjusting loading parameters much more frequently. With an undulating program, the intensity and volume change as often as every day of training. So with undulating periodization, training volume and intensity are increased and decreased on a regular basis, but not in the general pattern of always increasing intensity and decreasing volume as the training period progresses (like the linear model does). But is it better? Well, that's hard to answer with certainty; it's different, but with some clear advantages to the individual seeking and maintaining maximum strength and size gains. In fact, recently published research by Dr. Matthew Rhea from Arizona State University has shown that undulating periodization may be superior to traditional linear or alternating periodization models in inducing strength gains. So it's not just theoretical bantering as there's research coming out showing its effectiveness.

## Periodization: Practical Steps

We can't do the same program forever. That should be common sense, but as mentioned earlier, looking around the gym, this doesn't seem to be as obvious as it should be. Our bodies adapt to the demands imposed on it so with time the effectiveness of a given training protocol diminishes. Think of it as the Law of Diminishing Returns. Strength coaches and trainers, Charles Poliquin and Alwyn Cosgrove have written



that our bodies adapt to the number of reps performed the fastest, and the actual exercise the slowest. In fact, they've said adaptation to reps performed may happen in as little as six exposures. If that is in fact true, then we need to change the repetitions performed more often than we need to change our exercises. In addition, different rep ranges result in different training adaptations. This is in fact the opposite of what most trainees do. Most change their exercises but generally train in the same rep bracket all the time. Three sets of ten anyone? There's also an argument that can be made to keep your exercises more consistent as well. One, the big, basic movements, like squatting, benching, deadlifting, rowing, etc., are always going to be effective and two, the issue of motor learning or 'rehearsal' will help induce strength gains by improving the efficiency of the nervous system.

So to apply this, we're left with the goal of being relatively consistent with our exercises but with frequent variability applied to our rep schemes. And in comes the undulating model. Recall that with undulating periodization, the loading parameters -- sets and reps -- are manipulated as often as every workout,





so this addresses the issue of the possible quick adaptation to a constant rep scheme. Think of it as a variable rep system, which is another term that has been thrown around to describe the undulating model. So what should happen now is a slower adaptation to the training program since the training variable that your body adapts to the quickest is being manipulated the most frequently.

Undulating programs are often split into upper/lower splits, as opposed to the traditional bodybuilding style bodypart split. There's also numerous ways of putting it together. For example, assuming four workouts in our upper/lower split, we have two upper body days and two lower body days. One way that you'll see it set up is having one upper body and one lower body day devoted to heavy, low rep strength training based protocols. The other upper body and lower body day would then be devoted to higher rep, higher volume based protocols. The different training protocols allow you to work on achieving multiple goals at the same time. Similarly you can have even more variation within the actual workout. For example, heavy horizontal pushing (chest) and pulling (mid back/back thickness) and lighter vertical pushing (shoulders) and pulling (lat/lat width) in one upper body workout and the opposite in the other upper body workout -- heavy vertical pushing and pulling coupled with lighter horizontal pushing and pulling. Throw in a little bit of direct arm work at the end and you're set. By heavy and light, I am referring to the aforementioned heavy, low rep work and lighter, higher rep protocols. The same can be done with lower body. One day heavy quads and light or unloaded hamstrings and the other day heavy hamstrings and light/unloaded quads. There are many ways to do it.



## Periodization: An Aside

Now with all that said about periodization, its benefits and its importance, I wanted to touch on this from another angle which represents somewhat of an evolution of my own thinking. Vern Gambetta, considered the founding father of Functional Sports Training, and who prefers to use the term 'Planned Performance Training' in place of Periodization has questioned the differing periodization models by saying that the body never responds in a linear fashion, and as such all periodization is basically undulating to some degree. He goes on to say that the distinction in periodized schemes is an exercise in intellectual gymnastics. Well known Canadian trainer, Scott Abel holds a similar philosophy and has said that 'the application of any program is where the magic lies'. What counts with periodization is the design of the program and the manipulation and variation of the training variables. But, the beauty is in the application of the program and the training experience, not just the program itself. Gambetta goes on to say "variability and contingency must be built into the plan. Plan, execute the plan, evaluate the plan, revise the plan and execute the revised plan." Remember, there is no such thing as the perfect program. Don't get locked into the rigidity of what you're doing. Yes there are principles to adhere to, but the experience of the workout is what you're training for. Don't get too trapped in the web of details that can take away from the actual training experience; focus on training intensity. Think of the ICE principle (another Gambetta gem) -- Intensity, Concentration, and Effort. As it relates to Undulating Periodization, take note of the main points -- focus on more frequent manipulation of the rep schemes you're using.



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# RESEARCH

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Green Tea keeps obesity-related genes under control

**B**eneficial effects of green tea polyphenols (GTP) against obesity have been amply reported; however, the mechanism of this protection is not clear. The objective of a recent study was to identify GTP-targeted genes in obesity using the high-fat-diet-induced obese rat model.

A total of three groups (n=12/group) of Sprague Dawley female rats were tested: a control group (rats fed with low-fat diet), a group fed with high-fat diet (HF), and group of rats fed with high-fat diet and GTP in drinking water (HF+GTP).

As anticipated, the HF group increased body weight as compared to the control group. Supplementation of GTP in the drinking water in the HF+GTP group reduced body weight as compared to the HF group.

When researchers extracted RNA from liver samples and analyzed it for the expression of eighty-four

obesity-related genes, they found that in comparison to the control group, the rats in the HF group had significant changes in the expression levels of 12 genes, including increased expression of 3 genes that stimulate the appetite (i.e., orexigenic genes); reduced expression of 7 genes that reduce the appetite (i.e., anorectic genes); and reduction in the expression of 2 genes that relate to energy expenditure. Intriguingly, the HF+GTP group restored the expression levels of these genes in the high-fat-induced obese rats. Furthermore, the protein expression levels of

superoxide dismutase-1 (SOD1) and catechol-O-methyltransferase (COMT) also showed GTP-regulated protective changes in this obese rat model.

Collectively, this study revealed the beneficial effects of GTP on body weight via regulating obesity-related genes, anti-inflammation, anti-oxidant capacity, and estrogen-related actions in high-fat-induced obese rats.

Reference:

Lu C, Zhu W, Shen CL, Gao W. Green tea polyphenols reduce body weight in rats by modulating obesity-related genes. *PLoS One* 7(6): e38332, 2012.





# Brewer's yeast great for boosting the body's immune response to strenuous exercise

**T**en days supplementation with 250mg/day beta-glucan (BG) derived from a proprietary strain of brewer's yeast alter immune response following strenuous physical activity, recent human trial reports.

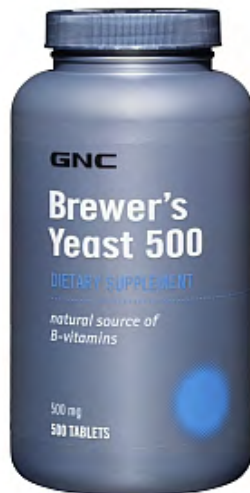
The study, published ahead of print in the online edition of the British Journal of Nutrition, shows that brewer's yeast beta-glucan increased the potential of blood leucocytes to produce cytokines critical for innate and adaptive immune responses.

Sixty recreationally active men and women completed two trial conditions using a cross-over design with a 7 d washout period: placebo (rice flour) and brewer's yeast beta-glucan were given for 10 days before completing a 49-minute bout of cycling in a hot, humid environment. Blood was collected at baseline (before supplement), pre-, post- and 2 h (2H) post-exercise.

Beta-glucan significantly boosted the production of IL-2, IL-4, IL-5 and interferon- $\gamma$  (IFN- $\gamma$ ) at pre- and post-exercise compared to placebo. Furthermore, plasma IL-4, IL-5 and IFN- $\gamma$  concentrations were greater at 2 hours following beta-glucan supplementation. The investigators conclude that brewer's yeast beta-glucan may have potential to minimize post-exercise immunosuppression.

Reference:

Carpenter et al. 2012. Br J Nutr. 10:1-9.



# Research shows supplementing creatine with sugar is a thing of the past.



**A** study published in 2011 tested traditional creatine dosing; creatine + 70g dextrose (aka sugar or carbohydrate) head-to-head versus creatine + BIOCREAT™; a highly standardized potent fenugreek extract.

Results from the study demonstrated that the BIOCREAT™+ creatine group significantly increased lean body mass and improved 1 RM bench press 120% over the control group. The BIOCREAT™ group also led to a greater increase in peak power over the creatine + 70g dextrose group, after only 4 weeks! This represents a quantum leap in creatine dosing, eliminating the need for carbohydrates to improve delivery to the muscles. Imagine all the benefits of traditional creatine supplementation without the added calories/sugar. Look for BIOCREAT™ to start showing up this year on the labels of premium creatine products, but beware of imitations and non-standardized forms of fenugreek.

Reference: Taylor et al. 2011. J Sports Sci Med. 10:254-260

# Can quercetin stimulate nitric oxide in the endothelium?

**Q**uercetin is a major flavonoid in a wide range of fruits and vegetables such as black and green tea, apples, grapes and, particularly, onions. Research shows that consumption of quercetin may contribute to a reduction in risk of cardiovascular disease.

Certain dietary flavonoids have been shown to upregulate the expression of adenosine monophosphate-activated protein kinase (AMPK). AMPK is a conserved key enzyme in cellular energy homeostasis that affects fatty acid oxidation. It has emerged as an important integrator of signals that control energy balance through the regulation of multiple biochemical pathways.

The aim of a recent study was to investigate the effects of supraphysiological concentrations of quercetin and its methyl and glucuronide metabolites (3'-O-methyl-quercetin and quercetin-3-O-glucuronide) on activation of AMPK and eNOS in human aortic endothelial cells (HAECs)

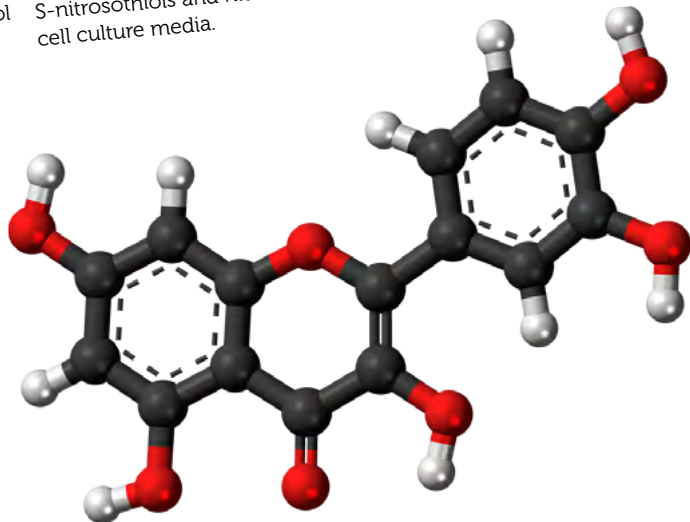
and endothelial function in isolated aortic rings from C57BL mice.

Investigators found that 5 and 10 $\mu$ M quercetin and its metabolites, and pre-treatment of arteries with quercetin and its metabolites can significantly protect vessels against experimentally-induced endothelial dysfunction in isolated arteries. Inhibition of AMPK blocked these protective effects. Researchers also found that 5 and 10 $\mu$ M quercetin and its metabolites can induce activation of AMPK and eNOS in human aortic endothelial cells, and lead to a significant increase in the concentrations of nitric oxide by-products (i.e., S-nitrosothiols and nitrite) in cell culture media.

