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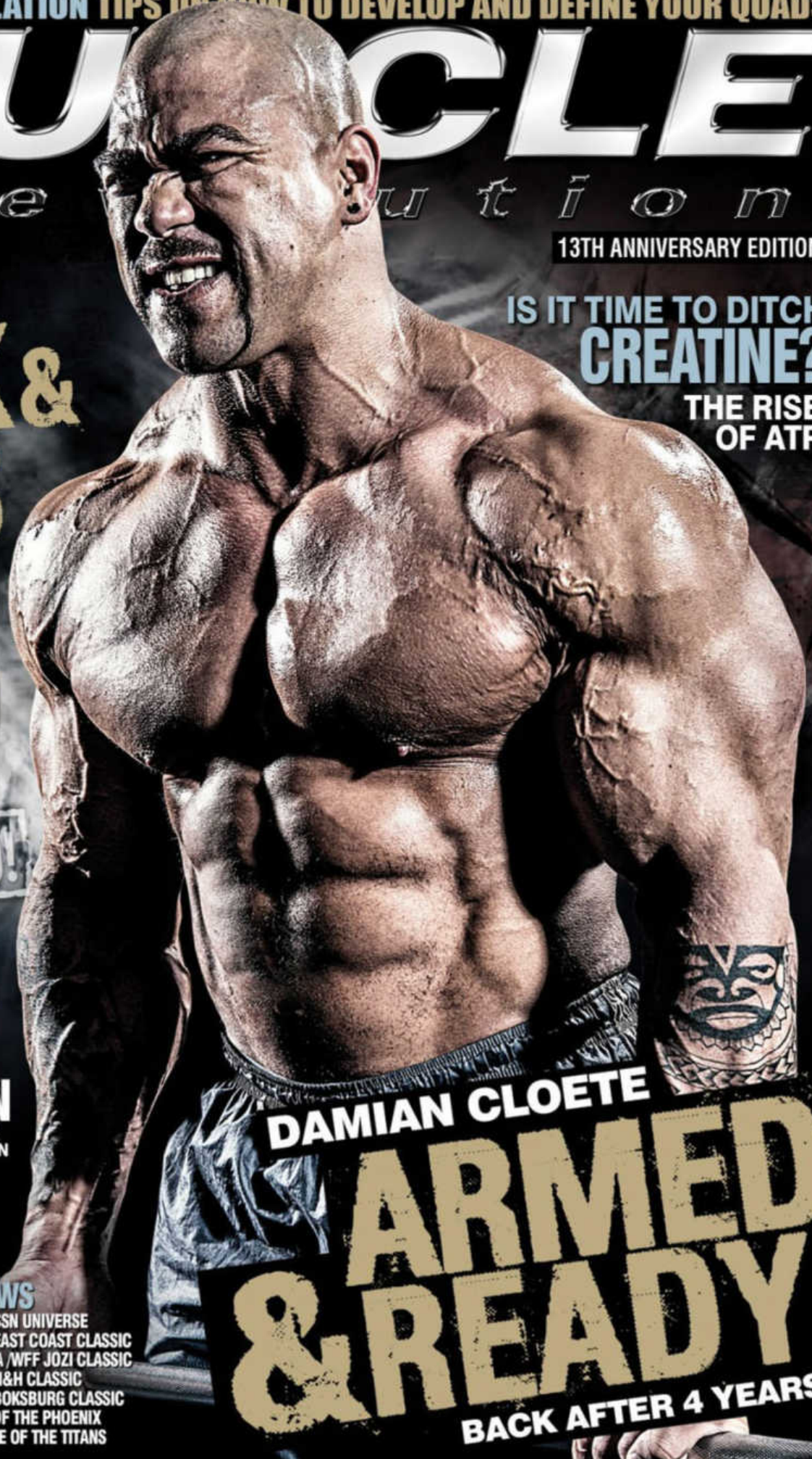
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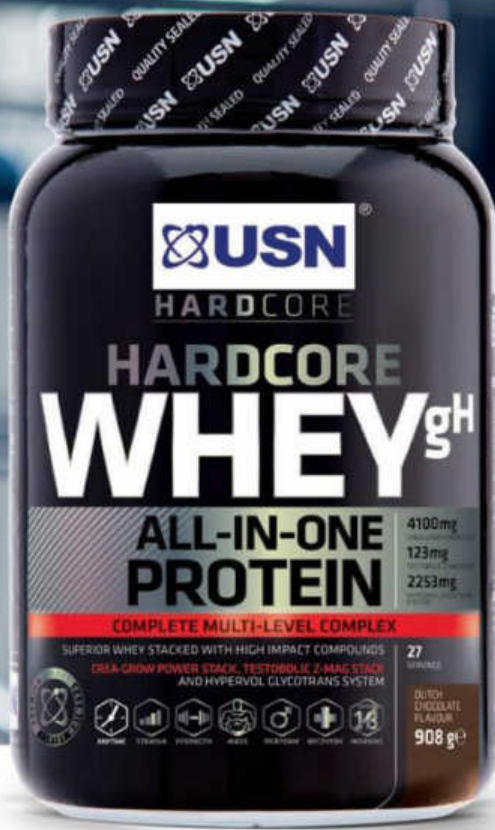


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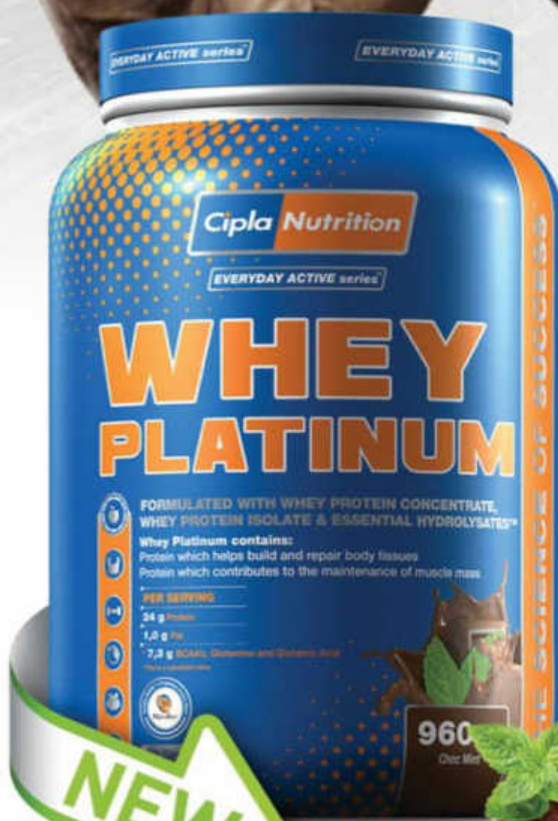
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Lovers of iron from left: yours truly, Jesse Pretorius, Andrew Carruthers, Cindy Ellis, Eben du Plessis, Pedro van Gaalen and Natascha Oosthuizen at Body Conscious.

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THE TAO OF LIFTING

Is it just me or is there some strange spiritual cleansing that happens when we train? We all have our day to day problems in a world that seems to be moving faster, as if it's a runaway train on a track with no end.

Let's face it, bodybuilders are a special breed of extremists. While the lifestyles we lead may be similar in this regard, what differentiates the iron brethren are the differing reasons why we choose to face-off against of the iron and steel in the gym. Some just want that XXL T-shirt to fit a little tighter; others want to lose the extra flab they have been carrying around for too long. Some do it to climb onto the stage to showcase what they've sculpted to the world; and some merely aim to smash personal records on the weightlifting floor. My reason? I hit the weights to kill the demons; to calm my inner turmoil during those intense sets. For me the gym is holy ground – a big church where everyone under a bar is equal.

I always try to make my workout as hardcore as possible because, like integrity, it is not visible until you are called upon to demonstrate it. The gym is never a place where I pound the iron aimlessly. It is a place where I find the strength to show what I am really made of; to load up the bar and keep pushing forward; a place where I sometimes fail just to return and try again. The iron game is therapy for me because it keeps my mind strong and clear. To me it is a metaphor for life.

A colleague told me that her day would, more often than not, be better when she started it with an early morning training session. This made me think that the spirit is also toned as we toil with barbells and dumbbells, not just the body.

We all know why we do this madness – our muscles burn, our hearts pound and our bodies change.

But the body can be unpredictable. You never know what to expect. Some days you are on fire and you blast through each set like it is nobody's business, yet on other days you need a proper slap in the face just to get going. However, no matter what is going wrong in your life one thing rings true about the gym – it always gives you the chance to do things right.

If I miss out on training for too long I become enveloped by a thick cloud of depression – I shut down – only to be resurrected when I return to the weights room. No matter what set you are on right now in your life make it the one that counts. You'll find that at the end of your lift you are always stronger than what you thought you were...

We might train for different reasons but the tao of lifting is the same for everyone – to push past the challenges; to lift the things that are hard to lift; to overcome the impossible. Today, tomorrow and the next day.

Werner
Editor

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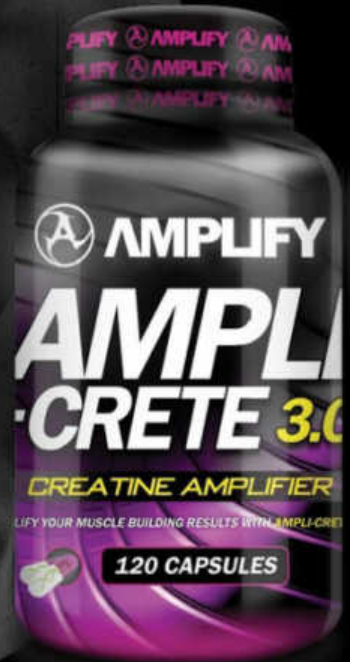
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THIRTEEN YEARS YOUNG

Whenever this anniversary edition rolls around I always get a little nostalgic as I think back through everything that both the business and the sport have been through. The issue in your hands represents a lucky 13 years of publishing Muscle Evolution magazine – 73 issues in total. I've created a few brands since the inception of this one, but for me Muscle Evolution will always remain closest to my heart. It marked the beginning of my career in magazine publishing and it has helped me form bonds with some of the best people I have had, and ever will have the pleasure of calling friends and clients. Thirteen years ago I was just a guy with an idea and an unrelenting work ethic. I poured heart and soul into promoting local bodybuilding in the hope that you, the reader, and the rest of the community would see that this magazine was here to promote and grow the sport we all love so dearly.

Since then, much like our name suggests, the business of bodybuilding and the local community have continued to evolve. More and more people have gotten involved, both from a personal and business perspective. Federations have come, others have gone, and the rest continue to thrive. The heads of these federations have also changed. Great athletes have retired, with other talented individuals rising to take their place. Amidst all of this the only thing that has remained constant has been change.

With this dynamic environment as the backdrop I have learnt many lessons over the past 13 years. Most importantly, I now know that success in this game depends on two things: relationships and your ability to adapt as quickly as the industry evolves. I've watched countless brands start strong, only to fail because of their inability to move with the times. It's a brutal business to be in; selfish, narcissistic and sometimes unrewarding, but if bodybuilding is in your

blood you'll stick with it.

Thankfully we're one of the survivors which means I have plenty to be thankful for. First and foremost, I dedicate this publisher's letter to the South African bodybuilding community. Thank you for supporting the work that we do and the athletes we promote. We take great pride in tirelessly recognising and promoting SA's finest talent and showcasing as many shows as we can. We understand how proud you are of the hard work you put in for every event so it's only fitting that we do our best to celebrate and showcase that dedication. We also need to thank our clients and partners who have all helped to build and sustain what is now an institution in South African bodybuilding.

With that said, I would like to reveal the next evolution in our business by officially welcoming our new editor, Werner Beukes, to the team. Werner is the needle we found in the journalistic haystack and I'm truly privileged and excited to work with such a talented writer and passionate bodybuilder. We've got some massive ideas for the mag and Werner has a wealth of knowledge and experience under his belt, so expect him to dig even deeper to keep you on the cutting edge of advancements in bodybuilding.

I'm also pleased that this landmark issue profiles the return of one of SA's greatest talents – Damian Cloete. I unofficially dubbed Damian "The Phantom" because he would always appear out of nowhere, do a few local shows, then disappear again. Then, four years ago he took an extended leave of absence but I'm happy to report that this genetic masterpiece is back to take on the super-heavyweight division. I can't wait to see the damage he does on stage this year.

With that I thank all our readers, once again, for believing in what we do here at Maverick Publishing. While 13 years and 73 issues may seem like a really long time, I feel like we're still only warmed up. So hold on tight, there's lots more to come!

Enjoy issue 73.

Andrew
Editor-In-Chief



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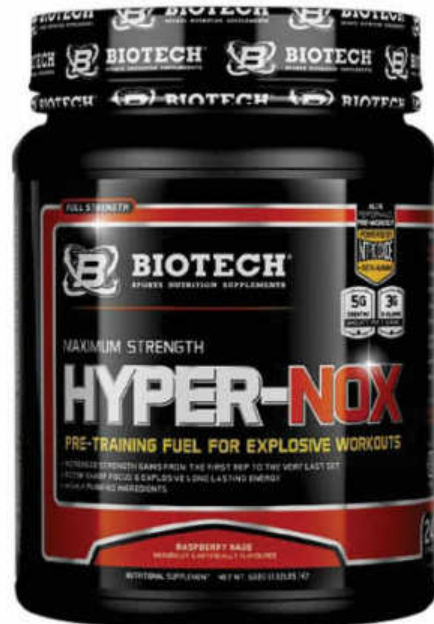
MUSCLE NEWS



CALUM VON MOGER TO GUEST POSE AT NABBA PRO WORLD CHAMPIONSHIPS IN PRETORIA ON 7 NOVEMBER.

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APOLOGY

We were so revved-up about bodybuilders Jaco Venter and Juan Bothma going head to head in the ultimate arm battle in Muscle Evolution's July/August 2015 issue that we made an error about the duo competing on the IFBB Nationals stage. Both athletes are in fact affiliated to Nabba. We apologise for the factual error.

ARNOLD 2.0. TO POSE AT WFF PRO WORLD CHAMPS

The current three-time Mr. Universe Calum von Moger, dubbed Arnold 2.0. by his fans for his uncanny resemblance to the most famous bodybuilder of all time Arnold Schwarzenegger, has confirmed that he will be guest posing at the World Fitness Federation (WFF)/ Nabba Pro World Championships being held in Pretoria on 7 November 2015. The Nabba/WFF affiliated bodybuilder will hold a seminar and mingle with fans during his visit to South Africa. Arnold has been a role model and inspiration for the Australian bodybuilder since he started to lift weights at the age of 14. Calum works out six days per week and follows a strict food plan to keep in shape. He is famous around the world for his classically proportioned physique. Calum's most recent victory, the Mr. Universe held in France, is the third major title of his career after he won the Junior Mr. Universe in 2011 and the Amateur Mr. Universe last year in South Korea. Calum, who weighs 112kg and stands 6'2", is passionate about travelling, introducing the bodybuilding lifestyle to people and motivating children to get fit.

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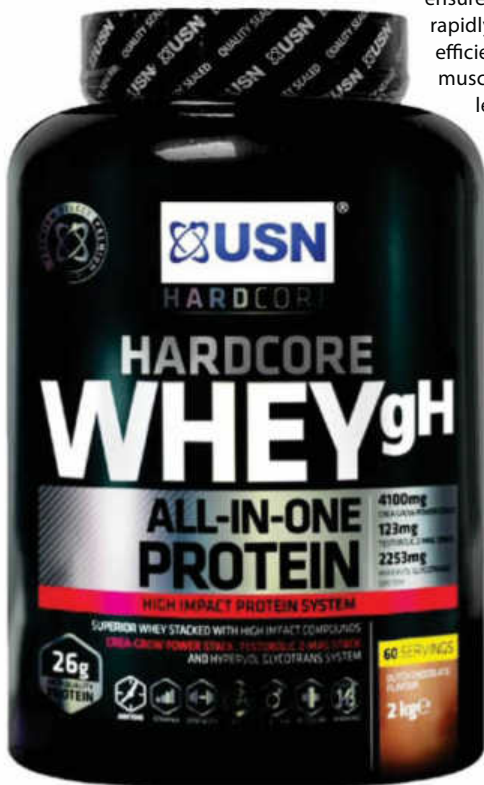
TNT Mercury has released the final product in the Kevlar trilogy – Rapid Fire. Comprised of an equal blend of patented and trial-based carbohydrates, Kevlar Rapid Fire affords competitive athletes an immediate surge of bioavailable patented Vitargo, followed by a staggered release of Palatinose. Both carbohydrate sources have had significantly more athlete-specific trials than other available energy sources and have yielded the most credible results. Both forms have been incorporated in equal ratios into this product, resulting in better pumps, faster recovery and increased endurance, while also mitigating catabolic pathways during training. The product is also packed with pH-correcting alkaline buffers and electrolytes to reduce acid build up, improve muscle response and accelerate recovery between sets. Available to retailers and the public on a limited one-month reduced launch special exclusively at Chrome stores or the Chrome online store. Retailers can benefit from significant bulk buy discounts direct from the Chrome warehouse at trade wholesale prices for the duration of this once-off launch special.