These results provide further support for the cardioprotective effects of certain dietary flavonoids. They suggest that beneficial effects of quercetin on endothelial cell functions are in part mediated via AMPK pathway. Other recent experimental evidence corroborates these findings, as it supports the hypothesis that AMPK activation in blood brain barrier-derived endothelial cells directs the trafficking of GLUT1 intracellular pools to the plasma membrane thereby increasing endothelial sugar transport capacity.

## References:

1. [Epub ahead of print]
2. [Epub ahead of print]



# Aerobic Exercise Boosts Brain Power

**T**he physical benefits of regular exercise and remaining physically active, especially as we age, are well documented. However, it appears that it is not only the body which benefits from exercise, but the mind too. The evidence for this is published in a new review by Hayley Guiney and Liana Machado from the University of Otago, New Zealand, which focuses on the importance of physical activity in keeping and potentially improving cognitive function throughout life. Their review is published online in the Springer publication *Psychonomic Bulletin & Review*.

A certain amount of mental deterioration is expected with advancing age. However, this may not necessarily have to be the case as particular aspects of cognitive function such as task switching, selective attention and working memory among others, all appear to benefit from aerobic exercise. Studies in older adults reviewed by the authors consistently found that fitter individuals scored better in mental tests than their unfit peers. In addition, intervention studies found scores in mental tests improved in participants who were assigned to an aerobic exercise regimen compared to those assigned to stretch and tone classes.

Interestingly, these results were not replicated in children or young adults. The one area where physical fitness or regular exercise was found to have an effect on cognitive function in these age groups was for memory tasks. Both the updating of working memory and the volume of information which could be held was better in fitter individuals or those put on an aerobic exercise regime. The authors comment that despite physical fitness not affecting all areas of cognitive function in younger people, evidence is mounting that just because they are in their prime developmentally does not mean that they cannot benefit from regular exercise.

In older generations, the evidence for improvement in cognitive function is insurmountable. The types of tests of cognitive function reviewed here are important in showing that exercise may attenuate age-related decline for specific tasks. For example, it has been found to positively affect mental tasks relating to activities such as driving, an activity where age is often seen as a limiting factor.

The authors conclude that engagement in exercise can provide a simple means for people to optimize their cognitive function. They add that more research into the effects of exercise on young adults and children is required. However, they say that "the indications reported thus far -- that regular exercise can benefit brains even when they are in their prime developmentally -- warrant more rigorous investigation, particularly in the context of society becoming increasingly sedentary."

Reference:

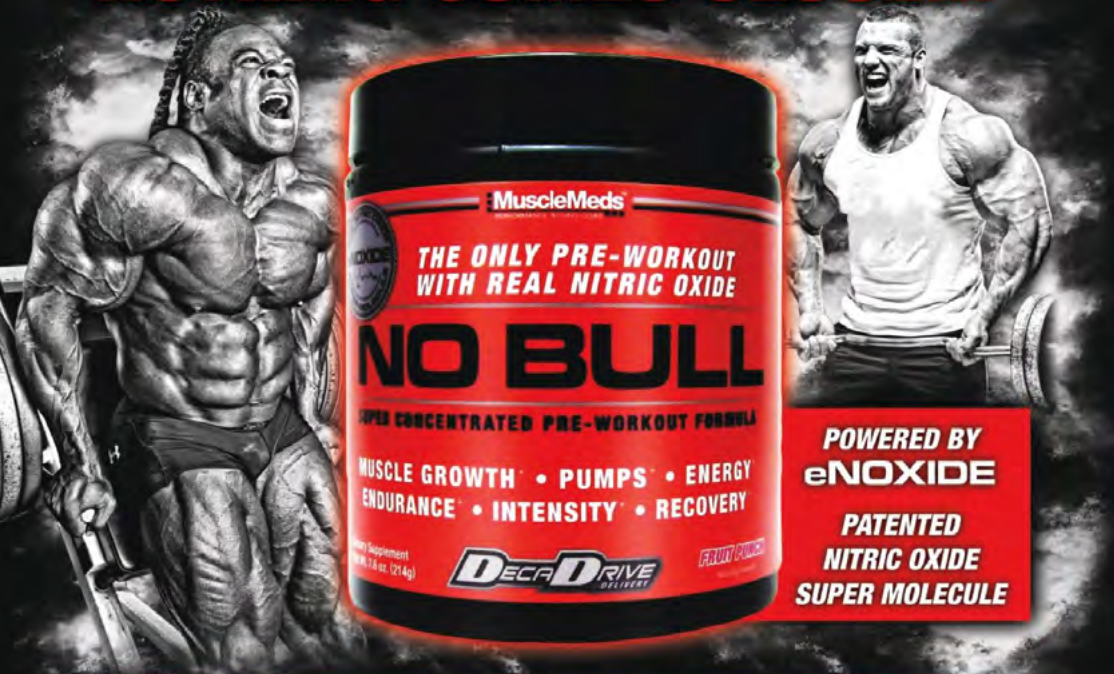
Springer. 13 Dec. 2012. Web. 4 Jan. 2013. ScienceDaily,



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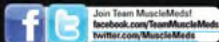
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# New Protein Linking Exercise to Bigger, Stronger Muscles Discovered

**I**t is well known that exercise not only creates adaptive responses within skeletal muscle fibers, but also enhances collagen synthesis both in muscle and connective tissue.

Scientists at Dana-Farber Cancer Institute have isolated a previously unknown protein in muscles that spurs their growth and increased power following resistance exercise. Mice given extra doses of the protein gained muscle mass and strength, according to the report in the Dec. 7 issue of the journal *Cell*.

"This is basic science at present," commented Jorge Ruas, PhD, first author of the report. "But if you could find a way to elevate levels of this protein, that would be very exciting. For example, you might be able to reduce muscle wasting in patients in intensive care units whose muscles atrophy because of prolonged bed rest." Other applications, he said, might be in disorders such as muscular dystrophy and the gradual loss of muscle mass from aging.

Bruce Spiegelman, PhD, the senior author, led the Dana-Farber team that identified the protein, PGC-1 alpha-4, in skeletal muscle and said it is present in mice and humans. Resistance exercise, such as weight lifting, causes a rise in PGC-1 alpha-4, which in turn triggers biochemical changes that make muscles larger and more powerful, said the researchers.

The protein is an isoform, or slight variant, of PGC-1 alpha, an important regulatory of body metabolism that is turned on by forms of exercise, such as running, that increase muscular endurance rather than size. "It's pretty amazing that two proteins made by a

single gene regulate the effects of both types of exercise," commented Spiegelman.

The researchers found that the new protein controls the activity of two previously known molecular pathways involved in muscle growth. A rise in PGC-1 alpha-4 with exercise increases activity of a protein called IGF1 (insulin-like growth factor 1), which facilitates muscle growth. At the same time, PGC-1 alpha-4 also represses another protein, myostatin, which normally restricts muscle growth. In effect, PGC-1 alpha-4 presses the accelerator and removes the brake to enable exercised muscles to gain mass and strength; it turns down myostatin and turns up IGF1!

Several experiments demonstrated the muscle-enhancing effects of the novel protein. The investigators used virus carriers to insert PGC-1 alpha-4 into the leg muscle of mice and found that within several days their muscle fibers were 60 percent bigger compared to untreated mice. They also engineered mice to have more PGC-1 alpha-4 in their muscles than normal mice who were not exercising. Tests showed that the treated mice were 20 percent stronger and more resistant to fatigue than the controls; in addition, they were leaner than their normal counterparts. The altered mice were also stronger and more active than the normal mice. Now we here at JACK'D are looking forward to the future of this research and its effectiveness on humans.

## Journal Reference:

1. Jorge L. et al. *Cell*, 2012; 151 (6): 1319 DOI: 10.1016/j.cell.2012.10.050, A PGC-1 Isoform Induced by Resistance Training Regulates Skeletal Muscle Hypertrophy.



# Pinocchio Effect Confirmed: When You Lie, Your Nose Temperature Rises

**W**hen a person lies, they experience a “Pinocchio effect,” which is an increase in the temperature around the nose and in the orbital muscle in the inner corner of the eye. In addition, when we perform a considerable mental effort our face temperature drops, and when we have an anxiety attack our face temperature rises. These are some of the conclusions drawn in a pioneering study conducted at the University of Granada Department of Experimental Psychology, which has introduced new applications of thermography.

Thermography is a technique based on body temperature that is applied in many fields such as general industry, the building industry and medicine. Thermographic cameras have a wide range of uses and was developed in the USA during the II World War to detect the enemy (night vision).

Scientists have discovered that when a mental effort is made (performing difficult tasks, being interrogated on a specific event or lying) face temperature changes. When we lie about our feelings, the temperature around our nose raises and a brain element called “insula” is activated. The insula is a component of the brain reward system, and it only activates when we experience real feelings (called “qualias”). The insula is involved in the detection and regulation of body temperature. Therefore, there is a strong negative correlation

between insula activity and temperature increase: the more active the insula (the greater the feeling) the lower the temperature change, and vice versa, the researchers state.

The researchers have demonstrated that temperature asymmetries in both sides of the body and local temperature changes are associated with the physical, mental and emotional status of the subject. The thermogram is a somatic marker of subjective or mental states and allows us see what a person is feeling or thinking, professor Salazar states. It is useful for evaluating emotions (since the face thermal pattern is different) and identifying emotional contagion such as lying. Just think, what if they start using this type of technology on athletes...

University of Granada. “Pinocchio effect confirmed: When you lie, your nose temperature rises.” ScienceDaily, 3 Dec. 2012. Web. 3 Jan. 2013.



Sooooooooooooo, tell us the truth ... are you competing drug free?

# Stuff you need & want

by derek hart

**T**his is the section of JACK'D where we review products we use regularly and like, or products

that don't cut the mustard and want to educate you about so you can decide whether or not you'd like to make a purchase. No marketing here or kick-backs given from any of the companies, just our opinion. The products could be anything from bodybuilding gear,

supplements, gym reviews; the sky is the limit. Products like favorite foods, drinks, electronic devices, movies, television shows; hell,

anything and everything you can possibly imagine.

If you have a product suggestion, review or any type of comment, like or dis-like, about our product reviews give us a shout and we'll take a look to see

if it's indeed up to snuff and it is good enough to make it on the STUFF list.

“ No sugar coating here, we tell's it like's we see's it when it comes to reviews of anything and everything!

## Rating System

★  
CRAP

★★  
NOT AS CRAP

★★★  
DECENT

★★★★  
A GOOD BUY

★★★★★  
AWESOME!

## » MuscleMeds Carnivor Liquid Shots



### THE GOOD

Small, portable protein shot made from real beef protein that comes in Power Punch and Orange Blast flavors. Sometimes you just don't feel like eating and the Carnivor Shot is great for after you train or anytime when you're on the go. 50 grams of protein you can take anywhere!

### THE BAD

That it only comes in 2 flavors... hopefully there will be more in the future.

### THE STATISTICS

★★★★★

Price	\$44.99/ 12 pack
Taste	Great
Flavors	2
Would you Recommend	YES

4 oz shot with 50 grams of protein, 0 carbs and 0 fat - amazing product!

## » Five Finger Shoes



### THE GOOD

The Vibram FiveFingers shoes are a "barefoot" shoe that improves your body mechanics by letting your foot work the way it should and not the way it does in a shoe. The results is a great ergonomic advantage with improved balance, agility and grip. They may look funky but they are awesome.

### THE BAD

Some people may not like the look of the shoe.

### THE STATISTICS

★★★★★

Price	\$99.99
Feel	Great
Do they work?	YES
Would you Recommend	YES

5 stars as your feet will thank you for buying these shoes!

## » MIO Energy Shots

### THE STATISTICS

★★★★★

Price	\$3.50
Does it work?	YES
Taste	Great
Would you Recommend	YES

You know how much I like RockStar from our last issue, well this stuff is great too!