USN Hardcore Whey GH Updated

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less protein is wasted and that the rate of recovery improves for faster results. It also contains all the standard whey protein amino acids, in addition to a multi-level complex that comprises elements proven to assist in muscle recovery. These nutrients include zinc, magnesium, creatine monohydrate, L-glycine, taurine and Tribulus Terrestris, delivering a powerful formula for a potent pre- and post-workout protein complex.



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- Kids Development (CPT)
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MUSCLE NEWS



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IRENE ALLEY SHINES AT NABBA WORLDS

South Africans can be proud of Irene Alley's impressive fourth place finish in the Class 2 division at the recent Nabba World Bodybuilding Championships, which were held in Malta in June. Irene had the complete package and was a shining example of muscle and femininity. Nabba is the original competitive bodybuilding association, formed in 1950. Nabba's first Mr. Universe contest was won by Steve Reeves, who went on to make over 30 Hercules movies. Other iconic bodybuilders who won the Mr. Universe title include Reg Park, Bill Pearl and Arnold Schwarzenegger.



LOCAL ATHLETES EXCEL AT WFF UNIVERSE

South African bodybuilders did their country proud at the recent World Fitness Federation (WFF) Universe Championships held in France. Matthew Larkins took a phenomenal fourth place in a fiercely-contested line-up of 32 sliced and diced competitors in the Male Sports Model category. A rock hard **Juan Bothma** entered the Men's Super Body section and ended up with fifth place out of 16 athletes. **Vivian Goosen** was crowned the champion in the Women 45 years plus category, with the sensational **Michelle van Straaten** earning her pro card for placing ahead

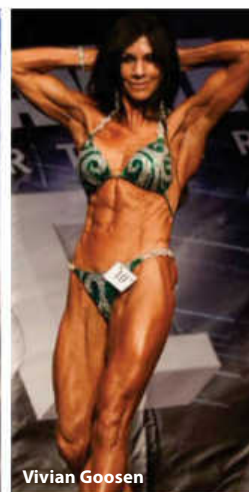
of the pack in the Women's Performance Figure category. **Anita Visser** pulled out all stops for a well-deserved second place in this category. **Chante van Wyk** walked away with top honours in the Bikini Model Open division which earned her a pro card. **Shelly Naughtin** finished in sixth place in a line-up of 24 athletes. **Cat Buys Rademeyer** scooped gold in the Bikini Pro line-up with her crisp lines and awesome conditioning. **WFF All Africa Chief Judge Manie Lemmer and WFF SA President Alet Lemmer** qualified as international pro judges for **WFF International**.



Matthew Larkins



Juan Bothma



Vivian Goosen



Michelle van Straaten



Anita Visser



Chante van Wyk



Cat Buys Rademeyer



Shelly Naughtin

CORRECTION

In our show report in Muscle Evolution's July/August issue we incorrectly credited Francois Basson as the winner in the Nabba Pretoria Classic's Male Fitness Model over 80kg category. The winner was in fact Matthew Larkins. Basson finished in second place at the show. We regret the error.





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PLATEAU-BUSTING PLAN

Q I'm 21 years old and have been training solidly for a year and four months now. I train 5-6 days a week. My schedule consists of one day of cardio and the rest of the time is dedicated to weight training. I have been following a good diet consisting of high carbs (basmati rice, oats) and high protein (steak or chicken breasts), and I've been using whey protein and a pre-workout. I've managed to drop body fat while gaining about 8kg of muscle and I've gained a significant amount of strength, but for the last four months I haven't gained so much as a kilogram. I feel I have reached a plateau and can't seem to gain any more weight. Is there anything you would advise other than steroids as I'm not ready for that. *Tarquin Grovers*

A I certainly understand your frustration. In today's quick-fix society we tend to expect everything we want 'now'. This need for instant gratification and results has driven the rise in popularity of steroids and other potentially harmful performance-enhancing substances. While resorting to these ergogenic aids can certainly assist in achieving faster results from your hard work in the gym, the fact of the matter is that there are many very successful and satisfied drug-free bodybuilders. What you'll find is that the best natural bodybuilders are more patient than the average person who trains in the gym, particularly those who have opted to go the chemically-assisted route to achieve their desired results. **The guys who choose to do things naturally are willing to put in a tremendous amount of time and effort, and they focus their efforts on simply having one great workout at a time.** Five or six days of successive great workouts equates to a great week of training. When you string together several great weeks of training you achieve a great month; and you can be assured that month stacked upon month of great training will result in years of beneficial habits that will eventually get you the results you want.

If you want to reach your full genetic potential naturally you must look at your bodybuilding endeavours as a series of long-term lifestyle choices rather than focusing on short-term goals like seeing how much weight or muscle you are able to gain from month to month.

To put things in perspective, I've been competing for more than 20 years and have been training for a few more years than that. In that time I have only gained around 30kg of muscle, which equates to around 1,5kg per year – slightly more than 100g per month on average. That is barely measurable on the scale and is significantly slower in terms of overall results than what you have averaged over the last 16 months. I would therefore suggest that rather than becoming despondent you focus on creating a clear vision of what you want to look like after five more years of living a disciplined bodybuilding regimen. Now, I know that it may be difficult to exercise that kind of patience for someone in their early twenties, like yourself, but just imagine



"To put things in perspective, I've been competing for more than 20 years and have been training for a few more years than that. In that time I have only gained around 30kg of muscle, which equates to around 1,5kg per year – slightly more than 100g per month on average."

how good you'll be in the years to come if you create the same degree of mental fortitude as that of the best drug-free bodybuilders in the world!

Believe me when I tell you that you have not yet scratched the surface in your quest to gain muscle. There is still so much for you to try and learn from. How many different training methods or strategies do you think there are that can help you bust through your current plateau and add quality muscle? When you consider the amount of exercises you could possibly perform, the manner in which you can change your set and rep structure, the different weight combinations you could use, and the many

different types of machines available to you, you quickly realise that there are many options available for you to still try. There are literally thousands of different combinations you could still try in your quest for additional gains.

So, to answer your question more directly, change your training – your workout efficiency, the intensity, volume and the structure of your programme, and combine that with consistency in terms of your diet and supplementation. This will ensure your longevity in the sport, along with continued gains.

Lastly, role model yourself on the world's best drug-free bodybuilders and keep searching for the right answers for you. There is no one-size-fits-all approach to training. When you find the right recipe, hang in there, keep on plugging away, stay positive and keep believing – the results will follow.

"THERE IS NO ONE-SIZE-FITS-ALL APPROACH TO TRAINING. WHEN YOU FIND THE RIGHT RECIPE, HANG IN THERE, KEEP ON PLUGGING AWAY, STAY POSITIVE AND KEEP BELIEVING - THE RESULTS WILL FOLLOW."


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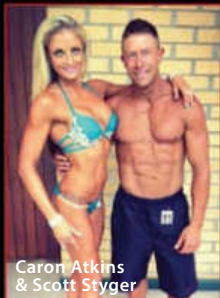
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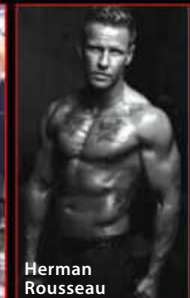
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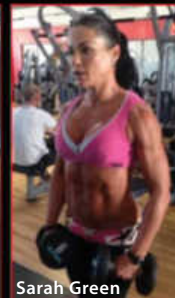
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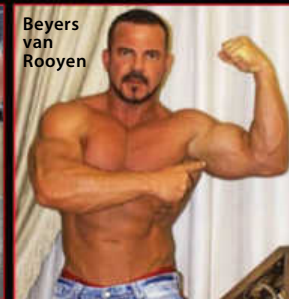
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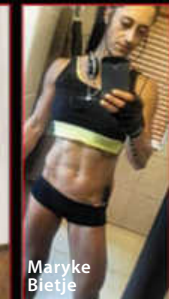
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The price for all this power - \$2.8 million, but all six have been sold.



The Koenigsegg One:1, so named due to the 1:1 horse power-to-kilogram curb weight ratio, is touted as "the world's first megacar" because it is the first homologated production car to produce one megawatt of power. **Custom-made Michelin Cup Tires adorn the Koenigsegg Aircore carbon fibre wheels, which help to transfer the 1371Nm of torque at 6000rpm onto the tar.**

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Lee Powell

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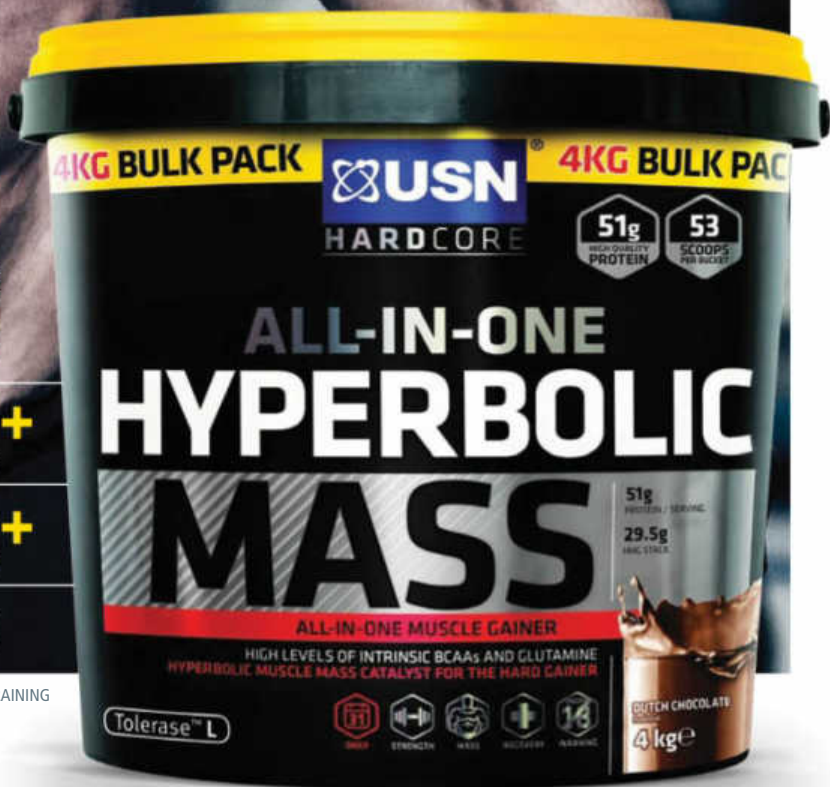
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AESTHETIC MANIPULATION THROUGH SCIENCE & TECHNOLOGY

THE ELEMENTS THAT HAVE AND CONTINUE TO SHAPE MODERN BODYBUILDING

SPARKING GROWTH

SINCE THE BEGINNING OF THE MODERN BODYBUILDING ERA PEOPLE HAVE BEEN LOOKING FOR WAYS TO GET 'THE EDGE' OVER THEIR COMPETITORS, WHETHER IT BE THROUGH SPECIALISED TRAINING TECHNIQUES, INDIVIDUALISED MEAL PLANS, CUTTING-EDGE SUPPLEMENTS OR EVEN PERFORMANCE-ENHANCING DRUGS (PEDS).



ACCESS TO INFORMATION

One of the most important elements that has shaped the trajectory of bodybuilding progression, both in South Africa and internationally, is access to quality information. Be it in written form or multimedia formats such as videos on YouTube and shared via bodybuilding sites across the web, information from the top pros and coaches is now just a click away.

By sharing training tips and demonstrating training techniques the best in the world have helped many athletes create bigger and more conditioned physiques. These training guidelines and guides were not available a few years ago and the rate of progression in the last decade shows that they have certainly become very useful to modern-day athletes. Bodybuilding podcasts are the latest multimedia medium to rise in prominence, giving athletes and coaches a platform to share their secrets at a cost to help generate income for themselves.

Bodybuilding podcasts are the latest multimedia medium to rise in prominence.

SUPERIOR SUPPLEMENTS

Information is worthless unless you put it into practice and enhance the impact of your efforts in the gym with the right nutritional support. The one aspect in this regard that has certainly come to the fore in the modern era of health, fitness, bodybuilding and even sports performance, is that of nutritional supplementation.

And there are few places in the world where this trend has been as prolific than in South Africa. As recently as 1996 there were only two or three companies that were specialising in delivering nutritional supplements to consumers, who were mostly bodybuilders and weight lifters back then. Today, a mere 20 years later, a trip to the local pharmacy will reveal entire isles with shelves

that are packed full with a range of brands and products from a host of local manufacturers as well as international ones.

This level of growth, which still continues today, is an indication that these products work and that they are effective. They are therefore an integral and, dare we say, an essential part of any muscle-building plan.

"AS RECENTLY AS 1996 THERE WERE ONLY TWO OR THREE COMPANIES THAT WERE SPECIALISING IN DELIVERING NUTRITIONAL SUPPLEMENTS."



CHEMICAL ASSISTANCE

50 years into this addiction, athletes have discovered that there is one means above all others that consistently delivers results.

There is no doubt that when you see a line-up of conditioned athletes today you'll notice that there are one or two who just seem to stand out from the rest. This could be attributed to superior genetics or even several years of experience within bodybuilding but, more often than not, these athletes have stumbled across a powerful weapon that has enabled them to destroy their peers on stage.

When it comes to giving athletes a physical advantage there is an undisputed tool, albeit highly controversial. The truth of the

matter is that due to the effectiveness of **anabolic steroids** they have and will more than likely remain the most prominent form of performance-enhancing aid in the quest for aesthetic development.

Not only is there a dramatic change in the appearance of the body when anabolic steroids are administered but there is also an increase in strength and speed. This, in turn, enhances athletic ability and, subsequently, performance. This is why lawmakers and governing bodies have stepped in, as the magnitude of the advantage that those who choose to use these PEDs gain over their 'clean' competitors is enormous.

In this regard the World Anti-Doping Agency (WADA) is at the forefront of athlete testing to ensure, to the best of their ability, that there is a level and fair playing field in professional sport.

As the tests get more sophisticated, so do the drugs and the manner in which they are administered. There is a lot of money to be made in modern-day sports, with the difference between first and fifth often equivalent to millions of dollars. Just a few years back, for instance, a test for exogenous human growth hormone (hGH) was not available. Interestingly, in 2008, we saw the greatest number of Olympic records established at a single Games. Coincidence? I think not...

THE RISE OF INSULIN

However, it wasn't just anabolic steroids and hGH that gave rise to the modern-day bodybuilding mammoths who step on the pro stage these days. It is widely known that when athletes started using insulin effectively, without doing any harm to themselves, that the revolutionary breakthrough in the size of bodybuilders occurred. But

it wasn't just that they were getting bigger; they were doing so in a relatively short amount of time too.

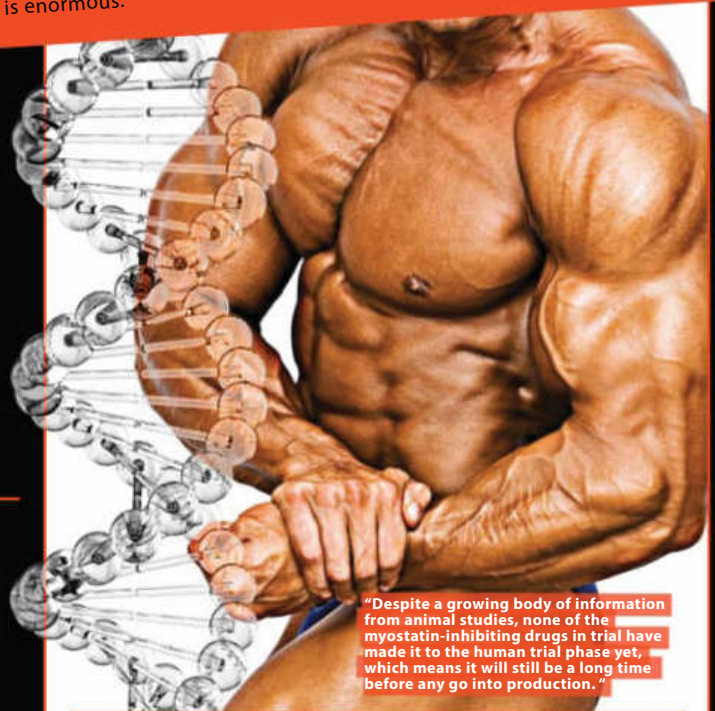
That's because insulin is the most anabolic hormone in your body so using excessive amounts of it can, without a doubt, produce amazing results, but only when used properly. However, when used incorrectly it can be fatal.

ALTERNATIVE OPTIONS

Other compounds gaining in popularity these days are SARMs – Selective androgen receptor modulators. They are intended to have the same kind of effect as androgenic drugs such as anabolic steroids but they are much more selective in their action.

The use of peptides such as GHRP-6, GHRP-2, Hexarelin and CJC-1295 have also become quite popular. The problem with this approach, I find, particularly in our country, is that people don't have the knowledge required to use them properly to get the best effect. Thankfully this is relatively harmless due to the fact that these peptides don't have the side-effects we commonly see with the use (or misuse) of other anabolic substances such as steroids. It does, however, mean that users are more inclined to say that these compounds don't work when the actual problem lies in the lack of knowledge required to use them effectively.

"USERS ARE MORE INCLINED TO SAY THAT THESE COMPOUNDS DON'T WORK WHEN THE ACTUAL PROBLEM LIES IN THE LACK OF KNOWLEDGE REQUIRED TO USE THEM EFFECTIVELY."



"Despite a growing body of information from animal studies, none of the myostatin-inhibiting drugs in trial have made it to the human trial phase yet, which means it will still be a long time before any go into production."

GENE DOPING

The next frontier seems to be the manipulation of gene expression, something that scientists are already able to achieve in animal studies, through the use of compounds that manipulate how your body receives, interprets and reacts to certain 'biological messages'. One of the most prolific discoveries, which has a direct application in modern-day bodybuilding as it has the potential to create dramatic, monstrous results in athletes, is a compound called a myostatin blocker or inhibitor.

Myostatin is a protein produced by the body that inhibits myogenesis, which is muscle cell growth. From studies we know that less myostatin in the body produces a more muscular

physique. The first time I read about myostatin blockers was in 2007 and I recall that a U.S.-based pharmaceutical company called Wyeth Pharmaceuticals were doing experiments on a product they were making called Folstax. The development of this product and others like it was aimed at individuals who were suffering from degenerative diseases such as muscular dystrophy. However, to my knowledge, despite a growing body of information from animal studies, none of the myostatin-inhibiting drugs in trial have made it to the human trial phase yet, which means it will still be a long time before any go into production. When they do though expect a massive step change in the sporting world, not just bodybuilding. **M.E.**

MICELLAR WHEY

MICELLAR WHEY IS FOR BODYBUILDERS WHO ARE LOOKING FOR MORE MUSCLE, STRENGTH AND A BETTER PERFORMANCE IN THE GYM.

Casein and whey are the two protein supplement staples you're likely to find in any serious bodybuilder's arsenal.

Casein is a slow release product ideal for use at night, while whey is a fast acting protein that makes it ideal for post-workout and early morning usage and at regular intervals throughout the day. Simply stated, whey is most commonly used to build muscle while casein is used to curb muscle breakdown.

The use of the word 'fast' in the context of whey refers to the amount of time the protein takes to be fully metabolised – digested and assimilated – by the body. This characteristic means the use of a whey supplement will rapidly elevate circulating amino acid levels, and with its high branched chain amino acid (BCAA) and essential amino acid (EAA) content, particularly the highly anabolic amino acid leucine, it promotes greater protein synthesis to boost muscle tissue growth and repair. It is therefore considered by many as the gold standard in protein supplementation. In addition, whey protein contains little to no fat and very few carbs, depending on the flavour and brand you choose.

Casein, on the other hand, is digested at a much slower rate than whey. It therefore releases its constituent amino acids over a longer period of time, delivering a steady 'trickle' of amino acids into the blood stream. It has therefore always been a good choice for bodybuilders who want a simple way to combat the muscle catabolism that occurs overnight or when there is a long gap between meals. However, this protein product contains less leucine

than whey, which means that to get the best of both worlds serious bodybuilders have had to keep both variants in their supplement cupboards.

A NEW KING ON THE HORIZON

There is a newer form of whey on the market that now delivers on all fronts. Micellar whey offers athletes an efficient way to slow the absorption of whey just enough so that they can still reap its anabolic benefits, while also benefiting from a prolonged amino acid trickle-feed effect similar to that of casein.

Touted as the world's first sustained-release 100% whey protein, it is a new product

designed for bodybuilders who are looking for more muscle, strength and a better performance in the gym. The inventors of this form of whey have found a protein composition that offers a slow release of amino acids to stimulate muscle protein synthesis, decrease muscle breakdown and enhance muscle mass. With this combination of attributes it is a product that is bound to change the way athletes use whey protein forever.

"MICELLAR PROTEIN OFFERS AN IDEAL MEANS TO MAINTAIN AN ANABOLIC STATE THROUGHOUT THE DAY WITHOUT CONSUMING MULTIPLE WHEY SHAKES"

THE BEST OF BOTH WORLDS

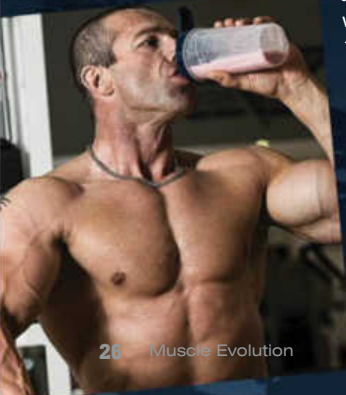
To achieve this balance micellar protein has been coated using advanced protein polymerisation technology which makes the protein particles twice the size of those in regular whey protein. This leads to a slower digestion rate, similar to that of casein, while still maintaining the nutritional benefits of traditional whey protein.

To be more specific, micellar protein that is manufactured from high quality whey will

boast a high leucine and BCAA concentration, in addition to a slower digestion rate. On average a scoop of micellar whey should deliver 2.7g of leucine and 5.8g of BCAAs. The high leucine content means it can stimulate higher protein synthesis and creates a greater overall anabolic potential for a longer period of time.

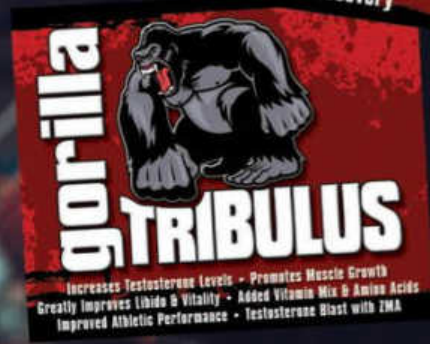
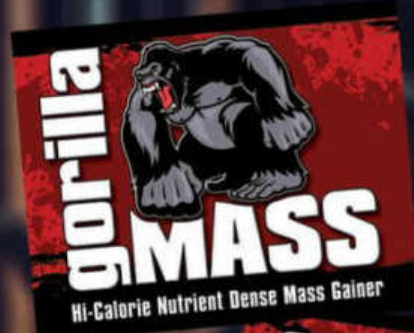
Bodybuilders are constantly faced with the challenge of managing overall daily protein intake – the how and when

to consume high-protein meals and shakes to maintain and build muscle. This newer form of supplemental protein seems to be the answer to this dilemma as micellar protein offers an ideal means to maintain an anabolic state throughout the day without consuming multiple whey shakes, while also helping to limit catabolism. This offers the modern bodybuilder the best of both whey and casein in one convenient product. **M.E.**





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"YOU GOTTA EAT BIG TO GET BIG!"

- Ronnie Coleman

THE WORLD OF BODYBUILDING HAS BECOME INCREASINGLY COMPLEX SINCE THE INTRODUCTION OF THE INTERNET. BODYBUILDING NUTRITION IN PARTICULAR HAS BECOME AN OVERLOAD OF INFORMATION ON HOW TO EAT, WHEN TO EAT AND HOW MUCH TO EAT.

If anyone had asked eight-time Mr. Olympia Ronnie Coleman two decades ago how they could put on muscle he would most probably have told them: "You gotta eat big to get big". These days it seems as if bodybuilders are tracking their macros and chugging down a post-workout shake before the iron has gone cold simply because that is what everyone else is doing. Nutrition should always be a personalised strategy based on your specific goals, age, genetics and experience in the sport. That said, maybe it is a good idea to revisit the tried and trusted methods used by the bodybuilding legends of yesteryear to help boost your own muscle-building efforts.

The same rules from the past are still relevant in bodybuilding today as they were decades ago. The Lee's, Franco's and Arnold's all ate smaller, more frequent meals. Bodybuilders from that era realised the main factor for muscle growth came from training hard, proper nutrition and the ability to eat enough. They consumed 30g of protein or more per meal, with Arnold being the number one advocate of recommending 1g of protein for every pound of bodyweight, as unbelievable as that may sound in comparison to today's recommended protein intakes (upward of 2g or protein per kilogram). The macronutrient breakdown used back then of roughly 30% protein, 55-60% carbs and 10-15% fat is still widely accepted to this day as the optimum ratio to build more muscle.

"THE MAIN FACTOR FOR MUSCLE GROWTH CAME FROM TRAINING HARD, PROPER NUTRITION AND THE ABILITY TO EAT ENOUGH!"

With unlimited and easy access to information and research on the Internet we have started to become too pedantic about nutrition. Diet fads, the over emphasising of certain foods and the times you consume them, as well as relying too heavily on supplements with some getting more than half of their daily calories from protein shakes, have left us dazed and confused.

Old school bodybuilders from the '70s and '80s ate foods that are often overlooked and even neglected by modern-day bodybuilders. Things like white potato, full fat milk, whole eggs and fatty meats have all been replaced by so-called superior foods. **Let's look at the alternatives in each macronutrient group that you may be overlooking:**



CARBOHYDRATES

Carbs should make up the largest percentage of a bodybuilder's food intake on a daily basis. If you were to follow the modern bulking methods your top carb sources would come from oats and sweet potato sources. There are other options. White potato with its higher glycaemic index than the moderate GI sweet potato has been given a bad rep. Most bodybuilders don't eat their potatoes without other foods, so the protein or fat alongside a potato will slow down its digestion. **White potatoes also contain more iron, magnesium and potassium than sweet potatoes, not to mention a large potato contains 8g of fibre and 7g of protein.** Brown rice is favoured over wild rice which is slightly lower in fibre but higher in protein than brown rice. Adding additional high GI carbs to your meals will increase your appetite which is beneficial to people who struggle to get their required calories in.

PROTEIN


The protein intake of modern-day bodybuilders generally comes from chicken breasts, egg whites and protein shakes. In the past, before the boom of supplements, whole foods were the main component of a bodybuilder's diet for the simple reasons of price, availability and ease of digestion. Even with the advancement of products today whole food protein sources are still easily digested and they contain essential vitamins and minerals you need to build muscle. **Yoghurt or unpasteurised milk are good options when you cannot afford to buy a high quality protein shake.** Milk contains both fast and slow digesting proteins and it remains a quick way to get in additional calories. One cup of whole milk is roughly equivalent to 32g of powdered milk and offers approximately 8g of fat, 12g of carbs and 8g of protein which makes it a perfect post-workout drink.



FATS

Consuming some fat with each meal has been shown to improve satiety levels. Having sufficient fats in your diet will also increase male hormone production due to its influence on your cholesterol which is a precursor to testosterone. These factors should be a good enough reason to see the return of whole eggs, cheese and pork chops to a bodybuilder's diet. **Musclemen from the past regularly consumed cheese omelettes and whole-roasted chickens to pack on size.** The only time they did not eat fats was post-workout when they opted to have a carb or protein-rich meal instead.

CONCLUSION

We can certainly learn from old school bodybuilders. Many of the former bodybuilding stars had to rely on trial and error to figure out what worked for them and although we have a wealth of knowledge with cutting-edge research at our fingertips, it would be valuable to remember that on a biochemical level we are all different. Find out what works best for you and what would generate the best possible results. At the end of the day your top priority is to get in enough calories to make considerable gains to reach your personal goals. It is no surprise that one day someone asked Arnold how much protein he ate and his response was "all of it". 

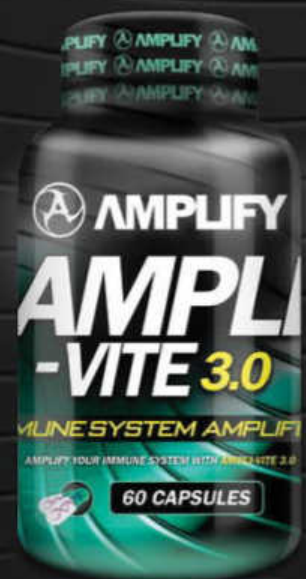
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A STORM OF FREAKISH PROPORTIONS IS ON ITS WAY FROM DURBAN THAT HAS THE POTENTIAL TO DESTROY EVERYTHING IN ITS PATH. DAMIAN "BIG D" CLOETE IS BACK, BIGGER THAN EVER AND HUNGRY TO ENTER THE WINNER'S CIRCLE AT THE IFBB KZN PROVINCIALS.

The 30-year-old Damian is no stranger to the stage, having enjoyed success at both international and national level. In 2005 he came fourth in the Junior division of Nabba Mr. Universe and in 2006 the big man placed second in the same competition before being crowned as the Junior Winner in the 2006 Nabba World Championships held in Dublin, Ireland.

THE SECOND COMING

BIG D'S RESURGENCE:

DAMIAN CLOETE IS BACK AND RARING TO GO

Now Big D is deadlifting and preacher-curling his way back to the podium as a super heavyweight after a four year hiatus. He last competed at the 2010 IFBB KZN Provincials where he was crowned the heavyweight champion. The year before Damian placed second to Marius Dohne at the same show.

"I decided to take a few years off from competing to focus on my career so that I can provide a better life for my family," he explains. Now, with that aspect of his life sorted, Damian is launching a full-scale resurrection of his bodybuilding career with the help of Dohne as his coach and nutritionist and

personal trainer Chris Dranias.

Looking at Big D's current mass it appears that he has been able to seemingly double in size in a mere four years. At 1.79m and weighing around 116kg at the time of the interview Damian is under no illusion that he needs to bring a combination of muscle density and tone to battle it out with the other top competitors on the IFBB stage. He has months of relentless training and clean eating behind him to get absolutely dialed in for show day.

"I've been dieting since January eating six times a day to get back on track. I'm nervous but looking forward to competing again,"

he says. A comeback of this magnitude is like Muhammad Ali coming back – you don't want to come back and get knocked out. The most important thing about a comeback is coming back and beating everybody.

That is Big D's main plan of attack – to bring something special to the stage for the fans. His gains are especially noticeable in his hamstrings, calves and back. "I had to bring up these weaker body parts to make improvements to my physique. I believe that if you really want something it is not going to be handed to you on a silver plate. You have to go out there and battle the odds and fight for what you want."





BIG D'S TRANSFORMATION IS REMARKABLE FROM 140KG TO 116KG FOR THE STAGE. HE HAS BEEN DEADLIFTING AND PREACHER-CURLING HIS WAY BACK TO THE PODIUM AS A SUPER HEAVYWEIGHT AFTER A FOUR YEAR HIATUS.



BIG D'S COMEBACK ROUTINE

Day 1: Hamstrings, calves, abs

Day 2: Back

Day 3: Chest

Day 4: Quads, hamstrings

Day 5: Shoulders, calves

Day 6: Arms, abs

Day 7: Off

BIG D'S COMEBACK EATING PLAN

Meal 1: 12 egg whites, 150g oats, cup of wild berries

Meal 2: 250g chicken, 300g basmati rice

Meal 3: 2 cans of tuna, 350g sweet potatoes

Meal 4: 250g chicken, 300g basmati rice

Meal 5: 2 cans of tuna, 350g sweet potatoes

Meal 6: 300g of fish (kingklip or hake), one cup of green vegetables

BIG D'S COMEBACK ARM ROUTINE

BICEP BLITZ



4 SETS X
10-12 REPS

BARBELL CURLS

"I am a believer in the benefits of a variety of exercises for sculpting your arms. This is a classic mass builder. My objective with curls is not to move tons of weight but to feel the muscle I am working on," says Damian.