### THE GOOD

Baby Pomegrante what??? Everybody knows the commercial but I've never tried the stuff until I was working on this column. Late night, shot some in my bottle of water and wow, energy to spare. No shakes, and it helped me finish off this section. So impressed I knock the other product I was writing about out of this spot!

### THE BAD

Not available in Canada.



## » Halo 4



### THE GOOD

Halo 4 is finally out and it was worth the wait! Great storyline, amazing graphics and the online play is superior to previous versions of the game ... play it and find out for yourself. Very addictive, get ready to play for hours - jump on the bike while you play and you have the ultimate cardio activity!

### THE BAD

As the game was just recently released, they're aren't enough maps yet - come on 343, make some more maps!!!

### THE STATISTICS

★★★★★

Price	\$59.99
Fun to play?	YES
Worth the \$\$?	Hell Ya
Would you Recommend	YES

4 stars only because I want more multiplayer maps!





### THE GOOD

Nike+ FuelBand tracks your daily activity on your i-device including running, walking, lifting, cardio and dozens of other activities. It tracks each step taken and calorie burned. And on top of that, it also tells the time of day!

### THE BAD

Expensive, but if you have the extra cash to blow, then get one and you'll be the coolest kid on the block.

### THE STATISTICS



Price	\$149
Quality	Great
Does it work?	YES
Would you Recommend	YES

Would recommend if you have the money to spend on cool gadgets.

## » Fat Gripz

### THE STATISTICS



Price	\$39
Quality	Great
Do the work?	YES
Would you Recommend	YES

Amazing product to increase your grip strength, you'll notice the difference immediately.

### THE GOOD

Fat Gripz are one of those, "why the hell didn't I think of that" products. Made from a military grade, high-density compound, they grip the bar without compressing making the standard bar thicker, increasing your muscle activation for better gains in strength and mass. They fit over virtually every barbell and dumbbell.

### THE BAD

Didn't think of this idea first!



## » Crystal Head Vodka



### THE GOOD

Smoooooooooooooooooth, smooth, smooth. Did I mention Crystal Head vodka is smooth. Made by Dan Ankruid - yes Venkman from Ghostbusters, this vodka kicks ass! Put in the freezer and you can drink it straight. One of the best vodkas I've ever tasted!

### THE BAD

Nothing, Crystal Head tastes great and comes in the coolest bottle ever made!

### THE STATISTICS



Price	\$39.95
Smooth?	Yes
Taste	Great
Would you Recommend	YES

If you're a vodka lover give Crystal Head a try... and when you done the bottles make cool bookends!

# » Smartshake Shaker Cup



## THE GOOD

SmartShake has three compartments mean you can store several servings of your nutritional supplements – creatine, protein, vitamins, capsules, pre- or post-work supplements... whatever you like, wherever you go, you'll never a serving!

## THE BAD

That there isn't a JACK'D version of the cup - but we're working on it!

## THE STATISTICS



Price	\$9.99+
Various sizes	Yes
Does is work?	YES
Would you Recommend	YES

Great for holding all of your supplements in one location!

# » Lean Bodies Consulting Food Substitution App

## THE STATISTICS



Price	\$4.99
Quality	Great
Worth the price?	Every penny!
Would you Recommend	YES

You can't put a price on variety in your diet, get this app today!

## THE GOOD

Ever wonder how much steak you should eat instead of fish for a meal, or chicken, or veal, or... well this app lets you calculate just that! Type in how much of one food you are going to eat and find out how much of another will equal that serving - great for switching things up when your meal plan gets in a rut!

## THE BAD

A little pricy for an app, but if you're serious about your diet and training, this app is a must have in your arsenal - hell, isn't your progress worth \$5 anyway!?!?



# » Ab Enhancer



## THE GOOD

Just when you thought you've seen it all - here comes the AB Enhancer! Why go through all the pains of dieting, counting your calories and measuring your food? Now all you need to do is sit back on the couch, chug back a cool, refreshing beer while munching on hot wings and BBQ potato chips, watching the big game on TV, slap this bad boy on and in no time you'll have a six pack! Just think, the fatter you get the deeper your "ab" cuts will be!

## THE STATISTICS



Price	\$19.99
Easy to use?	YES
Does is work?	YES
Would you Recommend	great gag gift

5 stars you'll never buy another piece of equipment again once you try this baby out!!

**CLICK HERE TO WATCH!!!!!!!**

Rob Belisle  
IFBB Pro  
AG Athlete

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# Ask The General

**Q** When it comes to training for mass, what do you recommend for sets and reps? When I start getting ready for my show, should I go higher reps to burn fat?

**A** Let me answer your questions in order. The normal recommendation for gaining mass is reps of 6-8 for three sets on anywhere from 3-6 exercises per body part. Personally I think you can still gain mass on reps of 10-12 or even more! In my experience changing the rep range, the exercises and the tempo of each set on a frequent basis is what leads to continual gains. Muscles are smart and adapt to similar stresses very quickly. I suggest changing things up every 4-6 weeks, if not more often.

Now on to your second question. Probably the biggest mistake I see bodybuilders do is changing up their training to exclusively high reps when getting ready for a show. The notion that training with higher reps will burn more fat is kind of crazy. Certainly training with less rest time between sets will help cardiovascularly, but by simply lightening the weights you are telling your muscles that you don't require them to lift heavy weight anymore. The result? Your muscles will shrink. Keep your weights as heavy as you can, making safety priority number one, and you will retain more muscle leading to your show.

**Q** Is pre/intra and post workout nutrition important?

The nutrition you take in pre-workout is probably THE most important nutrition of your day. You want to supply yourself with high quality carbohydrates and protein before, during and after your weight training session. For pre and post, carbohydrates like sweet potato, basmati rice and red potato are great. Look for protein sources like chicken breast, turkey and lean red meats for protein.



During exercise you will want a quick absorbing protein like whey isolate and a fast carbohydrate that requires little digestion like waxy maize. I recommend ISO-Phase and GLYCO-Phase. ISO-Phase is a whey isolate with added glutamine and BCAAs. GLYCO-Phase is a waxy maize with added vanadyl and chromium



to mimic insulin – one of the body's most powerful anabolic hormones. Mix one scoop of each into one liter of water and sip on it while you train.

I also recommend taking GP3 20-30 minutes before you train and immediately after. This ensures you get your performance supplements like creatine, glutamine, BCAAs, taurine and beta-alanine around your workouts when it's most important. You can also add Nitric Impact to your pre-workout GP3 to get extra focus and energy for your workout as well as a super-enhanced muscle pump!

*Chris Johnson is the CEO of Advanced Genetics and PureForce Nutrition. He is a national CBBF champion and certified personal trainer and is considered one of Canada's leading experts on sports nutrition and supplementation.*





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WARNING: May contain some sh\*t  
some people may find offensive! ← - - -

# MOSCA MADNESS WITH BIG V!



**O**k, let me first introduce myself for people not already in the know... my name is Valerio Mosca, I'm not just any other, ordinary bodybuilder - I'm a bodybuilding fanatic!

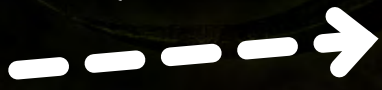
2013 looks like it's going to be one hell of a year. Not only is JACK'D Magazine taking the bodybuilding world by storm and I'm getting awesome feedback from the fans about my first column. Recently my friend, Jay Cutler announced he's going to compete at the Olympia in September and take on his good friend (and my buddy also) Phil Heath for the title of Mr. Olympia! When I heard this I went f\*#kin' nuts! This is going to be the best Olympia ever - Jay's going for his fifth title win and Phil is trying for his third - f\*#kin' eh!

To help promote his return to the stage, Jay agreed to

come to my home town of Toronto in March for another one of his amazing meet and greet, guest-posing seminars. If you've never been to one I suggest you check it out. Jay's a great champ and representative to the sport of bodybuilding, he takes the time to meet with all of his fans no matter how long it takes. The last time he was in town was a blast, there were over 500 fans jammed up to the rafters to meet with Jay and to pick his mind on his training, dieting, supplementation, posing - you name it, they asked about it!

Check out the video below of Jay at his last seminar we did together, who else but Cuts would get the crowd into such a frenzy by going through the audience posing and then bringing people up on stage to pose with him. Imagine, you are one of the lucky people on earth to say that you were up on stage posing with 4-time Mr. Olympia Jay Cutler!

...a clip from Jay's last visit to Toronto we did right after he won #4...





...Jay always takes the time to meet fans, even make new ones! check out what happens when Jay visits Iceland. they've never seen anything like this before ...

“I can't wait to come see all my fans in Toronto; I appreciate meeting each and everyone of you. This is an event you wont want to miss out on as you can come and hang out with me for an amazing seminar and guest pose. There will be tons of free give aways and things to be won!” Jay Cutler

Click on the poster to learn more about Jay's next seminar with me in Toronto!

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- Learn some of his bodybuilding secrets
- Take a picture with Jay and get his autograph
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ATHLETICS



# NO MATTER WHERE I AM OR WHAT I'M DOING I ALWAYS TAKE THE TIME TO EAT CLEAN!

**Q** : I get emails from people all the time asking me how I stick with my diet year round when I'm travelling the globe on business workin' the booth at bodybuilding expos and watchin' the action on stage ... if you noticed, I didn't mention what stage! ;)

**A** : Throughout the years I've come up with many ways to keep eating while on the road, in the gym or doing whatever. But no matter what, I always make sure never to miss a meal!

The easiest way to make sure you always have enough food is to prepare your meals by cooking a sh\*t-load of chicken, beef, whatever, at once so it lasts you a few days. I get mine from a place called JW Foods who ships it right to my door; can't get any easier than that! Then I separate my portions into tupperware, fill up my cooler bag and take it with me everywhere. Make sure you have a good cooler bag that keeps everything cold the entire day so your meals don't go bad giving you da' trots!

I also always keep a can of

tuna in my car and a few bottles of GP8 with me just in case because you don't need a cooler. I hate tuna, to me it tastes like sh\*t. Reminds me of this girl I met in the Phillipenes but thats a story for another day. Anyway it's a good source of protein so I always have a can with me.

One time when I got stuck in traffic at meal time, so I pulled off the road, cracked upon the can and wolfed it down. Since I can't stand the taste of it I buy the flaked tuna in water, shake the can up for a few minutes so it turns into mush, grab my fork, take a bite and immediately wash it down with some water. Takes me about a minute to finish the can. Worst minute of my life, but I feel great after ... tuna, the food you love to hate!

Another trick I use, when I cant stand the tuna anymore, is to pack up some MUTANT WHEY in my Smartshake cup (Jay Cutler edition of course!) load it up with the GP8 water and take it with me. I use this method if I'm going out to catch a flick or to a game; especially with a lady friend, you just can't crack open the



tupperware or can of tuna on a date. Imagine that smell as you're watching Die Hard and you crack open your meal of Talapia or that awful, awful tuna. Everyone in the audience will hate you. I know, one time a few years back a couple of people brought tupperware into the theater, sat in front of me, opened it up and started eating fish - WTF!!!! How are you suppose to make a move on your date when you got that going on? Certainly decreases your appetite making you not want to eat out after that!



**E**very time you go to the gym you see this hot chick training in an outfit that would make the Pope drool ... you know the type, dressed to show off but acts like she doesn't like it. Why would she dress that way if she didn't want every guy, and some girls, to stare like a deer in the headlights? I know you want to go talk to her but don't have the balls to do it. Well, I've put together my top 20 pick-up lines you can use to break the ice so you can pick up that hot chick and make everyone in the gym green with envy!