ALTERNATE DUMBBELL CURLS

"Do these with good form, but at the same time you must apply as much stress as possible to spark new growth."



4 SETS X
10-12 REPS



4 SETS X
10-12 REPS

SPIDER CURLS

"I keep my body against the incline bench and focus on squeezing my biceps as hard as I can. A lot of people in the gym don't know this exercise and underestimate the true benefit you get from doing it this way."

CABLE CURLS

"This exercise is ideal to pump up the muscle bellies. I normally do this exercise at the end of my workout."



4 SETS X
10-12 REPS

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TRICEP TEAR-DOWN

TRICEP CABLE PUSHDOWNS

"I basically do this movement to warm-up my elbows and get my triceps ready."



4 SETS X 10-12 REPS



4 SETS X 10-12 REPS

OVERHEAD ROPE EXTENSIONS

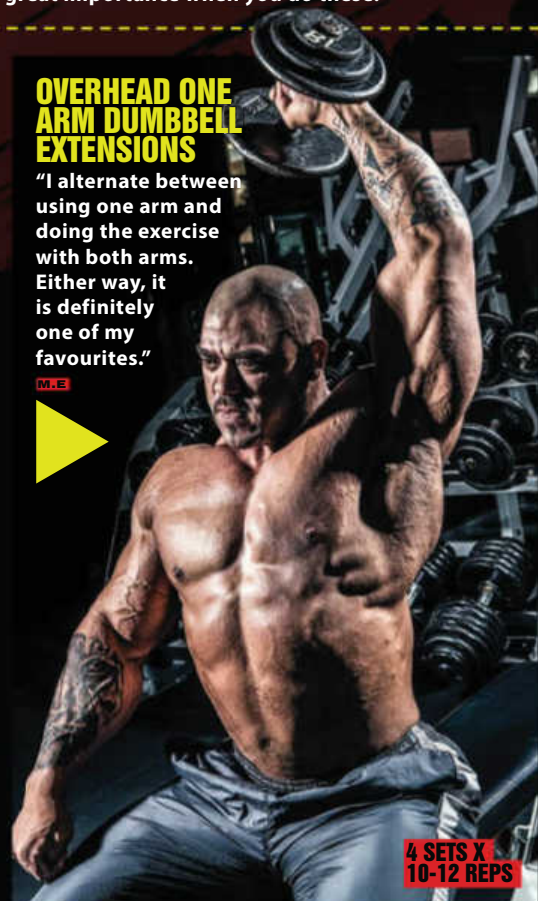
"I put maximum tension on the triceps when I do overhead rope extensions. The mind-muscle link is of great importance when you do these."



4 SETS X 10-12 REPS

DUMBBELL KICKBACKS

"Keep your upper arm stationary and focus on your triceps exclusively when you do kickbacks. It is a wonderful exercise to completely finish off the back of your arms."



OVERHEAD ONE ARM DUMBBELL EXTENSIONS

"I alternate between using one arm and doing the exercise with both arms. Either way, it is definitely one of my favourites."

M.E.

4 SETS X 10-12 REPS



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YOU DON'T HAVE TO BE GENETICALLY GIFTED TO BUILD A MONSTROUS BACK THAT BOASTS THE SIZE, WIDTH AND DENSITY TO BLOW EVERYBODY ELSE OFF THE STAGE.

The number one prerequisite for developing an awesome back is intensity, according to rapidly rising bodybuilding star Awonke Ngoma. A simple look at his back development will tell you that he knows how to turn up the intensity a notch or two for maximum muscle growth.

BRUTAL BACK ATTACK

**AWONKE NGOMA'S
BLUEPRINT FOR A WIDER WINGSPAN**



Awonke's outstanding back development is true testament to his ability of making some exercises work for his body structure. The 29-year-old has spent considerable time in the trenches to sculpt his back and can now hang with the big boys in any line-up on any given show day.

"I like to, now and then, deviate from the standard form of lifting weights to simulate the muscle more effectively and spark new growth," says Awonke. He believes the brain responds to this variety in the normal exercise regimen by releasing more growth hormones to build additional slabs of muscle in weaker areas that are not normally adequately stimulated when you don't use unorthodox training methods.

"While I mostly stick to the standard moves, I have found in the past that I can stimulate my body in a totally different and fresh way by doing my own versions of exercises such as pull-ups and seated cable rows when I hit my back. You have to think out of the box to grow. My training is always performed with my safety as a priority though."

Awonke, a former rugby player, started to train seriously and consistently in 2009 and enjoys listening to the latest hip hop music while pumping iron. He believes that bodybuilding as a sport can be used in a positive way to uplift disadvantaged communities and get children off the streets and in to gyms to improve their self esteem.

"WHILE I MOSTLY STICK TO THE STANDARD MOVES, I HAVE FOUND IN THE PAST THAT I CAN STIMULATE MY BODY IN A TOTALLY DIFFERENT AND FRESH WAY BY DOING MY OWN VERSIONS OF EXERCISES SUCH AS PULL-UPS AND SEATED CABLE ROWS WHEN I HIT MY BACK."

ATHLETE STATS

OFF-SEASON WEIGHT: 102kg

CONTEST WEIGHT: 86kg

HEIGHT: 1.69m

BIRTH PLACE: Mthatha, formerly known as Umtata in the Eastern Cape

LIVES: Durban

CONTEST HISTORY:

- 2009 IFBB KZN Provincials - 2nd Novice
- 2009 IFBB SA Champs - 1st
- 2012 IFBB East Coast Classic - 1st Senior Men 70-80kg
- 2012 IFBB KZN Provincials - 6th
- 2013 IFBB East Coast Classic - 1st Senior Men 70-80kg and Overall winner
- 2013 IFBB KZN Provincials - 2nd Senior Men u/80kg
- 2013 IFBB SA Champs - 4th Senior Men u/80kg
- 2015 Queens Casino - 1st Senior Men 80-90kg and Overall winner
- 2015 Rise of Phoenix - 2nd Senior Men 80-90kg



AWONKE'S TRAINING SPLIT

DAY	MORNING:	AFTERNOON
1	Back	Arms
2	Chest	Calves and hamstrings (light pumping day)
3	Rest	
4	Quads	Glutes, hamstrings and calves
5	Shoulders	Arms
6	Full body workout focusing on weaker body parts with light weights	
7	Rest	

AWONKE'S:

OFF-SEASON DIET

- **MEAL 1:** Oats with whey protein
- **MEAL 2:** White rice, chicken breasts and vegetables
- **MEAL 3:** Baked potato, ostrich and vegetables
- **MEAL 4:** Sweet potato, steak and vegetables
- **MEAL 5:** Whey protein

SUPPLEMENT PLAN

- Amino acids
- Creatine monohydrate
- L-glutamine
- Whey protein

When he is dieting for a contest he will also make use of a reliable multivitamin and a fat burner.

CONTEST PREP DIET

- **MEAL 1:** Ruby grapefruit, oats and egg whites
- **MEAL 2:** Brown rice, chicken breasts, broccoli
- **MEAL 3:** Fish salad
- **MEAL 4:** Chicken salad
- **MEAL 5:** Whey protein



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AWONKE'S BACK BLASTING VARIATIONS

Awonke blasts his back with a combination of light and heavy weights. He will typically start his back attack with lighter pumping sets that consist of 4-6 sets with reps ranging from 20-30 before finishing off with heavier weight.

"The amount of weight is not critical as long as you force yourself to work through the pain barrier and feel the muscles contract. I also use super, tri and giant sets to crank up the intensity. When you train back you have to pull out all the stops to make the muscles work harder. Back day is definitely not for the faint-hearted," he states.

MACHINE LAT PULLDOWNS

This exercise works the back for a proper front-lat spread on stage and is an alternative to pull-ups where you use your own body weight.

Awonke likes to include it along with his version of pull ups to fully exhaust his back. "I don't believe in using any extra movement to knock out reps but remain upright throughout the exercise. I also make sure my abs are tight and my elbows are back and pointed out toward the sides of my body."

EXECUTION: Grasp the pulldown bar with a wide overhand grip. Lower the pulldown bar using a controlled motion to just underneath your chin. Squeeze before slowly allowing it to return up along the same path to the original position.

AWONKE'S TIP: "TRY TO REMAIN UPRIGHT THROUGHOUT. AVOID LEANING EXCESSIVELY BACKWARD AND RATHER FEEL THE CONTRACTION IN YOUR LATS WHEN YOU PULL DOWN THE WEIGHT IN THIS MOVEMENT."

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PULL-UP!

This exercise works the upper and middle back (rhomboids, lats, teres major and minor, infraspinatus, middle and lower trapezius).

This is the ultimate test of strength for Awonke. "I use a shoulder-width underhand grip. I like to pull myself up and then arch my back before reaching the top of the bar for extra intensity. I know it is different to normal pull-ups but it works. Give it a try."

EXECUTION: Hang freely from the bar with a shoulder-width underhand grip, with arms extended and ankles crossed behind you. Start pulling your body up, with your shoulder blades down and back. Make sure that you arch your back and contract your lats as you raise your body upward and outward. Awonke concentrates on keeping his elbows out to his sides when he pulls himself up. Hold momentarily as your chin crosses the level of the bar at the top, then lower yourself back down to the bottom position under control. Alternatively you can also make use of an assisted pull-up machine that provides a counterweight. Before trying out Awonke's version be sure to perfect your standard pull-up.

AWONKE'S VERSION:

"I truly believe that this exercise is the king of all back exercises because of the tremendous amount of force it generates. My version hits the back a bit differently. It is definitely a must-do exercise for a well-defined, muscular back. If you don't have enough power you can use a spotter to hold your ankles. Keep at it to build up your strength with the goal of performing a number of reps on your own without any help."





BENT OVER ONE ARM LONG BAR ROW

This strength exercise works the middle back (rhomboids, lats, teres major and minor, infraspinatus, middle and lower trapezius).

"This is a super movement to get that extra thickness in the mid back area," says Awonke.

EXECUTION: Put weight on the one end of an Olympic barbell. Place the other end of the barbell you are going to row in the corner of two machines or put a heavy object on the ground to prevent the barbell from sliding backward. Keep your torso as close to parallel with the floor as possible with a slight bend in your knees. Grab the barbell with one arm just behind the plates on the loaded side and place your other hand on your knee. This is your starting position.

Now pull the bar up until the plates touch your chest. Squeeze for a second at the top before returning to the starting position. Complete your reps, then switch arms. Make sure to work through a full range of motion.

AWONKE'S TIP:
"DON'T USE ANY MOMENTUM WHEN YOU ROW THE BAR. KEEP YOUR BODY PERFECTLY STILL. ONLY YOUR ARM SHOULD MOVE. WHEN YOU LOWER THE BAR MAKE SURE YOU GET A GOOD STRETCH ON THE LATS. THIS IS AN EXCELLENT 'PUMPING' EXERCISE TO GET TONS OF BLOOD INTO THE LATS AND MIDDLE BACK. IT CAN ALSO BECOME A VERY EFFECTIVE MASS BUILDER IF YOU START TO PILE ON THE WEIGHTS."

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STANDING UNDERHAND PULLDOWNS

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"This is lat-specific weight training at its best."

EXECUTION: Stand in front of the lat pulldown machine with a secure underhand grip on the bar. Slowly pull the

weight straight down in front of you until it's at about mid-chest level. Concentrate on using the muscles in your back and not your arms when you perform the movement. Pause for a second at the bottom of the move, squeeze and then slowly and under control return the weight back up to the starting position and repeat.



AWONKE'S TIP:
"DON'T BE AN EGO MANIAC – WORK WITH WEIGHTS YOU CAN HANDLE AND FEEL. REMEMBER TO SQUEEZE AT THE BOTTOM," HE SAYS. "KEEP THE MOVEMENT SLOW, CONTROLLED AND FLUID. NO JERKING IS ALLOWED."



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AWONKE'S SEATED CABLE ROW

The seated cable row will target the middle back (rhomboids, teres major and minor, infraspinatus, middle and lower trapezius).

This exercise can be used on its own or at the end of a superset to fully blast the back. "I believe my special version gives you more bang for your buck," says Awonke.

EXECUTION: Attach a close-grip bar to a seated row cable machine. Sit upright and place your feet against the foot platform with your legs slightly bent. Grasp the bar and lean slightly back until your torso is erect and your arms fully extended. Awonke keeps his elbows close to his body and he focuses on pulling the weight to his abs in a controlled motion. Squeeze your shoulder blades together as the bar reaches your body, hold for a second and then slowly return to the starting position.

AWONKE'S VERSION:

"On the final reps I start to row the bar towards my forehead to target the muscles in my back in an unfamiliar way. Obviously you will not be able to do this while using a heavy stack. Go light and pull the bar to your face and straight back while squeezing your shoulder blades before you slowly return to the original position." **M.E**



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STEROID, EXPOSÉ:

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LOCAL STEROID INDUSTRY FRAUGHT WITH CRUDE HOME-BREWED PRODUCTS AS UNDERGROUND LABS THRIVE

IN THIS ISSUE OF MUSCLE EVOLUTION WE EXPOSE A WORRYING RISE IN THE SALE OF PRODUCTS MANUFACTURED IN BACKYARD STEROID LABS, A PRACTICE THAT IS PUTTING BODYBUILDERS AND OTHERS ATHLETES AT SERIOUS RISK. Speaking on condition of anonymity, 'Mr. X', a central role player who has been part of the steroid black market in South Africa since 1991, speaks out to warn users about the potential dangers and health risks faced.

Selling steroids is big business and on the rise in South Africa. And, it seems, so are the risks associated with buying them. While underground labs are not a new phenomenon in South Africa, it seems the number of backyard manufacturers is growing, which is a concern for many within the industry.

With this increase in the number of injectables being manufactured in kitchen labs with no measures in place to ensure that everything is sterile and bacteria free scores of bodybuilders are getting sick from injecting copious amounts of these impure substances into their bodies.

D E N T I A L

LOW QUALITY

En route to the prearranged meeting point with Mr. X I was expecting to meet a dodgy-looking character in the mould one would associate with the illicit drug trade. Instead I came face to face with a well-spoken bodybuilder who is passionate about the sport and lives in an affluent part of Johannesburg.

The only indication that I was persona non grata were the vicious-looking guard dogs patrolling the perimeters of the well-kept property. With a fleeting glance at their enormous teeth I was utterly thankful for their obedience in the presence of their owner.

"Steroids are absolutely everywhere nowadays," says Mr. X. "Labs fill an important niche but what annoys me the most is that people who have never lifted a barbell in their entire lives now sell like it is candy in some store down the road. I know of guys selling steroids they make in their kitchens. They don't care about obtaining the best possible raw API (active pharmaceutical ingredient – a substance used in manufacturing a drug product) and have no proper filtering process. They even use an ordinary coffee filter to process the stuff they sell. They have no regard for health problems brought on by injecting an unsterile product."

For these kitchen brewers the only potential repercussion of consumers becoming aware of low quality products is lost income. They don't invest the money and time in a bacteria-free and sterile environment because

it would only sap profits. With no one to 'police' them these operations are run from houses where injectables are usually made in a kitchen by an amateur without any training in chemistry or sterility.

"Complaints about fakes are never aired in public, making it difficult for customers to properly evaluate the best suppliers to purchase from," he continues. Mr. X, on the other hand, cares about his clients and what they inject. "Selling poor products are making us all look bad and it harms the credibility and integrity of established suppliers like myself who are known for delivering products of high quality on a consistent basis."

NOVICE STEROID CHEMISTS

This trend is being driven by the proliferation of readily available information on the Internet, which makes it the first stop for these novice steroid chemists who operate from kitchens. Today pages and pages of information on how to manufacture, sell, buy and use steroids is available at the mere push of a button. The free flow of information has spawned a new breed of novice steroid chemist who is formulating their own concoctions to sell on the black market.

"If users are not aware and don't demand better standards why would anyone supply better quality?"

Many of these underground labs purchase their ingredients off the Internet. The ingredients of their products are of poor quality, with high heavy metal

"SELLING POOR PRODUCTS ARE MAKING US ALL LOOK BAD AND IT HARMS THE CREDIBILITY AND INTEGRITY OF ESTABLISHED SUPPLIERS LIKE MYSELF WHO ARE KNOWN FOR DELIVERING PRODUCTS OF HIGH QUALITY ON A CONSISTENT BASIS."



"MY ESTIMATION IS THAT 99.9% OF ALL STEROIDS IN SOUTH AFRICA ORIGINATE FROM UNDERGROUND LABS."

and acid contents, and are weak. People are actually injecting this fake and bacteria-filled junk into their bodies and they then wonder why they end up in hospital. I don't know why anyone would even consider a high-risk source like a kitchen brewer when you know that you are actually putting your

health on the line," says Mr. X. "I have flown to China and more recently Cambodia on numerous occasions to meet with manufacturers and build relationships. I make sure we have the best possible API. My reputation is of utmost importance to me. Having been in the business for so long I know for a fact that these guys buy the ingredients for their local labs without ever making a single trip to the source – normally China. My estimation is that 99.9% of all steroids in South Africa originate from underground labs. I believe 15% of these underground labs are importing their products directly from the manufacturers like I do and the other 85% are sold with raw ingredients imported from China from websites that also sell other cheap products like bags and shoes"

Mr. X admitted he also had, at one stage, tried his hand at producing the finished product himself but failed. "I realised that it was virtually impossible to uphold the standards the factories in China and Cambodia offered me. It is and always will be an extremely difficult practice to keep products sterile and free of bacteria – even if you get the best API from China."

"I DON'T KNOW WHY ANYONE WOULD EVEN CONSIDER A HIGH-RISK SOURCE LIKE A KITCHEN BREWER WHEN YOU KNOW THAT YOU ARE ACTUALLY PUTTING YOUR HEALTH ON THE LINE."

INJECTIONS AND INFECTIONS:

● **TAKE SPECIAL CARE WHEN YOU USE VIALS. VIALS WITH RUBBER CAPS WILL HAVE BACTERIA ON THEM.**

Swab the rubber cap with a new alcohol swab to reduce contamination of the needle and the steroid inside. Wait for the alcohol to evaporate before piercing it with the drawing needle. Never refill vials – they are hard to sterilise and refilling puts you at greater risk for bacterial infections.

● **NEEDLES THAT GO INTO VIALS MUST BE NEW – JUST AS NEEDLES THAT GO INTO YOUR BODY MUST BE NEW.**

Piercing the rubber cap on a vial can blunt the needle. If you use a different needle to draw the steroid up from the vial

than the one you inject with always keep the needle capped until you are ready to use it. Use sterile water to inject or for the cleaning vials and syringes. Dirty hits are caused by the injection of foreign substances into your bloodstream (for example dirt, loose hair in the mix etc.) The symptoms are vomiting, sweating, severe headaches, fever and kidney pains.

● **STEROID PREPARATIONS MANUFACTURED UNDER NON-STERILE CONDITIONS PUT USERS AT RISK FOR ACQUIRING LIFE-THREATENING VIRAL INFECTIONS SUCH AS HIV AND HEPATITIS B AND C.** Users can also develop

endocarditis, a bacterial infection that causes a potentially fatal inflammation of the inner lining of the heart. Endocarditis occurs when bacteria spreads through your bloodstream and attaches to damaged areas in your heart. If left untreated, this condition can damage or destroy your heart valves resulting in death.

● **BACTERIAL INFECTIONS CAN CAUSE PAIN AND THE FORMATION OF ABSCESSES AT INJECTION SITES WHEN YOU ARE NOT INJECTING UNDER STRICT SANITARY AND STERILE CONDITIONS.**

Common infections are cellulitis and abscesses. Cellulitis means the inflammation of the cells. It

is an acute bacterial infection of the skin (dermis and subcutaneous tissues) resulting in pain, redness and warmth of the affected area.

An abscess is a localised collection of pus in any part of the body, usually caused by an infection. The formation of pus is basically an accumulation of fluid, living and dead white blood cells, dead tissue as well as bacteria. If an infection spreads to the tissues under the skin and into the bloodstream it could develop into a case of septicemia (blood poisoning) which can be fatal. Unlike other infections, antibiotics will not cure a well developed abscess. It must be opened and drained by a doctor for it to improve.

"THE OIL IS SUPPOSED TO BE FILTERED THROUGH TWO PRECISION FILTERS TO MAKE SURE THAT ALL THE BACTERIA IS FILTERED OUT AND EVERYTHING IS STERILE. THIS GUY WAS USING COFFEE FILTERS!"

THE USE OF COFFEE FILTERS

Mr. X explains that home brewing a quality product is difficult due to the complicated process of producing steroids: "Formulating the end product starts after you get the best quality API and the best oils. These oils are very important and could make for a good or bad quality injectable. The oil is heated to different temperatures and the API will then be added to the oil and then dissolves."

After the ingredient is suspended in the oil it must be filtered through a very sophisticated fine filter to ensure that all the bacteria is removed. "A filter costs about R2,500 and cannot be used for two different products like Deca or Trenbolone, for example. You can only autoclave (equipment used to sterilise objects) a filter 25 times before it must be disposed of and a new one is used. It is anything but cheap."

Mr. X also shared a recent conversation he had with a kitchen brewer who produces injectables on a kitchen stove. "At the time I was interested in possibly making the product myself locally instead of having it manufactured abroad and importing it. I asked the guy what he was doing to make sure it was bacteria free. He said that he was using heat to kill all the bacteria. My next question was what he was using as a filtering process to filter particles from the oil. He answered that he poured the oil through a coffee filter. I was shocked. The oil is supposed to be filtered through two precision filters to make sure that all the bacteria is filtered out and everything is sterile. This guy was using coffee filters! I believe anyone who buys from such a lab has no regard for his own health and life."

TELL TALE SIGNS

Mr. X states that the easiest steroids to make locally are capsules. "Capsules are the first sign of a back room operation. Anyone can purchase a manual capsule filling machine and fill capsules in his living room or kitchen while watching his favourite television series." According to Mr. X it is always better to buy pressed tablets as opposed to capsules.

"Check if the brand you are buying has its own insignia pressed on the tablets because this means that your supplier has spent extra capital on the proper equipment and expertise to manufacture the product." Kitchen brewers usually don't have money to spend on this kind of equipment.

"When buying injectables check if the product has its own logo stamped on the plastic cap of the bottle. If this is the case it is a good sign money was spent on producing the product. If your injectables have generic caps with the words 'flip up' or

'flip off' on the plastic it is almost certain that the product is locally manufactured because local generic caps are used to close the bottles."

While the absence of branding on the cap is a warning sign, the presence of a logo does not entirely guarantee that you are buying a pure product. A buyer should also look out for the presence of peptides, growth hormones and pregnyl in the product range on offer. "These products cannot be made locally and they have to be imported. Your bigger, more well-established suppliers will always carry these products," says Mr. X.

CLEAN UP YOUR ACT

"In a perfect world you should analyse the API with a high performance liquid chromatography test and do the same analysis on the finished product. Locally this is very difficult, if not impossible. We used to send sample products overseas for a couple of hundred dollars and a lab

would then carry out a test for us, but the US authorities got wind of this practice and closed it down. The one test we can still do in South Africa is to test for bacteria. When my products arrive from my manufacturer overseas I will always spend money on a bacteria test to make sure they are sterile and hundred percent pure before I embark on distribution. I want to urge others to do the same. I don't want to name and shame kitchen brewers but I would like them to clean up their act and follow my lead in making sure that their products cannot make anyone sick. At the end of the day they are playing with other people's lives."

Mr. X wants users to request independent lab testing to help them make more informed decisions and minimise the risks associated with the use of underground muscle-building and performance-enhancing drugs.

QUESTIONS TO ASK:

- 1 Does the product contain quantities of the active ingredients listed on the label?
- 2 Does the product contain the substance listed on the label?
- 3 Does the product contain impurities and contaminants?
- 4 Does the product contain unidentified compounds?
- 5 Does the product contain heavy metal contamination?

"My main concern is the purity and sterility of the products that are sold from kitchen brewers. Suppliers don't have to adhere to any stringent regulations and products with harmful bacteria, micro-organisms and viruses eventually end up in the hands of users. **When you inject a steroid you bypass a lot of your natural defenses that you normally get through oral administration. It leaves you wide open to infection in the muscle if the material is not sterile or properly produced. It can cause abscesses and could even kill you.**"

WHAT TO CHECK FOR WHEN BUYING:

- Check if the product has a website to confirm its authenticity.
- **Make sure the product checks out on the website when you purchase it. Local underground labs copy the names of bigger international labs to create an impression that they are legitimate.**
- Try to establish where the product was manufactured. If it is locally manufactured chances are good that you are at risk of using an inferior product as opposed to when it is imported.
- **Request a bacteria test from a local lab to find out if the product is clean.**
- Check the credentials of your supplier. Make sure that he is well-established and not a fly-by-night.
- **Don't believe bodybuilders when they say they are also using the product they are selling to you. Some bodybuilders sell a cheap alternative to people and use the more expensive products themselves. It is all about making a larger profit at the end of the day.**
- A supplier should also lift weights, live the bodybuilding lifestyle and take his own products. In this way you can be sure that it is the best quality possible.
- **Ask for a certificate of analysis from a third party on the API they are using to manufacture the product.**
- If the product is locally manufactured ask where the supplier is buying his API from. Also ask for a description of the filtering process and if it is sterile and bacteria free. Due to the nature of any underground operation you can never be sure if your product is clean or accurately dosed. **M.E.**

Disclaimer: This is a first of a series of articles on the local steroid market and issues that we at Muscle Evolution deemed necessary to bring to the surface. We neither promote nor condone the use and abuse of performance-enhancing substances, whether illegal or banned. We merely aim to foster a culture of responsible use and safety through a greater understanding about the possible health implications of using these substances.

TEAR DROP TURNAROUND

TARGET DEVELOPMENT AROUND THE KNEE FOR THE MOST MUSCULAR QUADS

That elusive quad 'sweep' is something that all aspiring bodybuilders and the more serious physique conscious among us chase. However, many bodybuilders struggle to develop the thickness above the knee in what is commonly known as the "tear drop" muscle due to its shape or vastus medialis.

A COMPLETE SET OF WHEELS

All the legends of the bodybuilding stage had exceptional vastus medialis development. A look at any line-up will tell you immediately who has neglected to train their legs properly, making it a make or break body part for any serious competitor.

Think about the thick and freaky quad development of former IFBB pro bodybuilders Tom Platz and Ronnie Coleman, both known for their relentless leg workouts. Current bodybuilders like Branch Warren and Kai Greene also have full upper leg development that is seldom realised by others. These bodybuilders would be the first to say that a complete set of wheels, which is characterised by a distinct tear drop, require intense quad sessions that tax this specific muscle group with focused techniques and a distinct approach.

CORRECT EXECUTION

Derek Archer, a qualified trainer and conditioning coach, and the director of education at the Institute of Fitness Professionals (Fitpro) which provides accredited education for the health and fitness industry, sheds light on this area of the physique:

"The vastus medialis is located on the anterior (front) medial (inside or middle) aspect of the femur (thigh) bone and is part

of the quadriceps group of muscles. It is commonly divided into the vastus medialis longus and vastus medialis oblique. The VMO is thought to be responsible for the medial tracking of the patellar (knee-cap) as a result of the oblique angle of its fibres. All the quad muscles are innervated by the femoral nerve and none can act independently."

Archer believes that to develop the vastus medialis the quads have to be fully activated when you train legs. Quality development therefore depends on the correct overall execution of exercises. "Leg extensions can strengthen your tear drop muscle and improve shape and size. You have to point your feet slightly outwards, but not too much as you don't want the axis of the knee to be out of alignment with the machine as this puts too much stress on the medial support structure of the knee when you perform these – so be careful how you place your feet," says Archer.

Archer is quick to add that "any exercise involving knee extension will work the quads, and it is the timing of the movement and the load that will determine what sort of adaptation will occur."

SQUAT SAFELY

Archer advises bodybuilders and athletes to move through a complete range of motion whenever possible for the greatest effect. "In addition, one must only lock out under control as we don't want the knee to go into hyperextension."

When anyone tries to focus more on developing one specific muscle, in this case for aesthetic balance and symmetry, it is also imperative that they don't create major strength imbalances. In this instance Archer says there needs to be balance between vastus medialis and vastus lateralis to ensure optimal and efficient knee function, and the hamstrings cannot be ignored when quad development is the main focus of a programme.

"The incorrect strength ratio between the quadriceps and hamstrings often goes unidentified until an injury occurs," he says. And it is this strength imbalance that is one of the leading causes of lower extremity injuries. Archer adds that weak hamstrings can also result from "postural issues such as 'sway back' where the pelvis is posteriorly rotated and anteriorly displaced and the knees are hyperextended. Excessive sitting can also cause

"ACCORDINGLY, THE BEST ADVICE TO OPTIMISE TEAR DROP DEVELOPMENT IS TO LEARN TO ACTIVATE THE MUSCLE PROPERLY WHEN YOU TRAIN AND, OF COURSE, TO ACTUALLY SHOW UP ON LEG DAY."



the hamstrings to tighten, which can also increase the risk of injury."

It is therefore important that bodybuilders keep these factors in mind when working to bring up a weak area. It is also pertinent to mention that genetics will also play a huge role in determining the shape of any muscle group, including the quads.

Accordingly, the best advice to optimise tear drop development is to learn to activate the muscle properly when you train and, of course, to actually show up on leg day. Truly monolithic legs with terrific tear drop development are created with blood, sweat and tears combined with the right approach.

TEAR DROP ANNIHILATION

YOU CAN GIVE YOUR TEAR DROPS A TREMENDOUS WORKOUT WITH THE FOLLOWING EXERCISES:

1) TOES-OUT LEG EXTENSIONS

Position your feet outward when you perform leg extensions and squeeze hard at the peak of the contraction to hit the vastus medialis with a vengeance. Pausing at the top will result in the recruitment of a greater percentage of muscle fibres and this will stimulate additional growth. **By doing leg extensions one leg at a time you can work the muscle more effectively.** Start with 3 sets of 10 reps per leg.

2) LUNGES

This is an old favourite of 8-time Mr Olympia Ronnie Coleman, who liked to perform them in the parking lot outside his gym. No one can dispute that Coleman had fantastic tear drop development. **You can perform lunges with your own bodyweight, a pair of dumbbells or a barbell like Coleman did.** Try to maximise the stretch at the bottom portion of each rep when you do lunges to activate the tear drop muscle. Maintain muscular tension and perform a full lunge with each rep. Perform 3 sets of 10 reps per leg.

3) FRONT SQUATS

Isolate your teardrop by performing front squats. By holding the barbell in front of your body you will transfer more of the weight onto your quads, with less

involvement from the hammies and glutes. **Maximise the stress on the tear drop muscles by pointing your toes slightly outward.** Go down as deep as you can. **Start by doing 3 sets of 10 reps.**

4) 1 AND ¼ SQUATS

You can also target these muscle by performing 1 and ¼ squats because the vastus medialis is, along with the hamstrings, responsible for getting you out of the bottom part of the movement when you squat. **Squat down as normal and then push yourself up only ¼ of the way, then slowly and under full control return to the bottom part of the squat before returning back up to the top of the movement.** This will count as a single rep. To overload the bottom position you are effectively targeting the vastus medialis. Perform 3 sets of 10 reps.

5) SPLIT SQUATS (BULGARIAN SQUATS)

Archer believes that this is a good exercise for overall quad development as the relative instability of using one leg at a time will force the vastus medialis and vastus lateralis to work. **"The former tends to work harder from the quarter squat position to full extension, according to some sources,"** he adds. Perform 3 sets of 10 reps per leg to start. **M.E**

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CHOLESTEROL-RICH FOODS INCLUDE EGGS, CHEESE, RED MEAT AND SHELLFISH.

Amidst all the fervent debate about the effect that low-carb, high fat (LCHF) eating has on diabetes, insulin resistance and, consequently, weight loss, a concurrent discussion rages on regarding cholesterol.

While there are numerous questions and concerns being raised about the effects that the LCHF diet has on cholesterol, particularly when adherents consume so much saturated fat, these discussions have also helped to reframe the important role cholesterol plays in the human body.