Below are my favorite pick up lines compiled by the world's leading scientists in the field of pickupology and I'm parting this knowledge to you ... have fun!

20: I've had quite a bit to drink, and you're beginning to look pretty good.

19: You're so beautiful I would marry your brother just to get into your family.

18: Yeah, it's big and if you pet it nicely, it spits!

17: Do you believe in love at first sight, or should I walk by again?

16: Something tells me you're sweet. Can I have a sample?

15: Are those lumber jack pants you're wearing? They are giving me a wood.

14: My love for you is like uncontrollable diarrhea. I just can't hold it in.

13: Do you work for UPS? I could have sworn I saw you checking out my package.

12: Baby, you're so sweet, you put Hershey's outta business!

11: Crap. Something is wrong with my cell phone. {Oh Really. What is that?} Its just that ... your numbers not in it.

10: If I received a nickel for everytime I saw someone as beautiful as you, I'd have five cents.

09: Are you a parking ticket? Because you've got FINE written all over you.

08: Did you have lucky charms for breakfast? Because you look magically delicious!

07: If you were a new hamburger at McDonald's, you would be a McGeorgeous.

06: I'll show you my tan lines if you show me yours.

05: Hi, I have big feet.

04: Are you related to Jean-Claude Van Damme? Because Jean-Claude Van Damme you're sexy!

03: Is that a mirror in your pocket? Because I can see myself in your pants.

02: Baby did you fart, 'cause you blow me away!

01: I think it is time I tell you what people are saying behind your back. Nice Ass!

**WTF!**

**A WOMAN AND HER LITTLE BOY WERE WALKING THROUGH A PARK AND THEY PASS TWO SQUIRRELS HAVING SEX. THE BOY ASKS, "MOMMY, MOMMY, WHAT ARE THEY DOING?" THE LADY RESPONDED, "THEY'RE MAKING A SANDWICH." THEN THEY PASS TWO DOGS HAVING SEX AND THE LITTLE BOY AGAIN ASKS WHAT THEY WERE DOING. HIS MOTHER AGAIN REPLIED THEY WERE MAKING A SANDWICH. DAYS LATER THE BOY WALKS IN ON HIS MOTHER AND FATHER AND SAID "MOMMY, DADDY, YOU MUST BE MAKING A SANDWICH BECAUSE, MOMMY HAS MAYONNAISE ALL OVER HER MOUTH!!!!"**

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WTF!



RICH PLANA, NPC CHAMPION

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## CHECK OUT SEASON 2 LEAVING HUMANITY BEHIND: EPISODE #3 MUTANT MEALS WITH RICH PIANA

In this episode, Rich talks about his eating habits when it comes to both bulking up, and dieting down for a contest. He goes into to detail about carb cycling, and protein intake. Rich says if you're wondering why you're not getting bigger, it's simple YOU'RE NOT EATING ENOUGH!







## 2013 Arnold Classic Preview

In just a few short days the 2013 Arnold Classic will be upon us and the bodybuilding world will head to Columbus Ohio to check out the action! The Arnold Sports Festival is the biggest event in the bodybuilding calendar year and includes the Arnold Classic, Ms. International, the Fitness, Figure and Bikini International, strongman, arm wrestling, bench press competitions, MMA, fencing, ju-jitsu; it has it all. Every year over 200,000 people make their way to downtown Columbus to either compete in one of the many competitions, to visit the tradeshow or watch their favorite IFFB Pros hit the stage and battle it out for one of the biggest titles, Arnold Classic Champion, second next only to the Olympia crown.

Every year 13 of the world's top pro men get invited to compete for the title and without the presence of the returning champion Branch Warren, the title is up for grasp! Will there be a new champion this year like Johnnie Jackson, or Fouad Abiad, or will former champion Dexter Jackson take back his title on his way to the Olympia? Let's break down the competitor list and let you know what the guys hear at the JACK'D head office think.



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**February 28 - March 3, 2013**  
**Columbus, Ohio**

Arnold Classic Champ



BRANCH WARREN



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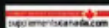
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# BUILD PROTECT REPAIR!

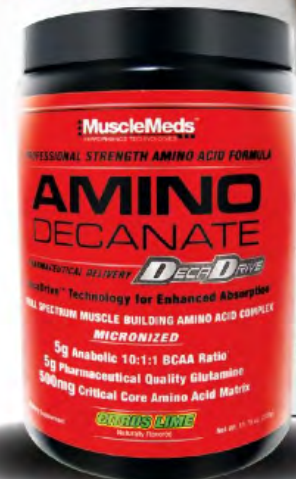
AMINO DECANATE is the most powerful and advanced amino acid complex available, designed to trigger maximum anabolic effects and prevent rate limiting amino acid deficiencies and catabolism often experienced during intense workouts. Each serving of AMINO DECANATE provides 5 grams of BCAAs in a highly anabolic 10:1:1 ratio yielding over 4 grams of leucine, plus 5 grams of pharmaceutical quality glutamine and 500 mg of 15 other amino acids known as Critical Core Amino Acids (CCAAs) for peak muscle building, maximum performance and optimal recovery. To enhance the bio-availability and potency of this already highly anabolic formula, AMINO DECANATE features MuscleMeds exclusive DecaDrive Delivery Technology!

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**5g** Anabolic 10:1:1 Ratio BCAA Complex

**5g** Pharmaceutical Quality Glutamine

**500mg** Critical Core Amino Acid Matrix



**10.5g** of  
Amino Acids  
per Serving!

Leucine Loaded:  
**Over 4g**  
per Serving!

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PERFORMANCE TECHNOLOGIES



## BIKINI INTERNATIONAL

Nicole Nagrani, winner of the inaugural Bikini International in 2011 and third last year; will try to win her second title at the third-annual Bikini International. With 2012 winner Sonia Gonzalez not competing, Nagrani; India Paulino, second in 2012; Jamie Baird, fourth in 2012; and Nathalia Melo, fifth last year, lead a pack of 16 bikini pros in the Bikini International.

Gonzalez of California won the Bikini International title in 2012 when she bested second-place finisher Paulino of Florida and inaugural Bikini Internatioanl champion Nagrani of Florida. Gonzalez pocketed \$7,000 for her win in March.

Other top six finishers in 2012 incuded Jamie Baird of Florida, Nathalia Melo of Florida and Juliana Daniell of Georgia. Others who competed last year include Jennifer Andrews, Abbie Burrows, Candyce Graham, Diana Graham, Jessica Jessie, Lexi Kaufman, Justine Munro, Jessica Paxson, Natalie Pennington, Monique Ricardo, Tianna Ta and Christine Vargas.

## FITNESS INTERNATIONAL

Five-time Fitness International champ Adela Garcia will not compete in 2013, leaving the door open for Oksana Grishina, Bethany Cisternino, Tanji Johnson and Myriam Capes to battle for the title among a field of 11. Grishina beat Garcia heads up to win the 2012 Arnold Fitness Europe, while Cisternino (fourth), Johnson (fifth) and Capes (sixth) will look to improve on impressive showings in 2012.

In 2012, the great Adela Garcia of Texas took home her fifth overall Fitness International title and third straight when she bested second-place Camala Rodriguez of Colorado and third-place Oksana Grishina of California. Garcia, who also won the event in 2004, 2006, 2010 and 2011, earned \$25,000 for her victory.

Garcia holds the record for most Fitness International titles with five. Susie Curry (1998, 1999, 2002, 2003) won the even four times, while Carol Lynn Semple (1994, 1995, 1997) won three championsips.

## FIGURE INTERNATIONAL

The Figure International has been one of the most prestigious titles on the IFBB Pro League circuit since it debuted at the Arnold Sports Festival in 2003.

A new Figure International champion will be crowned in 2013. Three-time defending champ Nicole Wilkins will not compete, leaving 2012 Arnold Figure Europe winner Erin Stern as the favorite among a field of 18. Candice Keene, Ava Cowan and Heather Dees all return after top six finishes in 2012, while Camala Rodriguez makes her Figure International debut after finishing second in the Fitness International in 2012.

## MISS INTERNATIONAL

Six-time champion Iris Kyle returns to the Veterans Memorial stage in 2013 after sitting out 2012 due to injury. Kyle will be challenged by five-time winner Yaxeni Oriquen, last year's winner, and Deb Laszewski, who finished second in 2012.

In 2012, Yaxeni Origen of Florida won her fifth Ms. International title by outlasting second-place Debi Laszewski of Florida and third-place Alina Popa of Switzerland. Oriquen earned \$25,000 for the victory.

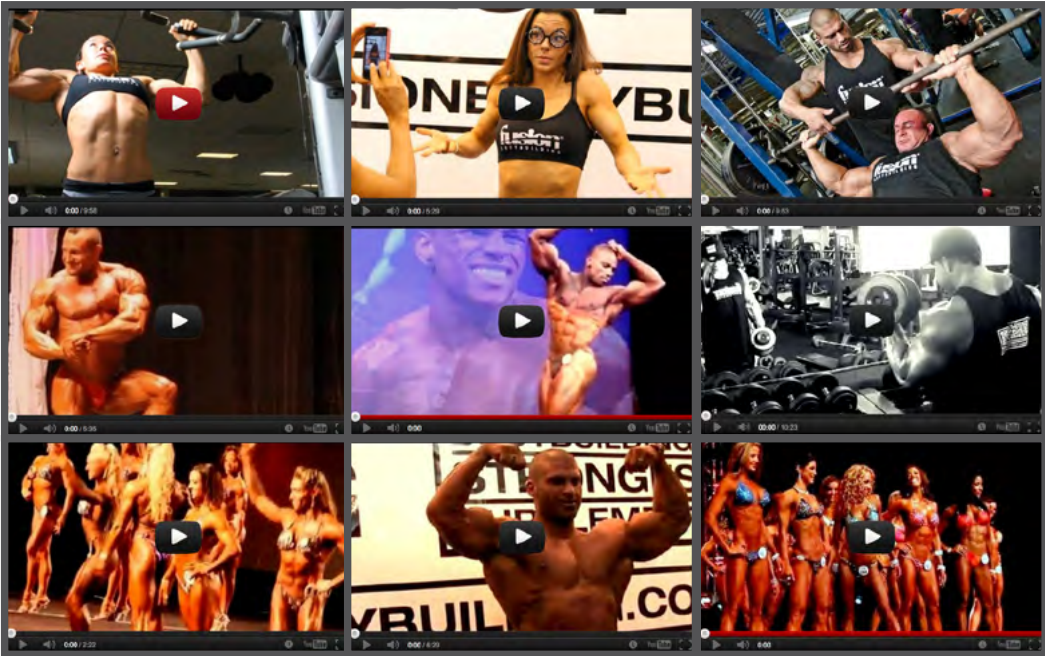
Others in the top six last year include Cathy LeFrancois of California, Kim Buck of Georgia and Brigita Brezovac of Slovenia. Others in the 2012 field included Maria Rita Bello, Tina Chandler, Alevtina Goroshinskaya, Monique Jones, Zoa Lindsey, Geraldine Morgan, Kim Perez and Maria Segura.