A lot of what we knew about this important substance has changed thanks to the efforts of people like Gary Taubes, Dr. Bill Lagakos, Ann Childers MD, Nina Teicholz and our own Prof. Tim Noakes, among others.

THE CURIOUS CASE OF CHOLESTEROL

IT'S TIME FOR EGG YOLKS TO MAKE A WELCOME RETURN TO THE BREAKFAST TABLE

THE BASICS

Cholesterol is an essential structural component of every cell membrane in our body, and is therefore required to maintain both the structural integrity of the cell membrane, and movement in and out of the cell through this membrane. Cholesterol is also an important precursor for the biosynthesis of steroid hormones, bile acids and vitamin D.

The body produces about 75-90% (the figure varies according to different sources) of its required cholesterol in the liver. Accordingly, a limited amount of ingested cholesterol is required to make up the difference.

As cholesterol is oil-based and therefore immiscible in blood (it is a hydrophobic substance which means that it cannot dissolve in water) it is transported in the

bloodstream by lipoproteins, namely low-density lipoprotein (LDL) and high-density lipoprotein (HDL).

Before delving deeper into the debate, it is worth noting that it is not just cholesterol itself that is necessarily good or bad, but rather these carrier proteins that have been linked to cardiovascular disease.

WHAT WE THOUGHT WE KNEW...

In the past we have lumped cholesterol into one of two groups – 'bad' LDL cholesterol or 'good' HDL cholesterol.

High levels of LDL have long been associated with an increased risk of cardiovascular disease and certain cancers, with recent reports also linking it to brain

disorders such as Alzheimer's and dementia. 'Good' HDL cholesterol, on the other hand, is deemed as such due to the fact that this form is carried away from arteries to the liver and gut, where it is metabolised and excreted.

It was also thought that an increase of diet-derived cholesterol raised circulating cholesterol above recommended levels, thereby increasing a person's risk of things like coronary heart disease and arteriosclerosis. We were therefore told to give cholesterol-rich foods such as eggs, cheese, red meat and shellfish a skip.

Current recommendations are that levels of LDL cholesterol should be less than 3mmol/l (millimoles per litre) and that HDL cholesterol levels should more than 1mmol/l. Total cholesterol levels are also used as a basic indicator for cardiovascular disease risk, where more is generally considered to be bad for you.

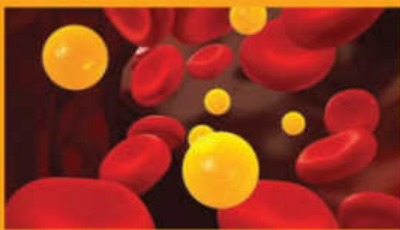
WHAT WE KNOW NOW...

It now seems that we were wrong about cholesterol, in some aspects at least. For starters, we now know that cholesterol is complicated stuff. A basic distinction between 'good' and 'bad' is an oversimplification of a substance that is vital to life, yet still has the ability to negatively affect our health and even cause death.

The scientific and medical communities at large have also been locked in debate about whether ingested cholesterol is the root cause of elevated total cholesterol levels and, more importantly, elevated LDL levels, which are more dangerous, or if an overconsumption of simple carbs, sugar and trans fats, predominantly from processed foods, are to blame.

In this regard, recent developments now refute previous thinking around dietary cholesterol. The 2015 Scientific Report of the U.S. Dietary Guidelines Advisory Committee, for instance, stated that "available evidence shows no appreciable relationship between consumption of dietary cholesterol and serum (blood) cholesterol".

More importantly though, a report published in the Annals of Nutrition and Metabolism now claims that higher cholesterol does not lead to heart disease and indeed protects against many illnesses, including cancer. The cited research seems to confirm that if you have a high cholesterol level you will live longer, which is an about-turn on conventional wisdom with regard to cholesterol.



CHOLESTEROL IS NEEDED TO...

- Produce vitamin D, which we need for strong bones and protection against diseases, including some cancers. Vitamin D is synthesised from cholesterol by the action of sunlight on our skin.
- Create cell membranes, which keeps our cell structures intact and regulates what can pass in and out of cells.
- Produce sex hormones, which include oestrogen, progesterone and testosterone.
- Produce bile, which is needed for the digestion of food.
- Fight infection, as the lipoproteins that carry cholesterol bind to viruses and bacteria and deactivate them.
- Produce synapses, the crucial links between the nerve cells (neurons) in our brains that are essential to transmitting impulses.

"Damage to the cardiovascular system seems to occur when LDL cholesterol is deposited in the cells that line major artery walls, and is then oxidised. This seems to happen when high levels of insulin are present."



PARTICLE SIZE

So what then is to blame for the increased risk of cardiovascular disease? Well, according to Prof. Noakes "it's not all about the cholesterol." In fact, he says that high cholesterol is a poor predictor of heart disease risk. "It's vitally important to look at the other risk factors such as triglycerides, insulin, and your carbohydrate status, as well as cholesterol particle size to see what's really happening."

Noakes explains that it is the small LDL particles that are the killers, and it is vitally important to make this distinction as LDL cholesterol, in its various forms, fulfill many vital roles within the body. As such, labelling it all as 'bad' is misleading. For example, certain types of LDL cholesterol transport triglycerides to muscles for energy production, and like HDL, help return cholesterol to the liver so that it can be processed for other functions.

Damage to the cardiovascular system seems to occur when this type of cholesterol is deposited in the wrong places, the most dangerous of which are the cells that line major artery walls, and is then oxidised. This seems to happen under certain conditions, most notably when high levels of insulin are present.

When this happens there is an immediate immune response as the body tries to rid the arteries of these deposits, which is accompanied by inflammation. This may lead to blockages due to a narrowing of the arteries and the formation of plaque, which is what leads to the common cardiovascular conditions of high blood pressure and

atherosclerosis, thereby increasing the risk of strokes and heart attacks.

It is therefore important to firstly reduce the total amount of cholesterol being carried in LDL, which is best achieved by increasing the size of each particle, and secondly to reduce the total number of LDL particles present in the blood. In addition, a higher number

"IT'S VITALLY IMPORTANT TO LOOK AT THE OTHER RISK FACTORS SUCH AS TRIGLYCERIDES, INSULIN, AND YOUR CARBOHYDRATE STATUS, AS WELL AS CHOLESTEROL PARTICLE SIZE TO SEE WHAT'S REALLY HAPPENING."

of HDL particles, particularly the larger, more mature particles, and higher HDL cholesterol concentrations are important to decrease the risk of cardiovascular disease.

This can be achieved, according to Noakes and other proponents of the LCHF diet, by reducing your carb intake and increasing your fat intake, including saturated fat. "A high fat diet corrects everything," he says. "Your HDL goes up and your triglycerides come down (on the Banting diet), improving your HDL to triglyceride ratio dramatically." That's one of the better predictors of heart attack risk according to Noakes.

However, following this diet total cholesterol can increase, which is what many within the broader medical and dietetics communities caution against. But Noakes attributes this increase to a rise in both your HDL and the larger, safer LDL particles.

There does seem to be some degree of individual difference in the response of cholesterol when manipulating your macronutrient ratios in this way. Some people may experience an increase in total cholesterol, while

others may find that their measurements head in the opposite direction. The important thing to remember is that an increase in total cholesterol, even LDL cholesterol to some degree, is not as important as it was once thought. It seems that the combination of LDL particle size and the other interrelated factors such as low HDL levels, insulin resistance, a high carb intake and elevated triglyceride levels are what influence cardiovascular risk, not the amount of cholesterol in your diet. So don't throw away those egg yolks at breakfast. Ditching the toast may be a better idea... [M.E.](#)

"AS OUR UNDERSTANDING OF THESE PROCESSES ADVANCES, SCIENTISTS HAVE ALSO FOUND THAT HDL EFFICIENCY, RATHER THAN TOTAL HDL CONTENT, IS A MORE ACCURATE PREDICTOR OF CARDIOVASCULAR DISEASE RISK."

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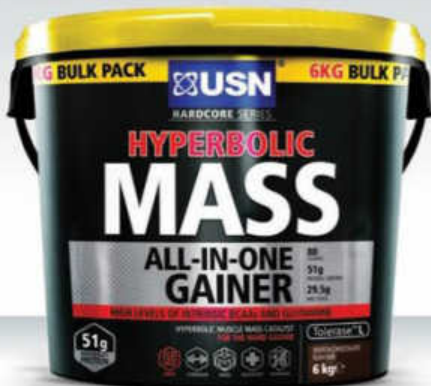
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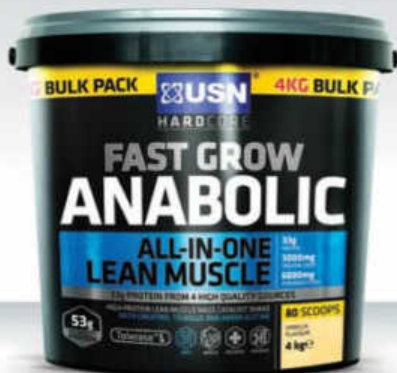
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JACO VENTER'S SHOULDER SMASHING WORKOUT

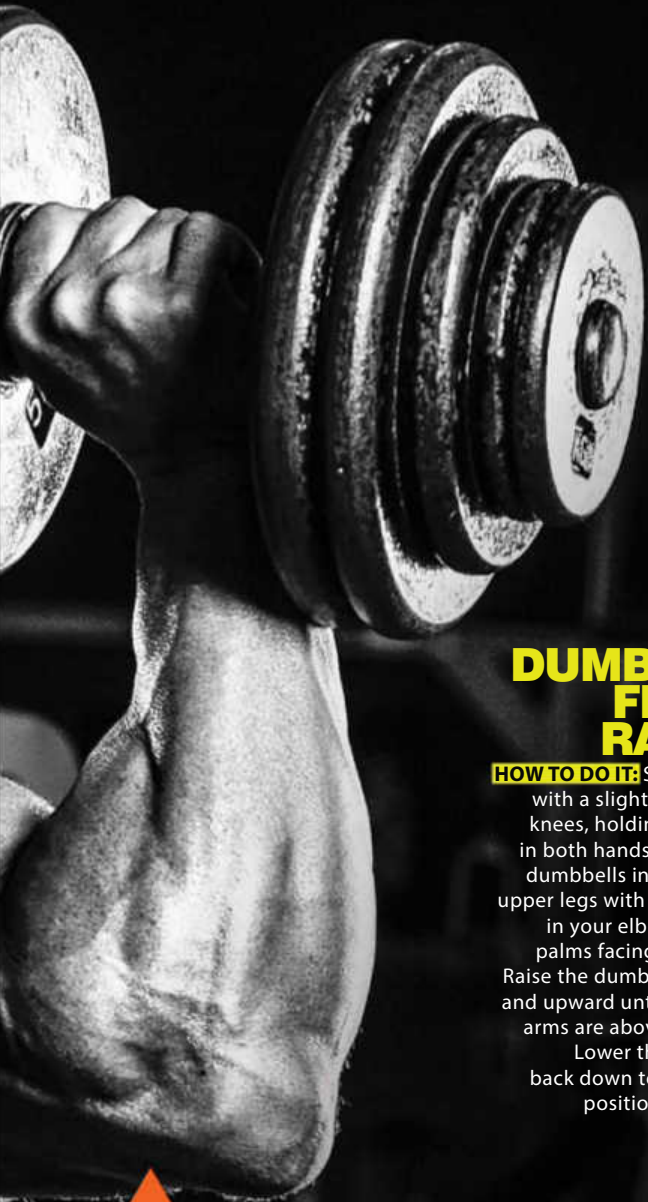
DUMBBELL DELTOID DESTROYERS

SHOULDERS ARE COMPLEX STRUCTURES AS THEY CONSIST OF A BALL-AND-SOCKET JOINT AND THE REQUISITE MUSCLES THAT ENABLE MOVEMENT OF YOUR ARMS THROUGH A 180 DEGREE ARC. It is the only joint structure in the body where that is possible, and the use of dumbbells as your preferred muscle building tool for your shoulder workouts takes full advantage of this biomechanical fact.

Jaco Venter is a top local athlete who has mastered the art of delt destruction. With a workout that targets all aspects of the deltoid muscles – the anterior, medial and posterior

muscles – he sports some of the most impressive shoulders on the local bodybuilding stage. For the inside scoop on how he trains shoulders for maximum effect we joined him at a recent training session.

“Shoulders are smaller muscles than the chest, back or legs but they are extremely important when you stand on a bodybuilding stage,” says Jaco. “Judges will struggle to find fault with magnificently developed shoulders that compliment your V-taper or X-frame. This muscle group, in my opinion, tends to fatigue a lot quicker than other body parts. I always perform 2 to 3 warm-up sets on each exercise I do to make sure the area I target is thoroughly warmed up. Then I select a weight heavy enough and bang out the reps I need for new growth.”



DUMBBELL FRONT RAISES

HOW TO DO IT: Stand upright with a slight bend in your knees, holding dumbbells in both hands. Position the dumbbells in front of your upper legs with a slight bend in your elbows and your palms facing your thighs. Raise the dumbbells forward and upward until your upper arms are above horizontal. Lower the dumbbells back down to the starting position and repeat.

DUMBBELL SHOULDER PRESS

HOW TO DO IT: Grab two dumbbells and sit on a bench that has a back support. Position the dumbbells to each side of your shoulders with your elbows below your wrists and your palms facing forward. Press the dumbbells upward until your arms are extended overhead. Lower the dumbbells back down to the sides of your shoulders and repeat.

JACO'S WORKOUT

EXERCISE	SETS	REPS
BENT OVER REVERSE FLYE	3 SETS AFTER 2 WARM-UP SETS	15-25 REPS
DUMBBELL LATERAL RAISE	3 SETS	10 REPS
DUMBBELL FRONT RAISE	3 SETS	15 REPS
REAR DELT STRAIGHT ARM PULLBACKS	3 SETS	10 REPS
DUMBBELL SHRUGS	3 SETS	12-15 REPS
SEATED DUMBBELL PRESS	3 SETS	8-10 REPS



ANTERIOR DELTS

FORM TIP: DON'T SWING THE WEIGHTS UP. RESTRICT MOMENTUM AND MAXIMISE TENSION.



DUMBBELL LATERAL RAISES

HOW TO DO IT: Stand upright with a slight bend in your knees, holding dumbbells in both hands. Hold the dumbbells in front of your thighs with your elbows slightly bent and your palms facing each other. Bend over slightly at your hips. Raise your arms to the side until your elbows are at shoulder height. Lower the weights back down and repeat.

JACO'S TOP 5 SHOULDER TRAINING TIPS

1. FOCUS ON YOUR POSTERIOR DELTS

"I feel most bodybuilders hardly ever miss a chest session and with all the pressing movements they have overdeveloped anterior shoulders. It is tricky to keep your shoulders completely out of exercises for other body parts. To get the three dimensional thick and dense look in your shoulders you need to focus more on the posterior delts."

2. GIVE THEM SUFFICIENT REST

"It is wise to leave a 48-hour gap between training chest and shoulders because of the huge amount of overlapping that occurs

when you train these two muscle groups. That gives them the time they need to recover and adapt in response to your training."

3. TRAIN SMART NOT HEAVY

"I think the shoulders are complex and can get injured easily if you don't train smart. Just count the number of bodybuilders who have injured their shoulders by using heavy loads. If you go too heavy another muscle will step in and take stress away from the area you are targeting. Once the shoulder joints and rotator cuffs are injured you are looking at a long and difficult road to recovery. Stimulate your shoulders - don't overload them."

4. LEAVE THE PRESSES FOR LATER

Jaco has found that he works his shoulders more effectively when he is performing his pressing movements in the middle and final stages of his workout. "I don't want to blindly press a ton of weight at the start of the workout and injure myself. The idea is always to fatigue the muscle first with other movements and then to finish off with presses. I love to pre-exhaust my delts by doing laterals first before hitting them later in the workout with a pressing movement. In that way I can prolong my career by not putting unnecessary stress on my shoulder joints."

5. VARIETY IS YOUR FRIEND

Jaco makes use of different intensity techniques to fully exhaust his shoulders and shock them into new growth. "I perform an exercise with strict form and at other times I would add half reps with heavier weight to really switch things up and apply more pressure on the muscle. I also like to do giant sets and super sets, and I love to use iso-holds on specific exercises. One week I will do an exercise with a dumbbell and the following week I'll do the same exercise by using a cable or barbell. I like to keep my body guessing when I train."

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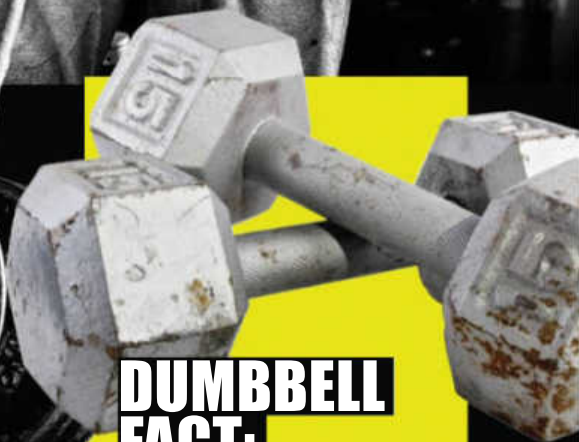
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BARB

SHRUGS

HOW TO DO IT: Stand upright with a slight bend in your knees, holding dumbbells in either hand at your sides. Elevate your shoulders as high as possible by 'shrugging' the weights up. Lower the weights back down and repeat.



DUMBBELL FACT:

It is thought that the dumbbell originated from the haltere, a hand-held weight used in ancient Greece, and was later used by English bell ringers as a way to build strength.

FORM TIP: DO NOT ROLL YOUR SHOULDERS FORWARD OR BACKWARD. IT IS AN UP-DOWN MOVEMENT.

POSTERIOR DELTS

5 COMMON SHOULDER TRAINING MISTAKES & HOW TO CORRECT THEM

Due to the biomechanics of the shoulder joint and the fact that it is involved in almost every upper body movement in some way, it is understandable then that many athletes and serious gym-goers will experience an injury to their shoulder joint at some point in their training as the wide range of movement capabilities make the shoulders more susceptible.

Often, people don't want to train their shoulders hard opting instead to cruise through their sets out of fear of suffering an injury to the fragile ball-and-socket joints. This issue is further compounded when shoulder muscles are not strengthened to the same degree as the major muscle groups in the upper body such as chest and back, which causes strength imbalances.

In this regard there are a few common mistakes that people make when it comes to shoulder development and training. To avoid injury, develop strong shoulders that aid movement, not hinder it, and add the aesthetic appeal of your upper body, avoid falling foul of these common errors...

MISTAKE 1: OVERSTIMULATING YOUR FRONT DELTS

The front (anterior) deltoid is the one muscle that carries the heaviest load when you work out. This muscle group comes into play when you train chest, back and even arms (for instance, when you perform dips and close-grip bench presses for triceps). The overstimulation and disproportionate amount of work imposed on the front deltoids is most noticeable when you attend a bodybuilding and fitness show where many athletes will likely have superior front shoulder development, but lack the balance in other areas. This is a direct result of an overload of presses and dipping exercises that dominate many routines today.

A well structured routine will not let



STRAIGHT ARM DUMBBELL PULLBACKS

HOW TO DO IT: Holding dumbbells in each hand, bend your knees and hinge at the waist until your torso is at a 45° angle with the floor. Keep your back flat. Keep your arms straight as you drive the dumbbells directly backwards, until they are perpendicular with the ground.

BENT OVER REVERSE FLYE

HOW TO DO IT Holding dumbbells in each hand, bend your knees and hinge at the waist until your torso is almost horizontal with the floor. Keep your back flat. With a slight bend in your elbows and your palms facing each other raise your arms to the sides, until your elbows are at shoulder height. Maintain the height of your elbows above your wrists. Return the dumbbells to the starting position and repeat.

FORM TIP: KEEP TENSION IN YOUR ARMS AT THE BOTTOM OF THE MOVEMENT.

BENEFITS OF DUMBBELL TRAINING

- ✓ With dumbbells you **can hold and maneuver the weights more freely** than with a barbell. This promotes a more natural range of motion as you can turn or rotate the dumbbells as you press.
- ✓ Dumbbells **can be used unilaterally or bilaterally** to better isolate muscle groups or increase the demands on the stabiliser and accessory muscles in the exercise.
- ✓ Dumbbells **make it impossible for the stronger side of your body to dominate** the movement which leads to better symmetry.
- ✓ As each dumbbell is moved independently of the other **they promote more balanced muscle strength and size development.**
- ✓ Lifts using **heavy dumbbells are often safer than barbells** as the dumbbells can be 'dumped' if you reach complete muscle failure.

you train chest and shoulders in the same workout and will ensure that adequate time is left between the days you train shoulders and other body parts that overlap with this muscle group. Ideally, three days should pass between hitting chest and shoulders. A good rule of thumb is then to train your shoulders on Monday and then your chest on Thursday or Friday. It is also a good idea to place less emphasis on anterior shoulder development during dedicated shoulder training sessions and focus more on medial (side) and posterior (rear) deltoids.

MISTAKE 2: FORGETTING THE MEDIAL DELTS

A good set of shoulders on an already athletic body completes the picture. However, many physique-conscious individuals forget about the importance of increasing the width of their shoulders by targeting their medial (middle) delts. While the front deltoids are the most visible in the group, the width needed to create that sought-after V-taper physique is achieved with adequate medial deltoid development.

MISTAKE 3: USING TOO MUCH MOMENTUM

Each deltoid is relatively small and needs to be isolated with the correct exercises to be fully developed. Most people go to heavy on lateral (side) and front raises and when they struggle to get the weight up successfully they use momentum to help them to complete the rep. If you swing dumbbells around you might as well pack up your gym bag and go home. Your shoulders will not get the full benefit and you will most likely injure yourself if you continue with the wrong exercise form. So drop the weights down a notch and eliminate the momentum. Choose weights you can handle for 10-12 strict reps at a slow tempo or lifting pace (1 second up, 2 seconds down). To further isolate your shoulders you can do your exercises in a seated position to take any extra movement or assistance from your legs out of your lifts.

MISTAKE 4: TARGETING THE REAR DELTS INCORRECTLY

Do you train your rear delts effectively? Ask any serious gym-goer this and you'll probably end up with the same answer. A resounding 'no', which is usually followed by a 'how'. We don't give our rear delts nearly enough attention, mostly because we're unsure of how to target them effectively. Due to this lack of understanding and attention we often relegate them to the end of a shoulder workout, dedicating a few half-hearted sets to the cause.

To kickstart growth in the rear delt region and bring them on par with your anterior and medial delts, start your training with them. With the right approach and the right exercises they'll soon become a much stronger body part. Exercises like the rear delt machine, bend over rear lateral raise, cable reverse flies, rear delt rows, T-bar rear delt row or the seated rear delt row machine are all great options.

MISTAKE 5: NOT ENOUGH VARIETY

We often get stuck in a rut with our training and before we know it we are just cruising through the same number of sets and reps of the same exercises we've been doing for the past three months. To prevent this serious training slump which negates gains and stagnates progress you have to train with a variety of weights and machines, with a varying rep and set structure that follows a properly periodised progression over time.

Also, by using an array of workout tools you will hit the shoulders from all the different angles leaving no aspect of their development to chance and without the proper stimulation to grow. You can utilise cables, machines, dumbbells and barbells, as outlined in point four, and by using different grips you can stimulate the muscle in a totally different and fresh way. Don't forget to also use the Smith machine as an alternative for the usual seated dumbbell or machine presses you perform in your workout. **M.E**

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45
Dexter Jackson

40
Kai Greene

40
Branch Warren

**WHY ARE SOME IFBB PROS
ABLE TO GO LONGER THAN OTHERS?**

LONGEVITY IN BODYBUILDING

FATHER TIME CAN BE A PAIN IN THE ASS. SURE, THERE ARE WAYS TO SLOW DOWN THE AGEING PROCESS, SUCH AS CLEANING UP YOUR DIET, GETTING MORE REST AND – MOST IMPORTANTLY – HORMONE REPLACEMENT THERAPY. But even using all three of the aforementioned components there are some IFBB pros who have not had the same success as their brethren once 40 or more candles need to be blown out on the birthday cake. There is a litany of reasons for this and, of course, individuals react differently to everything. When you take into consideration what being a professional bodybuilder entails, it is no wonder that more of their bodies don't break down sooner than later.

THE FORTY-SOMETHING CLUB

Take a look at the projected line-up for the 2015 Mr. Olympia (some have qualified, while others are leading in points at the time of this writing) and many of the big names are a part of the 40-and-over crowd.

Dexter Jackson, the 2008 Sandow winner, is 45. The perennial runner-up Kai Greene is 40, as is Shawn Rhoden and Branch Warren. Then you have Johnnie Jackson (44) and Victor Martinez (42). All placed in the top-10 at the 2014 'O' with the exception of Jackson, who finished 11th. So it goes without saying that bodybuilding is far from a young man's sport.

In the case of Greene, the two-time Arnold Classic winner has been nipping at the heels of Phil Heath, who is five years his junior. The man known as "The Gift" is looking to win his fifth consecutive Olympia and hold off the daunting challenge that Greene and Rhoden will surely be ready to give him.

Jay Cutler, 41, is a four-time winner of the IFBB's most prestigious contest of the calendar year but last took the stage at the 2013 Olympia and received a very charitable sixth place finish in what was his unofficial swan song as a competitor. He suffered some injuries along the way and that surely played a part in his decline. Cutler was defeated by Heath in 2011 and then had to sit out the following year due to a bicep injury. But he still garners a lot of attention travelling the globe promoting both his own business (Cutler Nutrition) and as a sponsored athlete for BPI.

"I think that Jay would have been fine but his crazy travelling schedule and the injuries here and there over the years have resulted in him (allegedly) ending his career early," says IFBB pro Zack "King" Khan. "So it's all a game of luck and who is pushing their body the hardest, and how long it can withstand this torture. No one knows; only time will tell."

While the forty-something crowd is aplenty in the pro ranks, it is the following decade of life that Gregg Valentino sees as being the cutoff mark. "It's after you reach the age of 50 that you really don't see guys competing anymore – unless it's in a masters class," the MuscleSport Magazine managing editor said.

PREDISPOSITIONED FOR GREATNESS?

It's no secret that genetics play a big part in someone having the ability to become a pro bodybuilder. But that aspect also dictates how long someone can do so and be effective. "When it comes to someone being able to do this for an extended period of time, genetics are a big part," IFBB pro Lee Priest says.

Khan added, "It certainly has a lot to do with genetics. Look at Branch Warren's training methods. They are crazy and most people would have been finished long ago by doing what he does, but that works for him and he's still going strong."

But Khan also reflected on the bodybuilders who have had to modify their training style as they aged, great genetics and all. "Other pros who train at high intensity but without the crazy amounts of weight ... that seems to be working for them."

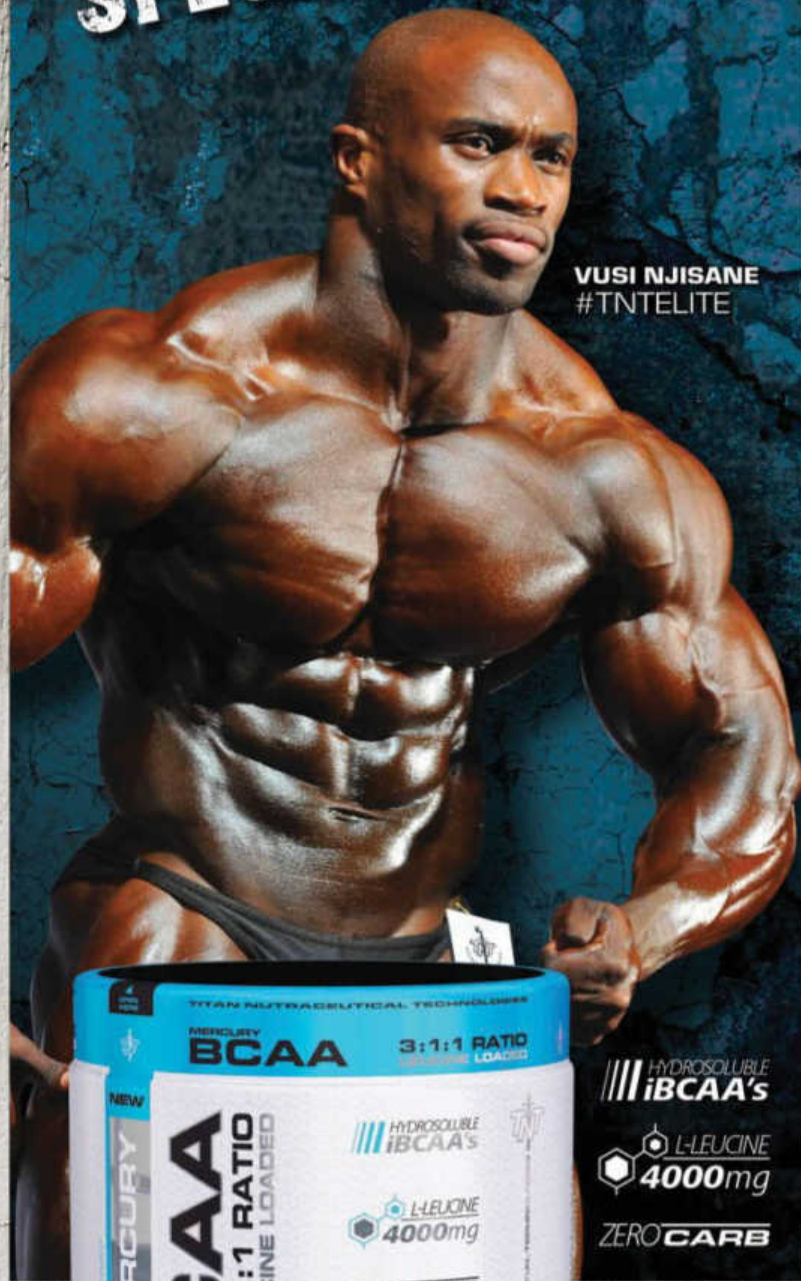
Basically *what a pro needs to do as they hit their forties is to have the ability to recognise if a change in style is needed to be able to continue*. Regardless of how your body reacts, Priest points out what may be even more important is just to have the opportunity to get that far.

"It really comes down to heart and mind," he comments. "If you have it mentally and still have that fire, you can go on as long as you like or as long as your body lets you."

What Priest did at the age of 41 is a perfect example of just that. After a seven-year layoff from the stage, he not only competed in but also blew away the competition at the 2013 Nabby Pro Mr. Universe competition in Australia.

Valentino agreed with Priest's last point wholeheartedly and added: "Being hungry is crucial for prolonged success at the Olympia level," he says. "Everyone at the elite level trains hard, eats good and is genetically gifted; that's a given. But if a pro is burnt out and lost his or her drive, then they're done. It's time to hang up the posing trunks."

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44

Johnny Jackson



41

Jay Cutler

STAYING HEALTHY

Injuries are obviously a major concern when you are competing within the upper echelon, but illnesses are also part of the equation – especially when you factor in the amount of drugs that are necessary to become a pro and rise in the ranks.

“Some of these guys have to take a hiatus or even give up due to medical reasons – some that we don’t even hear about,” Priest says.

Valentino added that many of these competitors run into health problems with their liver and kidneys, as well as other areas that are not as common. Misplaced or poorly administered synthol shots don’t exactly help either and often lead to muscle injury.

Common health issues that are expected as the human body ages are also magnified when decades of anabolic steroid use and contest preps are factored in. So when you tax your body in this fashion,

it is bound to break down inside even though it appears strong from the outside.

THE SIZE GAME

What makes being a middle-aged bodybuilder even more risky is the immense size these men need to put on, maintain and add to year after year just to be a factor in shows. So this is another weeding out process that affects certain competitors before others.

“With Cutler, he kept trying to come in bigger each year and the result was a blocky build,” says Valentino. “And that happened with other guys back in the 1980s as well. Rich Gaspari went from being a close second to Lee Haney in three consecutive years to falling out of the top three when he tried to add mass. Samir Bannout won the Olympia in 1983 because of his sleek lines but lost them when he put on more size after that. So if that affected guys in their 20s, just imagine what it does to them in their 40s?”

40

Shawn Rhoden

42

Victor Martinez

OFF-SEASON

For the bodybuilders who compete more frequently, the off-season is either much shorter or actually consists of more than one shorter period of time. So there are fewer chances to give their bodies time off from the daily grind of training and dieting, and more steroid cycles are being done. All of this comes into play in terms of how much their bodies are put through and that, in turn, will affect longevity.