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**FOUAD  
ABIAD**





**FOUAD LAST HIT THE STAGE AT THE 2012 ARNOLD CLASSIC AND TOOK 11TH PLACE. HE WAS OFF THAT DAY AND NOT UP TO HIS USUAL CONDITIONING. TAKING THE REST OF THE YEAR OFF TO TRAIN 2013 MAY BE THE YEAR WE SEE "HOSS" PLACE IN THE TOP 5, IF NOT THE TOP 3.**



**CPC NUTRITION - FUSING SCIENCE WITH RESULTS!**  
QUALITY INGREDIENTS • SCIENCE VERIFIED • REAL RESULTS • PRODUCT INNOVATION

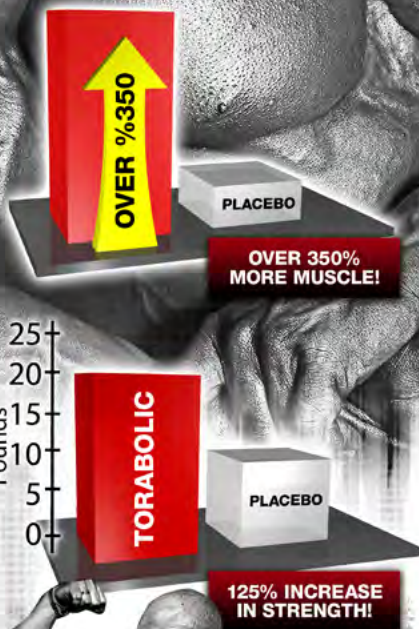
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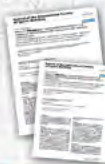
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Remember, what you put into your body is what your body will give you back. Get the results you can trust and trust in CPC Nutrition!



### **PUBLISHED CLINICAL STUDY**

- Wilbon et al. (2010). Effects of a purported aromatase and 5-alpha reductase inhibitor on hormone profiles in college-age men. *IJSNEM*. 20(6): 457-465
- Poole et al. (2009). Effects of TESTOSURGE Supplementation on Strength, Body Composition and Hormonal Profiles during an 8-Week Resistance Training Program. *JISSN*. 6(Suppl 1):P12



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AG Athlete

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# Ask The General



**Q** Hi General! I'm looking to pack on some muscle over the winter. I'm 35 years old and have been training for six years. What AG supplements should I use?

**A** Without getting into each in-depth, here are my recommendations:

GP3 – all your creatine, BCAAs, glutamine, beta-alanine and taurine.

ALPHA and/or Testdex – at 20 your testosterone levels start to plummet – these will maximize your testosterone, minimize estrogen and ALPHA will even boost growth hormone.

ISO-Phase and GLYCO-Phase – use these intra-workout to ensure you get the most from your training

Nitric Impact (optional) – when you need an extra boost and enhanced pump for training.

**Q** What's up, Chris? I'm getting ready for my first men's physique show. I use GP3 and Nitric Impact before every workout. I'm just starting my diet at 12 weeks out. Should I stack Nitric Impact with F-10 so I get the extra fat burning properties of the F-10?

**A** Now would be the time to swap out Nitric Impact for F-10. Nitric Impact plus F-10 would be quite the overload of stimulants and this can actually have a counter-productive result. Too many stimulants will cause the body to release cortisol, the stress hormone and that's not a good thing. While we're on the topic, you should watch your daily stimulant intake both off-season and contest prep. Limit your stims to AM and pre-workout and you'll be fine. When using F-10



(warm-up with 1 or 2 sets and then do 3 work sets each): Dumbbell curls, one-arm preacher curls, reverse barbell curls, one arm push-downs, close grip bench press, dumbbell overhead press.

On Friday superset the following exercises for 15 reps each for a total of 3 sets each: Rope pushdowns and barbell curls, overhead cable press and EZ bar cable curls,

pre-workout, stack it with PumpForce for a killer pump!

kickbacks and concentration curls. Your arms will be growing in no time!

**Q** My arms suck. My chest and back are good and my legs are big from years of soccer as a teenager. Please help!!!

**A** Try this out. On Monday train in the rep range of 6-8 with these exercises



Chris Johnson is the CEO of Advanced Genetics and PureForce Nutrition. He is a national CBBF champion and certified personal trainer and is considered one of Canada's leading experts on sports nutrition and supplementation.



# DARREM CHARLES







**DARREM LAST HIT THE STAGE AT LAST YEAR'S MASTER'S OLYMPIA WHERE HE TOOK 7TH PLACE. IN THE PAST 2 YEARS DARREM HAS ONLY COMPETED 4 TIMES COMPARED TO THE CRAZY AMOUNT OF SHOWS HE DID A FEW YEARS BACK; 6 SHOWS TOTAL IN 2008. DOES DARREM HAVE THE DRIVE TO TAKE ON THE YOUNG GUNS HUNGRY FOR THE TITLE, WE'LL SOON SEE.**







# ISO-TROPIC MAX™

Remie Cole  
SIGNATURE SERIES

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Everyone and their mother has an isolate out these days so why is this one better? For starters, this isolate packs 27g of protein per scoop...way above most isolates. Also, your protein ain't worth squat if you can't absorb it efficiently which is why ISO-TROPIC MAX™ includes the most powerful & clinically studied absorption enhancer on the planet, ASTRAGIN™. You'll never waste another gram of protein again.



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AstraGin™ up-regulates mRNA and transporter protein expression levels of the nutrient transporters that regulate the absorption of amino acids, glucose, glucosamine, and vitamins in human intestinal cells.

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0 g  
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0 g  
Carbs

Only 110  
Calories

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**TONY  
FREEMAN**



**WHAT CAN YOU SAY ABOUT THE X-MAN, HE GETS BETTER WITH AGE! THE DUDE IS JUST MASSIVE, AND FOR HIS TALL STATURE, THAT'S PRETTY IMPRESSIVE. KNOWN FOR HIS X-FRAME, TONEY IS DEFINITELY GOING TO BE TOP 3, MAYBE EVEN THE NEXT ARNOLD CLASSIC CHAMP IF HE CAN FIGHT OFF JOHNNIE AND DEXTER WHO ARE SURE TO BRING THEIR A-GAME.**





# PROTEIN PERFECTION

A new groundbreaking clinical study\* on protein reveals that MHP's Probiolic-SR is superior to whey!

Probiolic-SR, the world's first combination protein supplement of its kind, is formulated to provide fast, medium and slow releasing proteins in one advanced formula. The combination of these precise muscle building proteins provide far greater anabolic and anti-catabolic benefits than any other single protein supplement.

**GYM TESTED.  
RESEARCH PROVEN.**

This recent landmark study confirms that consuming a blend of proteins as found in Probiolic-SR provides a fast releasing whey, medium releasing soy isolate and slow releasing casein, thereby supplying a prolonged delivery of amino acids to the muscles. This combination increases the "anabolic window," making Probiolic-SR superior for consumption following resistance exercise versus whey protein alone.

**Marco Rivera**  
IFBB Pro, Team MHP



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\*Effect of Protein Blend vs. Whey Protein Ingestion on Muscle Protein Synthesis Following Resistance Exercise," Dr. Raessens, et al., 2012.  
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**MARCUS  
HALEY**





**HAVING NOT COMPETED SINCE THE OLYMPIA BACK IN 2011, MARCUS HAS TO REALLY MAKE A STATEMENT ON STAGE IF HE WANTS TO PLACE WELL. HAVING TAKEN OVER A YEAR OFF TO BUILD HIS PHYSIQUE, HE COULD SURPRISE US ALL AND WOW THE JUDGES IN 2013.**





# CUTLERS ATHLETICS

*Jay Cutler*



**APPAREL FOR THE  
HARD-CORE ATHLETE**





**DEXTER  
JACKSON**





**DEXTER "THE BLADE" JACKSON IS ON A ROLL. 4TH AT THE OLYMPIA AND WINNING THE MASTER'S OLYMPIA, WHEN DEXTER'S ON, HE'S HARD TO BEAT. TIGHT ABS WITH FULL MUSCLE BELLIES, DEX IS ALSO ONE OF THE GUYS WHO GETS BETTER WITH AGE. WATCH OUT, HE'S TOP 3 IF NOT ONE OF THE GUY WHO IS POISED TO WIN THE TITLE.**



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MARCH 1-3, 2013, COLUMBUS, OHIO







**JOHNNIE  
JACKSON**

**JOHNNIE IS JUST  
MASSIVE ... MASSIVE,  
MASSIVE, MASSIVE!  
WITH THE THICKEST  
BACK AND TRAPS  
IN BODYBUILDING  
TODAY, YEAR AFTER  
YEAR HE HAS BEEN  
CARVING HIS WAY TO  
THE TOP AND IS IN  
OUR TOP 3 TO TAKE  
THE AC! WATCH OUT,  
THERE COULD BE  
ANOTHER JACKSON  
TO HOLD THE  
ARNOLD CLASSIC  
CROWN.**











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by Design**

## KILL INCONVENIENCE

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- High protein 'clean' meal
- Very easy and convenient



Enjoyed by Dana Linn Bailey



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**MICHAEL  
KEFALIANOS**





**MIKE'S COMPETITION SCHEDULE OVER THE PAST FEW YEARS HAS BEEN GRUELING AND HIS PLACINGS REFLECT THAT - THEY GO UP AND DOWN LIKE A YO-YO. THAT BEING SAID, HE HAS THICK MUSCLES AND WHEN HE'S ON, BRINGS A DRY, SHREDDED PHYSIQUE TO THE STAGE. IF HE PLANS 2013 OUT RIGHT, HE'S SURE TO SNAG A COUPLE OF FIRST PLACE FINISHES AND PLACE CLOSE TO THE TOP 5 AT THE ARNOLD.**





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& STRENGTH**



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# CEDRIC MCMILLAN





HAVING NOT COMPETED SINCE HE WON THE 2012 NEW YORK PRO, CEDRIC HAS CLASSIC LINES AND IS THOUGHT OF BY MANY TO HAVE WHAT IT TAKES TO BE A FUTURE MR. OLYMPIA. TAKING ALMOST A YEAR OFF TO SERVE HIS COUNTRY, WILL CEDRIC BE ABLE TO TAKE IT; WE THINK TOP 5 FOR SURE IF NOT IN THE TWO!





# EXT



**THIS IS MY SHADOW...  
AND THERE IS ONLY ROOM  
FOR ONE GUY IN IT!  
I AM DONE PLAYING SANTA  
NO MORE GIFTS.**



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†Based on early-stage independent third party in vivo and / or in vitro model scientific research data findings. When combined with a proper exercise and nutrition regimen.





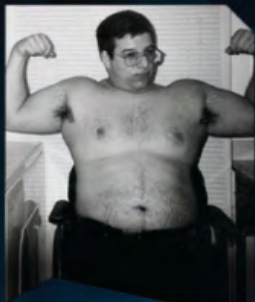
**BEN  
PAKULSKI**



**AFTER CALLING OUT  
BRANCH AT THE  
OLYMPIA ONLY TO  
PLACE 11TH, BEN  
"PAK MAN" PAKULSKI  
IS GOING TO HIT IT  
HARD TO BEST HIS  
4TH PLACE FINISH  
AT LAST YEARS' AC.  
WITH THE FREAKIEST  
LEGS THAT'LL BE  
ON STAGE, IF BEN  
BRINGS UP HIS BACK  
TO MATCH HE'LL BE  
UNSTOPPABLE.**







## NICK SCOTT

Get inspired by Nick's transformation at:  
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THEY SAID  
I'D NEVER  
WALK  
AGAIN.

THAT'S WHEN  
I UNLEASHED

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Featured products were not necessarily used in sponsored athlete's transformation.




**ED  
NUNN**




**MUCH LIKE THE X-MAN, ED IS ONE OF THE TALLER BODYBUILDERS IN THE LINEUP AND HAS TO CARRY MORE MUSCLE ON HIS FRAME TO COMPETE WITH THE SHORTER GUYS. IN HIS PAST FEW SHOWS, ED HAS SHOWED US THAT AGE DOESN'T MATTER AS HE GETS BETTER AND BETTER EVERY TIME HE COMPETES. DEFINITELY TOP 5.**





A highly muscular man with a mohawk hairstyle is shown from the waist up. He is wearing a black tank top with the SmartShake.com logo and text. He is holding a black shaker bottle with both hands. The background is a dark, textured wall.

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 **SmartShake**.com™



# RONNY ROCKEL





**AFTER A POOR SHOWING AT THE OLYMPIA, CAN RONNY STILL BRING IT TO THE STAGE OR HAS HIS TIME COME AND GONE. WE HOPE NOT BECAUSE WHEN HE'S ON, RONNY HOLDS HIS OWN WITH THE BEST OF THE BEST; INCONSISTENCY IS HIS WORST ENEMY.**







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MAXIMUM HUMAN PERFORMANCE





**FRED  
SMALLS**



**RELATIVELY A NEWCOMER TO THE PRO STAGE, FRED "BIGGIE" SMALLS WON HIS PRO CARD BACK IN 2010 AND HAS BEEN WORKING HIS ASS OFF TO MAKE AN IMPACT IN THE IFBB RANKS BY COMPETING IN SOME OF THE SMALLER SHOWS AND MAKING HIS OLYMPIA DEBUT LAST YEAR. FRED IS ONE OF THE NEW GUYS TO WATCH FOR IN THE FUTURE.**





RICH FRANK, 2005 *California* NPC CHAMPION

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WASN'T TESTED ON  
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MARCH 1-3, 2015, COLUMBUS, OHIO





**HIDETADA  
YAMAGISHI**



**"THE DRAGON" WAS PLANNING TO TAKE THE EARLY PART OF 2013 OFF DUE TO HIS HECTIC SCHEDULE AT THE END OF 2012 AND HIS POOR SHOWING AT THE OLYMPIA. HOWEVER THAT WAS NOT MEANT TO BE AS HE'S PUMPED UP TO BRING A PHYSIQUE THAT WILL BLOW US AWAY AND SHOW THE BODYBUILDING WORLD WHY HE IS THE BIGGEST THING TO EVER HIT THE WEST FROM JAPAN SINCE GODZILLA!**







# MY LEGEND CONTINUES...

8x 1998-2005  
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The Ultimate Pre-Training  
Muscle Builder

*Ronnie Cole*  
SIGNATURE SERIES



PHOTOS BY PIERRE LAMELY

**“The Only SUPPLEMENTS Good**



# MINE IS JUST BEGINNING...

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FLEXATRON  
RHODEN**

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**World's 1<sup>st</sup> Concentrated  
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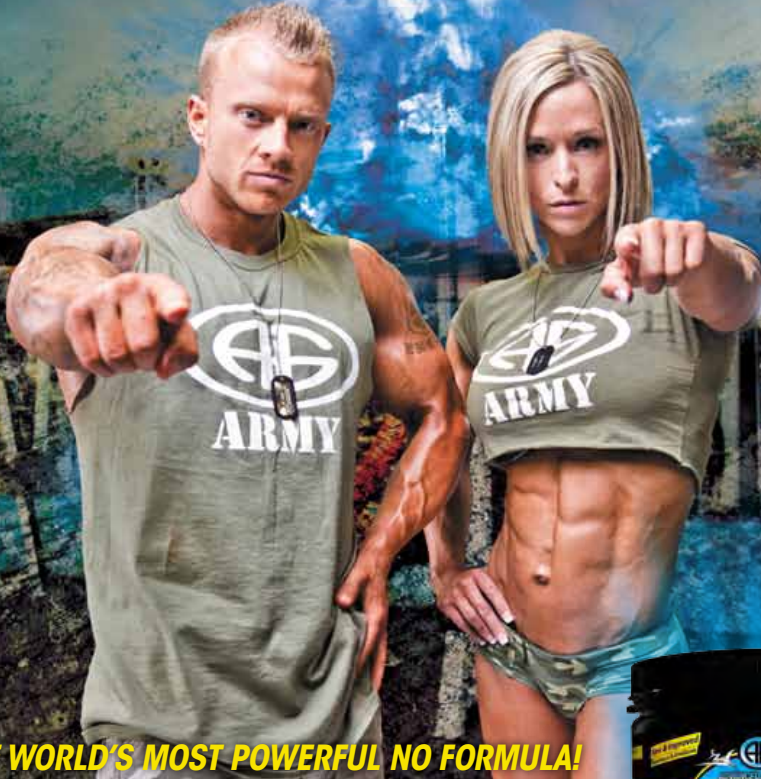
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**Enough To Have My Name On Them"**



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**NICK TRIGILI**



PRESENTS

## “NICK KNOWS...”



**Q:** I'M IN A RUT WHEN DOING B'S, NO MATTER WHAT I TRY I DON'T SEEM TO GET THE SAME CONTRACTION AND PUMP AS I USE TO - WHAT CAN I DO?

**A:** SOUNDS TO ME LIKE YOUR BODY IS STARTING TO ADAPT TO YOUR TRAINING AND YOU NEED TO SWITCH THINGS UP AND SHOCK THEM BACK INTO LIFE. ONE WAY I DO THIS IS BY THROWING IN A SET OF SEATED 21'S USING DUMBBELLS AT THE END OF MY ROUTINE. IF YOU'VE NEVER TRIED 21'S BEFORE YOU NEED TO.

21'S ARE SIMPLY THE FULL RANGE OF MOTION FOR A BICEP CURL BROKEN INTO 3 PARTS OF 7 REPS EACH FOR A TOTAL OF 21 REPS:

7 REPS DONE IN THE LOWER RANGE OF MOTION

7 REPS DONE IN THE UPPER RANGE OF MOTION

7 REPS DONE WITH THE FULL RANGE OF MOTION

FOR STEP 1 YOU DO 7 REPS FROM THE START POSITION OF THE CURL WITH YOUR ARM FULLY





EXTENDED UP UNTIL YOUR ARM IS 90 DEGREES PARALLEL TO THE FLOOR. YOU NEED TO DO THIS MOVEMENT WITH FULL CONTROL. AS YOU DON'T WANT TO GO UP TO HIGH. THEN ON THE 7TH REP YOU DO THE ENTIRE MOVEMENT SO YOUR BI IS FULLY CONTRACTED. THEN INSTEAD OF LOWERING YOUR ARM TO THE STARTING POSITION, YOU LOWER IT HALF WAY IN A CONTROLLED MANNER UNTIL, ONCE AGAIN YOUR FOREARM IS PARALLEL TO THE FLOOR AT A 90 DEGREE ANGLE. REP THIS OUT FOR 7 AND THEN DO ANOTHER 7 REPS OF THE FULL MOVEMENT. I'M TELLING YOU, YOUR ARMS WILL BE SCREAMING FOR YOU TO STOP AT THE END!

ANOTHER TRICK I USE, SINCE YOU SHOULDN'T DO ZIS EVERY TIME YOU DO BIPS IS TO THROW IN A SET OF CABLE CURLS AT THE START OF MY ARM ROUTINE. I'M A FAN OF USING FREE WEIGHTS AND ONLY USE CABLES WHEN I WANT TO CONFUSE MY MUSCLES IF I START TO HIT A RUT. IT SOUNDS SIMPLE ENOUGH, BUT IF YOU DON'T USE CABLES ON A REGULAR BASIS AND THEN THROW A FEW SETS INTO YOUR WORKOUT YOU'D BE AMAZED HOW WELL YOUR BIPS WILL RESPOND. I PERSONALLY LIKE TO USE A STRAIGHT BAR GRIPPING IT JUST A BIT SHORTER THAN SHOULDER WIDTH APART AND DO 3 SETS WITH A WEIGHT I CAN DO 15-20 CLEAN REPS; I'M NOT TRYING TO BUILD MASS HERE, I DO THEM AT THE START OF MY ARM WORKOUT TO GET THEM PUMPED UP WITH BLOOD UNTIL THEY FEEL AS IF THEY ARE GOING TO SPLIT AT THE SEAMS! I DON'T WANT TO BE ABLE TO BUTTON MY SHIRT AFTER I'M DONE ARMS I WANT THEM SO PUMPED UP!

ALONG WITH THE STRAIGHT BAR I SOMETIMES USE THE ROPE FOR MY SETS SO I HIT MORE OF THE FOREARM ARM AND BRACHIALIS AND EVEN TWIST OUT THE WRISTS AT THE TOP OF THE MOVEMENT TO GIVE MY ARMS A LITTLE EXTRA POP. ON SOME DAYS YOU CAN EVEN TRY COMBINING THE TWO AND DO A SET OF CABLE ZIS; ANYTHING YOU CAN DO TO VARY IT UP A BIT SO YOUR MUSCLES DON'T KNOW WHAT THE HELL YOU'RE DOING AND YOU SPARK THEM BACK INTO LIFE.

PROPER SUPPLEMENTATION IS ALSO A BIG PART OF GETTING YOUR BODY TO RESPOND



TO TRAINING AND YOU NEED A GOOD PRE-WORKOUT FORMULA. I USE NO-BULL FROM MUSCLEMEDS TO HELP GIVE ME THE ENERGY TO BLAST THROUGH MY BICEP WORKOUT AND TO PUMP THEM UP SO THEY FEEL LIKE THEY'RE GOING TO BURST.

NO BULL IS UNLIKE ANY OTHER PRE-WORKOUT FORMULA I'VE TRIED. I LIKED THEIR PRODUCTS SO MUCH THAT I CONTACTED MUSCLEMEDS TO HELP REPRESENT THE COMPANY! THE GUYS AT MUSCLEMEDS IN THE RESEARCH DEPARTMENT KNOW THEIR SHIT AND CAME UP WITH A PRE-WORKOUT SUPPLEMENT THAT ACTUALLY DELIVERS REAL NITRIC OXIDE TO YOUR MUSCLES AND NOT JUST NITRIC OXIDE PRECURSORS LIKE SOME OTHER PRODUCTS THAT AREN'T REAL NITRIC OXIDE. THEY ALSO INCLUDED A COMBINATION OF POTENT ANABOLIC AND ERGOGENIC COMPOUNDS TO HELP

YOU BLAST THROUGH YOUR WORKOUTS. THIS STUFF WORKS. I'VE NEVER EXPERIENCED THE FULL BLOWN "REAL NITRIC OXIDE MUSCLE PUMP" PRIOR TO USING THIS PRODUCT, AND I HAVE TO SAY IT'S UNREAL... IT'S EVEN BETTER THAN SEX!

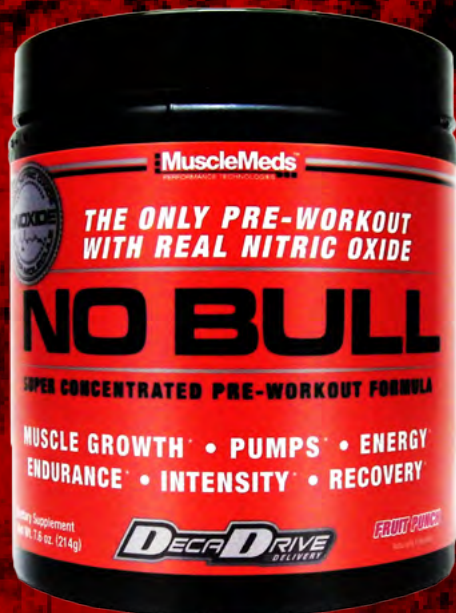
NO BULL DOESN'T STOP AT JUST GIVING YOU AN AWESOME PUMP EITHER! IT ALSO CONTAINS MUSCLEMEDS EXCLUSIVE DECADRIVE DELIVERY WHICH HELPS DRIVE THE STUFF DIRECTLY INTO YOUR MUSCLES WHERE IT'S NEEDED MOST TO PUT AND KEEP YOU IN AN ANABOLIC STATE OF EXTREME POWER, INTENSITY, ENERGY AND ENDURANCE TO FUEL YOUR WORKOUTS. THE UNIQUE MIND-MUSCLE SYNERGY CREATED BY NO BULL ALLOWS YOU TO TRAIN HARDER, HEAVIER AND LONGER SO YOU CAN MAXIMIZE MUSCLE GROWTH AND PERFORMANCE AND PUMP THOSE B'S UP LIKE YOU'VE NEVER EXPERIENCED BEFORE.

I MEAN IT WHEN I SAY IT, NOTHING ELSE COMES CLOSE TO GIVING MY CRAZY PUMPS LIKE THIS; NO BULL IS THE NO-ONSENSE HARDCORE PRE-WORKOUT FORMULA! I DEMAND THE BEST OF BEST OF MY SUPPLEMENTS AND YOU SHOULD TOO. FOR REAL PUMPS, REAL POWER AND REAL RESULTS, NOTHING COMES CLOSE TO NO BULL! USE THE TIPS I OUTLINED ABOVE, TRY THROWING 21'S INTO YOUR WORKOUT ROUTINE, SWITCH THINGS UP AND DO SOME HIGHER-REP CABLE CURLS AND USE NO-BULL BY MUSCLEMEDS AND YOU'LL HAVE THE BEST ARM WORKOUTS OF YOUR LIFE!



**REAL PUMPS  
REAL POWER  
REAL RESULTS**

- + Boost Energy & Intensity
- + Promote Anabolic Muscle Growth
- + Maximum Muscle Pumps
- + Increase Strength & Endurance
- + Speed Recovery & Recuperation
- + The Only Pre-workout With REAL NITRIC OXIDE



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# EXTREME HORMONAL MANIPULATION MAXIMUM MUSCLE GAINS

When MHP scientists developed the 5-Stage Pro-Testosterone Technology exclusively for T-BOMB II, they set a new standard in testosterone supplementation by addressing key endocrine system hormonal factors. The main reason other test formulas have failed you is because they are not properly formulated to optimize hormonal manipulation. Only T-BOMB II addresses the critical HTPA axis [hypothalamic-pituitary-adrenal axis] for maximum muscle growth. T-BOMB II is the choice testosterone formula for many world class bodybuilders and powerlifters because IT WORKS! Join the many satisfied customers and elite athletes who have relied on T-BOMB II to give them the anabolic edge.

## EXCLUSIVE 5-STAGE PRO-TESTOSTERONE TECHNOLOGY

T-BOMB II goes beyond testosterone into a new era of hormone manipulation with its exclusive 5-Stage Pro-Testosterone Technology. Recent research has discovered that many hormonal factors must be regulated in order to achieve the maximum anabolic effects of testosterone to trigger muscle growth. T-BOMB II has been scientifically formulated to help optimize your hormonal profile and achieve homeostasis (hormonal balance), allowing you to maintain higher testosterone while helping keep "Growth Killers" like HTPA negative feedback, estrogen and SHBG in check! Remarkably, most other testosterone products on the market do not properly address these critical hormonal factors, which can in fact result in lowering your natural levels of testosterone over time. By achieving elevated testosterone and homeostasis, T-BOMB II will help prevent "testosterone shut down" and allow you to make far greater gains in muscle mass, strength and male performance.

“ Making huge gains in muscle mass requires more than just testosterone – it takes total hormonal manipulation. That’s what sets T-BOMB II apart from all other formulas. ”

**Victor Martinez**  
– IFBB Pro Bodybuilding Champion

The Undisputed  
Unadulterated  
Undeniable  
**KING**

of **TESTOSTERONE!**



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# I.F.B.B. Events for 2013...

---> Don't miss any of the action!

Contest info and dates subject to change.

## MARCH 9-10 AUSTRALIAN PRO

Aussie, Aussie, Aussie  
Oi Oi Oi!  
The weekend after the  
AC many of the top  
pros head down under  
to battle for the  
Australian crown. After  
the show you can  
head out to the beach  
and swim with the  
sharks!

PRIZE: \$20,000  
MORE INFORMATION:  
promuscle@dohertysgym.com  
TO BOOK CALL: 613-9388-0866

## APRIL 11-14 FIBO POWER GERMANY

Head out for Europe's  
biggest tradeshow  
and check out the  
competition on stage,  
remember to bring  
your glow sticks  
because Germany  
has one crazy-ass  
night-life!

PRIZE: \$20,000  
MORE INFORMATION:  
jens.thieme@reedexpo.de  
TO BOOK CALL: 705-561-0775



## APRIL 26-27 ARNOLD CLASSIC BRAZIL

The Arnold makes its  
way to South America  
and beautiful Brazil  
in the first competi-  
tion for the IFBB in a  
country known for its  
amazing beaches!

PRIZE: \$???  
MORE INFORMATION:  
www.arnoldclassicbrasil.com.br  
appleat@terra.com.br



## MAY 25 NEW YORK PRO

This is one of the  
events you can't  
miss! One of the  
loudest crowds you'll  
ever hear, New York  
doesn't dissappoint  
bringing some of the  
best the IFBB has to  
offer - Steve and Bev  
always put on one of  
the best shows of the  
year!

PRIZE: \$20,000  
MORE INFORMATION:  
bev@bevfrancis.com  
TO BOOK CALL: 705-561-0775

## featured event



MARCH 1-2, COLUMBUS OHIO

## ARNOLD CLASSIC

This is one weekend you don't want to miss  
- from bodybuilding, to MMA, to strongman,  
armwrestling, and power lifting and of course  
the ARNOLD CLASSIC, the Arnold has it all!

PRICE: \$300,000  
MORE INFORMATION: mattlorz@rrcol.com  
CALL: 614-443-1877

## MAY 31/JUNE 1-2 TORONTO PRO SUPERSHOW

This year's event  
showcases not only  
IFBB Pro bodybuilding  
but also MMA, boxing,  
arm wrestling, a  
strongman challenge,  
kickboxing, model  
searches, amateur  
competitions, the one  
and only Valerio and  
more!

PRIZE: \$20,000  
MORE INFORMATION:  
tonhache@unitz.ca  
TO BOOK CALL: 705-561-0775

## JULY 5-6 WINGS OF STRENGTH CHICAGO

This show in the  
Windy City features  
both open and 212  
men's bodybuilding,  
women's figure,  
physique and body-  
building as well as an  
NPC national  
qualifying event.

PRIZE: \$20,000  
MORE INFORMATION:  
Tim Gardner  
tgflex@aol.com  
TO BOOK CALL: 813-908-7843

## AUGUST 9-10 PBW CHAMPIONSHIPS FLORIDA

The Grand Hyatt in Tampa Bay is the location for IFBB and NPC bodybuilding, figure, physique and bikini hitting the stage. You can't go wrong in sunny Florida and Tim puts on a good show for the fans - go check it out for yourself!

PRIZE: \$20,000  
MORE INFORMATION:  
Tim Gardner  
tgflex@aol.com  
TO BOOK CALL: 813-908-7843



## AUGUST 16-17 EUROPA PRO DALLAS

The Europa Pro show in Dallas Texas is one of the years big shows you have to see. Not only is Dallas a beautiful city, the show is big and brings in some of the best the IFBB has to offer. And you can also visit the world-famous METROFLEX GYM in Arlington



Texas. It's only about a 15 minute drive from the airport.

PRIZE: \$20,000  
MORE INFORMATION:  
Tim Gardner  
tgflex@aol.com  
TO BOOK CALL: 813-908-7843

## SEPTEMBER 28-29 MR. OLYMPIA VEGAS BABY!

What more can be said, the Olympia is where the best of the best battle it out in sunny Las Vegas for the sports ultimate title - Mr. Olympia! Watch as your favorite pros rock the stage to try and dethrone current champ Phil Heath.

The trade show is huge with all of your favorite supplements, equipment, bodybuilding stars and more.

Everyone comes out to Vegas for this event so start training, tanning and eating clean to show off what you got ... this is the premier competition you can't miss!

PRIZE: \$300,000  
MORE INFORMATION:  
www.mrolympia.com  
TICKETS: (888) 234-2334

## OCTOBER 12-13 ARNOLD CLASSIC EUROPE

Yeah that's right, the Arnold Classic now takes place in Madrid Spain as well! This

## featured event



SEPTEMBER 27-28, ORLENES ARENA, LAS VEGAS

## MR. OLYMPIA

Join JACK'D Magazine and everyone else in the world of bodybuilding at the year's top event in Vegas and witness history in the making as Phil Heath defends his title!

PRIZE: \$300,000+  
MORE INFORMATION: www.mrolympia.com  
TO BOOK TICKETS CALL: 888-234-2334

event is like it's big brother the AC held in Columbus Ohio, and it's Brazilian brother featuring bodybuilding, strongmen, powerlifting, MMA, figure, bikini and more. End the year right with a trip to Europe and then hop over to England!

PRIZE: \$125,000  
MORE INFORMATION:  
info@ifbbevents.com  
CALL: +34 67 388 8752

## OCTOBER 19-20 IFBB BRITISH GRAND PRIX

London England rocks the house with a competition that would surely make the royals blush. Bodybuilding, figure, bikini and more will take over this historic city and if you're lucky, while you're out on the town having a pint of sweet, sweet Guinness to wash down those fish and chips you might catch a glimpse of Pippa's famous ass!

PRIZE: \$20,000  
MORE INFORMATION:  
Neil Hill  
neil@grandprixexpo.co.uk

## WANT YOUR EVENT OR PRODUCT FEATURED?

Want your competition, event, product, service or anything else for that matter featured in the pages of JACK'D Magazine then give us a shout!

Email: [info@jackdmagazine.com](mailto:info@jackdmagazine.com)



A bodybuilder, Heather Green, is posing on a beach. She is wearing a gold bikini and is leaning against a wooden post. She has a tattoo on her left calf. The background is a blue ocean.

**AP** ALPHA PRO  
NUTRITION  
GREATNESS EXPECTED

**PRESENTS**

**The  
Ladies  
of  
Alpha Pro**

**Heather Green**



Natasha Yi



**Hillary Fisher**



**Christina Halkiopoulos**





**Sara Balint**







**ALPHA PRO<sup>®</sup>**  
**NUTRITION**

**Christina Halkiopoul**





**AP** ALPHA PRO<sup>®</sup>  
NUTRITION





# ALPHA PRO NUTRITION

GREATNESS EXPECTED



ALPHAPRONUTRITION.COM

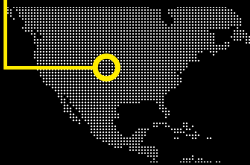
# AWESOME TRAINING TUNES!

Some of the best tunes to listen to while training sent in by viewers from around the world!

Nothing can help get you motivated more when you're hitting the gym like kick-ass tunes playing in the background. Unfortunately some gyms don't play music that would inspire anyone to lift heavier or pump out that extra rep, they play boring elevator music that would make you want to scream and pull your hair out! So we here at JACK'D put out the call online for people around the world to send in the names of some of the tunes that help inspire and push them in the gym. We got a good response, so the following are some of the tunes we agree kick some ass!



## 01 USA

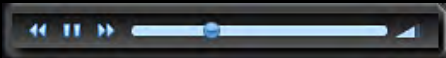


Dan from the US:  
"Thunder Struck" by AC/DC

Thunder Struck is a kick-ass tune and every time we listen to it before we hit the gym to pump some iron it feels like we're stepping into the Thunderdome - two men enter, one man leaves! Who's going to have the best work out this day. Only time will tell, but listening to this tune will get you in the mood to smack the weights around!

[BUY IT HERE!](#)

click on me to play video



## 02 CHINA

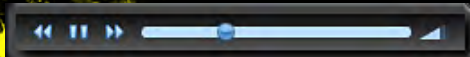


Kai from China  
"Scream" by Ozzy Osbourn

What training tune list would be complete without a tune from Ozzy?!? Scream is a song that must be played at full volume. Scream will set the tone of the song and will set the tone of your workout; loud and heavy!

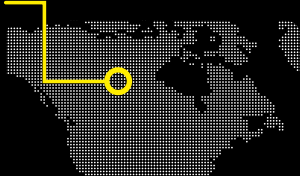
[BUY IT HERE!](#)

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## 03 CANADA

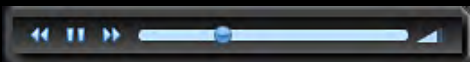


**John from Canada:**  
"Sabotage" Beastie Boys

A classic from '94 by the Beastie Boys, Sabotage is a mixture of rap and hard rock that will get your blood pumping as you hit the weights in the gym and this song will stick in your head for days. Voted one of the top 500 songs of all time by Rolling Stone magazine, with its hard riffs and classic Beastie Boys sound, this song is a must for your workout playlist.

[BUY IT HERE!](#)

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## 04 GERMANY

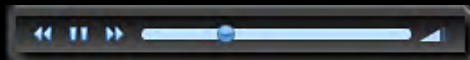


**Erik from Germany**  
"Du Hast" Rammstein

Ok, this song might not be appeal to everyone's taste, but you have to admit, you know Du Hast and it is definitely for the hard-core lifters out there pressin' 5+ plates in the industrial garage gym where super-heavy lifting is a way of life!

[BUY IT HERE!](#)

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## 06 AUSTRALIA

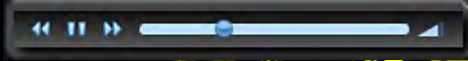


**Steve from Australia**  
"Stricken" Disturbed.

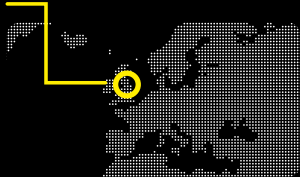
Stricken is just one of the many songs by Disturbed we're going to review in this section as the entire Disturbed discography should be on your ipod, ready to play at a moment's notice. Hell, if we could we'd list every song they have in this section. When anyone here at the JACK'D head office thinks of hard-core bodybuilding, Disturbed and Metro Flex comes to mind. Don't think so, add a visit to the world-famous Arlington gym on your bucket list like we suggest and see what we mean for yourself!

[BUY IT HERE!](#)

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## 05 UNITED KINGDOM

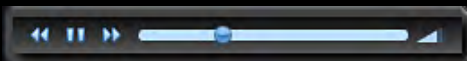


**Greg from the UK**  
"Crawling" by Linkin Park

A favorite and on the playlist of 4-time, Mr. Olympia Jay Cutler, Crawling by Linkin Park is the type of song that even if you're not a Linkin Park fan, you'll be a fan of this song. Sh\*t, if it's good enough to be on Mr. Olympia's playlist, it should be good enough for yours.

[BUY IT HERE!](#)

click on me to play



YOU HAVE SOME MUSIC SUGGESTIONS?  
EMAIL US AT [info@jackdmagazine.com](mailto:info@jackdmagazine.com)

# 'SUP WITH SUPPLEMENTS...

Information on the products discussed in 'SUP WITH SUPPLEMENTS' comes directly from the companies represented and does not imply an endorsement by JACK'D.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

## CEUTICORE - MYOSTANE MX



Myostane MX is the first orally active, clinically validated, anabolic product of its kind that works with your bodies' physiology to create the perfect environment favourable for maximum results.

Formulated with precisely dosed key clinical ingredients, Myostane MX activates the bodies' anabolic switches to boost raw power and strength while promoting skin splitting pumps and muscle fullness. Taken before training, you will feel a surge of focus and drive as you are able to push your body beyond its own limits leading to increased muscular performance and a stronger, harder more vascular physique. Myostane MX represents the future of anabolic nutrition and is a must have for any serious athlete looking to take their performance and results to the next level. Push past plateaus exceeding your own expectations using a revolutionary product that you can see and feel working from the very first dose ([www.ceuticore.com](http://www.ceuticore.com)).

## RONNIE COLEMAN SIGNATURE SERIES PRO-ANTIUM

A bodybuilder's diet revolves around one key element... PROTEIN! Being that I have over 20 years of experience in the highest competitive level of bodybuilding and the fact that I've won a record 8 Mr. Olympia titles, I know a thing or two about protein supplementation. PRO-ANTIUM™ has been designed with one purpose in mind: to provide you with the highest quality protein at the most concentrated level. If you're reading this paragraph it's probably because you realized that 29 grams of precision blended protein per scoop is pretty freaking serious! You might even notice 29 grams of protein is quite a bit more than the standard, well I'm not your standard bodybuilder and you're not looking for standard results! It's time that someone steps up to the plate and puts out a formula that offers extra protein to those that need it. Bodybuilders and fitness athletes need every gram of protein they can get and meeting those needs can get extremely expensive. Believe me, no one knows this better than me. PRO-ANTIUM™ has been built for these types of athletes.



## ALPHA PRO - UPLOAD



Getting psyched for an intense workout and also maintaining intensity throughout the session proved to be the real challenge. Alpha Pro Nutrition took that challenge and created the ultimate pre-workout stimulant: UPLOAD. UPLOAD contains only the most potent and purest of ingredients in extremely high dosages that will quickly and dramatically increase your energy, mental focus, blood flow and often an overall sense of euphoria in order for you to tear through those barriers. UPLOAD is specifically designed to help boost:

- MENTAL FOCUS
- BLOOD FLOW
- MUSCULAR STRENGTH

UPLOAD's formula is a perfect balance between Ajinomoto L-Arginine plus four diverse L-Arginine compounds, Creatine, Beta Alanine, 1,3 Dimethylamylamine, Histidine, L-Ornithine, N-Acetyl Tyrosine, Rhodiola, N-Acetyl L-Glutamine and a host of other essential ingredients including a multi mineral complex. Everything is added for a reason, everything in perfect balance and nothing is superfluous.

## VERACITY - DOMIN8

Sick of getting ripped off by pre-workout products that promise up to 50 servings but only deliver a fraction of those when taken as directed?

Unlike most pre-workouts that promise a certain number of servings, yet when taken as directed (i.e. take 3 servings for 'full effects') only deliver a handful of actual servings, Domin8 has 20 powerful, full-dosed servings per bottle. That means if you work out 5 days a week each bottle of Domin8 will last you a full month. And with each full-dosed serving you get 3 g of Citrulline, 2.5 g of Betaine, 4 g of BCAAs (2 g of Leucine, 1 g of Isoleucine and 1 g of Valine), 300mg of Caffeine, 150mg of Beta-PEA, 200 mg of Quercetin, 4mg of Astaxanthin, 2g of Vitamin C and 100mcg of Vitamin D.

Domin8 is the only pre-workout to contain this powerful combination of clinically validated ingredients, proven to increase energy, performance, strength and muscle growth. Don't just go to the gym, Domin8 it!!!

- INCREASE ENERGY + FOCUS
- INCREASE MUSCLE PERFORMANCE
- INCREASE MUSCLE ENDURANCE
- INCREASE STRENGTH



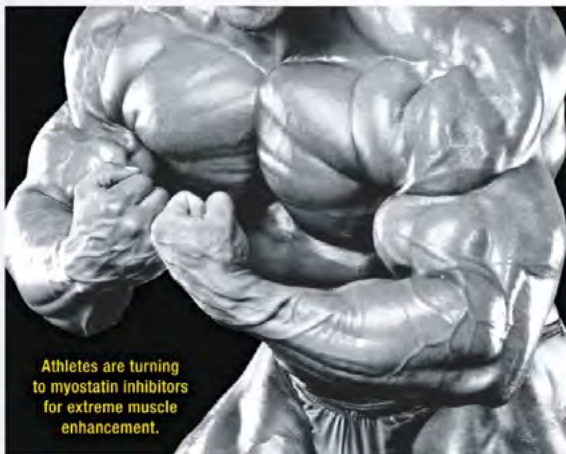


# Myostatin Inhibitors Spark Muscle Building Controversy

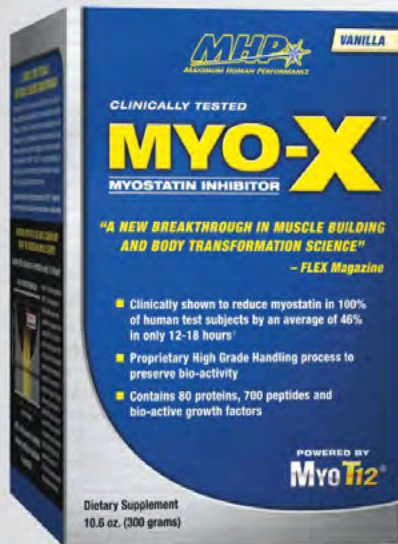
*The secret to extreme muscle enhancement may be myostatin inhibition.*

It's been all the rage of the muscle building press. It's been touted as the emerging bane of the existence of the World Anti-Doping Agency, as they try to keep athletes away from the sheer and ominous power of this new class of muscle building and performance enhancers known as myostatin inhibitors. While the International Olympic Committee may shudder to think of all the records that may be shattered, the United States Anti-Doping Agency actually went so far as to ban substances that utilize this approach as far back as 2008 by creating a new banned category.

So why are these athletic regulatory bodies so concerned about the use of myostatin inhibitors in sports? To best answer this question, let's discuss what myostatin is and exactly how it can positively affect muscle growth and athletic performance.



Athletes are turning to myostatin inhibitors for extreme muscle enhancement.



- Clinically Tested Natural Myostatin Inhibitor
- Reduces Myostatin in Test Subjects by an Average of 46%
- Shown to Work on 100% of Study Test Subjects

## WHAT IS MYOSTATIN?

Myostatin is the greatest single catabolic limiting factor of muscle growth. This natural growth factor protein exists in our bodies and works to regulate and limit muscle growth in a genetically predetermined pattern. Clinical evidence and case studies have confirmed how myostatin suppresses muscle growth. It is theorized that this vestigial control over muscle gains was evolutionarily needed to prevent the human body from being overly muscled. Unfortunately, thanks to this evolutionary process, your ability to put on more muscle is being restricted by myostatin regardless of how hard you train.

This is why there has been such incredible interest among scientists and athletes and such concern by athletic governing bodies over the use of myostatin inhibitors. The governing bodies of sports look at this as cheating, while athletes look at it as a way to enhance muscle growth and improve athletic performance. You should look at the use of myostatin inhibitors as a new and effective way to help you activate muscle growth and build the muscular physique you've been working so hard for in the gym.

## MYO-X: THE MYOSTATIN CRUSHER

Now, thanks to this amazing scientific breakthrough, bodybuilders and athletes everywhere may be able to break the limitations created by myostatin and maximize their muscle building potential. MYO-X is an all-natural, clinically tested myostatin inhibitor shown in scientific research to reduce myostatin levels in 100% of test subjects by an astounding average of 46% with just one serving! This is a very significant breakthrough for bodybuilders and athletes looking to increase muscle mass, strength and performance. Myostatin reductions such as these may help counter the catabolic forces that have restricted your ability to build more muscle and open the door to new muscle building potential. In fact, MYO-X is so extraordinary, *Muscular Development* magazine has proclaimed it to be the "Revolutionary Muscle Building Breakthrough of the Century!"\* No doubt, MYO-X has emerged as the single most powerful approach to extreme muscle enhancement for all athletes!