That is the main reason why you only see the top names competing one or two times per year. In the case of the past two Mr. Olympias (Cutler and Heath), they only enter that one show and perhaps another held right after that so that they do not have to endure another daunting contest prep cycle.

One exception is Jackson, who has always competed in multiple shows every year throughout his career and seems to peak at every one. In 2013, at the age of 43, “The Blade” won the Arnold Classic, Australian Pro Grand Prix and Tijuana Pro. He was the runner-up at the EVLS Prague Pro and made the top five at the Olympia. A year later, Jackson

competed three times (fifth at the Olympia, third at the Arnold Classic Europe and first at the Dubai Pro) and has won his first two shows in 2015 – the Arnold Classic (Ohio) and Arnold Classic Australia.

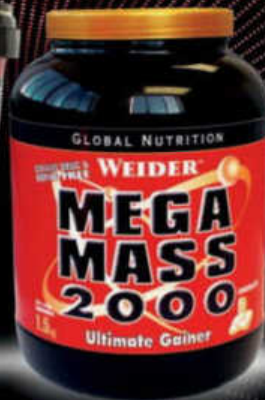
By and large it makes sense to limit the shows when you hit the age of 40. But with the Olympia qualification system in place, there will be instances where someone may have to switch up their strategy halfway through the calendar year in order to qualify. For example, Martinez finished as runner-up to Juan Morel at the 2015 New York Pro and needed to accumulate more points to qualify for the ‘O’, which he did by placing fourth at the Arnold Classic Brazil.

CONCLUSION

Being a successful pro bodybuilder is difficult enough, but the longevity factor has many parameters that add to the task. Genetics, injuries, illnesses, the amount of anabolics used and the frequency of competing all play into it. **M.S.**

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THE RISE OF FATP

HAS CREATINE FINALLY MET ITS MATCH?



adenosine diphosphate (ADP) and a phosphate molecule in the mitochondria of cells.

The additional creatine that is stored in skeletal muscle cells (approximately 95% of the human body's total is stored creatine located in these cells) is readily available to produce phosphocreatine, which is then broken down to release the phosphate molecule that is needed to resynthesise ADP back into ATP. This allows the reactions that release energy to continue, but there is, of course, a limited amount of diet-derived creatine that can be stored in our muscle cells.

This is where creatine supplementation has proven highly beneficial as it has the ability to increase the availability of phosphocreatine, with studies showing that ingesting creatine can increase the intra-cellular level of phosphocreatine in muscles by up to 20%.

In a sense creatine provides the fuel required to keep the metabolic fire burning longer. But it now seems that various pharmaceutical and supplement companies are cutting out the proverbial 'middle man' – creatine – in an attempt to simply make the metabolic fire that much bigger with the use of supplemental ATP.

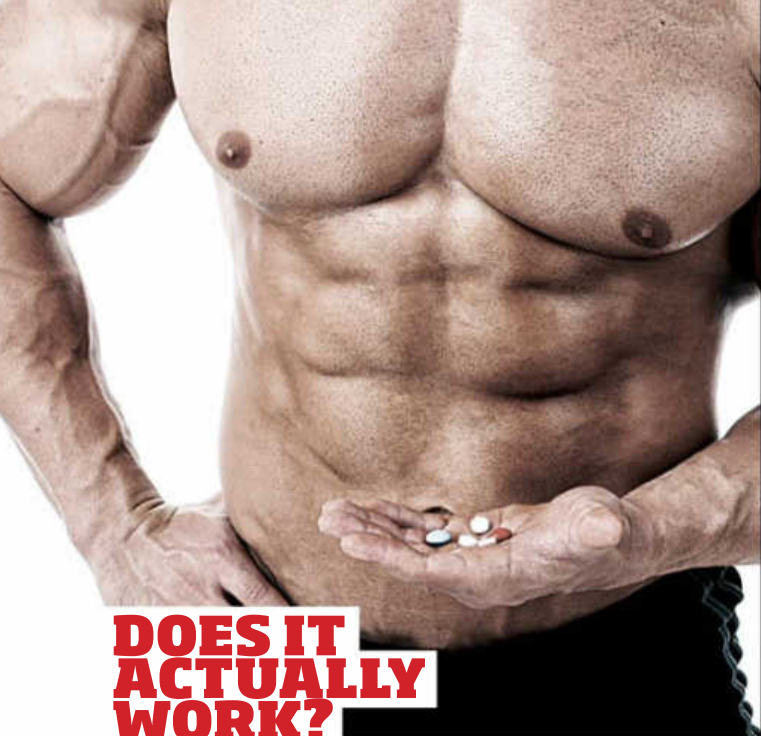
SINCE CREATINE FIRST HIT THE SUPPLEMENT SHELVES IN THE 1990S IT HAS STOOD THE TEST OF TIME AND REMAINS ONE OF THE MOST EFFECTIVE PRODUCTS IN THE QUEST FOR ENHANCED PERFORMANCE AND MUSCLE GAIN.

To briefly recap, creatine, a naturally occurring organic acid found in all vertebrates, produces the energy we need for short, intense, powerful muscle contractions; the type needed to lift heavy weights in the gym, sprint or jump. ATP and its metabolites are also involved in regulating important

biological processes such as blood flow, cardiac function, neurotransmission and liver glycogen metabolism.

Creatine is naturally produced in the kidneys from three amino acids – glycine, L-arginine, and L-methionine. When creatine enters our system it binds with a phosphate to form

phosphocreatine, which is then transported in the blood to muscle tissue and the organs that require it for energy. This intracellular energy production happens through the adenosine triphosphate-phosphocreatine (ATP-PCr) system. Energy is released during a cyclical process where ATP is broken down into



DOES IT ACTUALLY WORK?

THERE IS NOW a small but growing selection of products that contain supplemental ATP, which is being marketed as a direct and immediate source of energy. While it may seem like a logical, more effective approach to boosting energy levels and combating fatigue, supplemental ATP is not without its controversy.

Creatine, for instance, is highly bioavailable and now comes in various forms; some that are more bioavailable than others. On the other hand, the experts in the lab coats seems to be divided on the exact benefits of ATP supplementation. There are concerns regarding supplemental ATP's ability to traverse the intestinal wall intact and make it into the body's circulatory system to deliver that energy boost. Some say that ATP is unstable under the highly acidic environment in the stomach while others disagree, saying that ATP remains bioavailable. The research seems to paint a complicated picture in this regard.

In one study that looked at the bioavailability of ATP supplements (Arts et al, ATP supplements are not orally bioavailable, 2012) a team of researchers coated ATP with a low pH, resistant enteric coating. They wanted to test if supplementing with ATP in enteric-coated pellets increased the concentration of it in the blood stream. They administered a dosage of 5000mg of oral ATP daily to eight healthy volunteers and found that it degraded during

the digestive process and did not make it to the blood stream to provide better athletic performance or alertness. However, they did find increases in uric acid after the release of ATP in the proximal part of the small intestine, suggesting that ATP or one of its metabolites was absorbed and metabolised. Uric acid itself may have ergogenic effects, the research group admitted, saying that further studies were needed to determine whether chronic administration of ATP would enhance its oral bioavailability.

This seems to concur with what other researchers discovered: ATP dosages administered were "in and out" of the body and did not leave any significant impression. The only effect was an increase in uric acid (Coolen et al, Oral bioavailability of ATP after prolonged administration, 2011).

"There are concerns regarding supplemental ATP's ability to traverse the intestinal wall intact and make it into the body's circulatory system to deliver that energy boost."

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EFFECTS OF ATP PROBED

HOWEVER, A STUDY led by Dr. Jacob Wilson from the University of Tampa paints a completely different picture (Wilson et al, *Effects of oral ATP supplementation on athletic performance, skeletal muscle hypertrophy and recovery in resistance-trained men*, 2013). Wilson wanted to test the hypothesis that supplementation with oral ATP would improve power, strength and muscle mass during a 12-week resistance training protocol. The scientists also wanted to assess the safety of ATP supplementation.

This study represented the first formal investigation of the effects of oral ATP supplementation on lean body mass and muscle thickness following a chronic

resistance training programme. In contrast to Coolen, who questioned the bioavailability of oral ATP, Wilson found that the biological pool where ATP is measured determined the results of the bioavailability analysis. If sampled in venous portal blood, oral ATP was indeed bioavailable.

Results suggested that ATP supplementation could significantly impact athletic

performance, skeletal muscle hypertrophy and recovery. These results occurred in highly trained men and their particular athletic performance under extreme training conditions. The research also showed that 400mg of oral ATP administered daily had no effect on haemoglobin, white blood cells, blood glucose, liver or kidney function.

“ATP supplementation could significantly impact athletic performance, skeletal muscle hypertrophy and recovery. These results occurred in highly trained men and their particular athletic performance under extreme training conditions.”



INCREASED BLOOD FLOW

IN ANOTHER STUDY, which was published in the *Journal of the International Society of Sports Nutrition*, conducted by Jager et al. (*Oral ATP administration increases blood flow following exercise in animals and humans*, 2014) it was found that orally administered ATP can increase post-exercise blood flow and may be particularly effective during exercise recovery. The study used rats to examine the effect of ATP on blood flow prior, during and after exercise. In addition, blood flow in resistance trained athletes was also probed during ATP administration. According to the study significant improvements could be measured at a daily dose of 400mg of ATP in as little as one week in the human study.

Blood flow during exercise is indicative of nutrient and oxygen delivery rates. As such, increased blood flow will indicate greater nutrient availability for the body and the muscle should have the capacity to recover more quickly between sets, maintain performance for longer, and repair micro-trauma more efficiently between visits to the gym. Jager concluded that taking

ATP orally can increase blood flow, especially after working out. The exact mechanism whereby ATP increases blood flow during post-exercise recovery periods remains unknown warranting future investigation in this area.

In another study conducted on healthy men who strength-trained regularly, researchers recorded reduced strength losses after subjects took a patented form of ATP. The company behind the product says that it increases blood volume, oxygen levels in the blood and the delivery of nutrients to support performance and recovery.

Additional studies on the oral availability of ATP showed that it is unlikely that the oral administration of supplements that contain this substance would directly increase intramuscular ATP stores in the body as a single dose in humans did not increase ATP concentrations in the blood stream of the subjects tested. Exogenous free ATP is rapidly taken up by blood components or metabolised making it hard for scientists to measure circulating free plasma ATP derived from oral supplementation.

TIME TO SWITCH?

SO IS IT time to ditch the creatine and go for an ATP supplement instead? We wouldn't be too hasty. Much of the research around this relatively new supplement is in its infancy. Furthermore, if you understand the cyclical process you'll know that without sufficient phosphocreatine in your system the ingested ATP will yield a limited amount of energy as it cannot be resynthesised from ADP.

From the available research it seems that there is a performance benefit to be had from ATP supplementation, but the effect could be amplified even further with optimal stored and ingested creatine levels before and during exercise.

Furthermore, as there doesn't seem to be any effect on kidney and liver function (longer trials are most certainly needed to conclusively support this finding), supplementing with ATP may be a suitable means to maintain strength and performance during cycled creatine supplement use.

It is also clear from the research cited in this article that oral ATP administration can increase blood flow and this effect is particularly prominent following exercise. This may be the mechanism responsible for the ergogenic effects as previously reported in scientific literature. However, additional research is needed to determine whether a continued dose of ATP would make you recover more quickly between sets, enable you to work out longer, increase strength and let your body repair micro-trauma more efficiently between training sessions. **M.E.**

Ryan Terry

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THE NEW KID ON THE BLOCK

THE RAPID RISE OF
JOHNNY LUCAS

Newcomer Johnny Lucas has his bodybuilding goals firmly in place since starting to train for his first show 17 months ago. We caught up with this promising athlete to find out what makes him tick and fuels his hunger for success.

Johnny, what sparked your interest in bodybuilding?

I have always been interested in sport. At school I was an avid sprinter and played rugby, cricket and tennis. I always lifted weights but I only got serious about it about 17 months ago. It was around this time that I started to train at Hennie Kotze's Body Guru in Montana, Pretoria. My love for bodybuilding grew in leaps and bounds once I started to notice results after packing on some muscle.

How has bodybuilding changed your life?

The sport has made me a better person. It taught me the importance of self-discipline, dedication and to have a passion for what you do.

What job do you do?

I have worked as a business manager and was involved in the insurance industry before I decided to resign to start my own personal training and

online coaching business. Bodybuilding is the biggest passion in my life and I am at my happiest if I can help others reach their fitness goals.

Please tell us about your contest history and what you've achieved thus far?

I am still a baby in the industry! I competed at the Gauteng North Novice show earlier this year and won my line-up, as well as the overall title. I also placed second in the Senior Men Under 90kg category at the IFBB H&H Bodybuilding and Fitness Classic.

What is it about bodybuilding that fascinates you the most?

I believe there is much more to the sport than merely big guys lifting heavy weights. To me it is a true art form. I cannot believe how magical it is to see a body transform itself with hard work and dedication in the 12 weeks before a competition. I also like the competitiveness of the sport.

QUICK STATS

- ▶ **Born:** 2 July 1981
- ▶ **Lives:** Midrand, Johannesburg
- ▶ **Profession:** Online coach
- ▶ **Training for:** 17 months
- ▶ **Competition weight:** 84kg
- ▶ **Off-season weight:** 94kg

Give us an example of what you eat during the day?

IFBB Pro Hennie Kotze guides my diet. My meal plan looks like this:

Immediately when I wake up:

- ▶ 10g BCAAs
- ▶ 10g L-glutamine
- ▶ 1000mg vitamin C

MEAL 1:

- ▶ 1 cup cooked oats
- ▶ 6-8 egg whites
- ▶ 1 serving whey protein
- ▶ 150ml fat free yoghurt

10 min after meal 1:

- ▶ 1000mg flaxseed
- ▶ 1000mg CLA
- ▶ 1 multivitamin

MEAL 2:

- ▶ 250g chicken fillet
- ▶ 250g cooked rice
- ▶ 150g mixed veggies

MEAL 3:

- ▶ 250g chicken fillet or lean mince
- ▶ 250g baked potato
- ▶ 2 slices pineapple

MEAL 4:

- ▶ 200g tuna
- ▶ 200g basmati rice
- ▶ 1 tablespoon olive or omega sport oil

10 min after meal 4:

- ▶ 1000mg flaxseed
- ▶ 1000mg CLA
- ▶ 1 multivitamin

MEAL 5:

- ▶ 300g lean steak
- ▶ 200g vegetables or mixed salad
- ▶ 1 baked egg
- ▶ 150g sweet potato
- ▶ ¼ avo



“BODYBUILDING FOR ME IS MORE OF A MENTAL GAME THAN A PHYSICAL ONE. IT IS ABOUT YOU VERSUS YOU.”

How important is it for a bodybuilder to have a good support system?

Without my wife Brenda, my family and my friends I would not have been able to chase my goal of competing in my first show. They were firmly behind me, motivating me every step of the way. I was also lucky enough to be sponsored by Pure Nutrition Technology before I even stepped on to the stage.

To be a great bodybuilder you require discipline and sacrifice. In your opinion are the rewards worth the sacrifice and why?

Absolutely! I am still new in the sport but the sense of satisfaction that comes with victory after all the months of hard work makes it all worth it in the end. Even if you don't win a trophy at a show you are still a winner because every single competitor who stands on a stage deserves a medal for their efforts. Bodybuilding for me is more of a mental game than a physical one. It is about you versus you...

What is the most common mistake you make in the gym?

I lose focus quickly when I talk too much while working out. That is the biggest mistake I have made in the past.

Who is your biggest inspiration?

My wife Brenda is my rock and my inspiration.

Who do you train with?

I usually train with Hennie or by myself.

What do you do for cardio?

I walk on the treadmill for 40 minutes.

How many exercises, sets and reps do you do?

I do four to five exercises. I do four sets ranging from between 15-20 reps and the intensity is high, with limited rest between the sets.

If you could have just three supplements, what would they be?

Whey protein, BCAAs and creatine.

Everybody has a strong body part that seemingly grows with ease. What is yours?

I would say my arms. I only train them once a week.

What other body parts do you love to train?

I love the feeling I get when I train legs and back.

What motivates you when you train?

I always go all out when I hit the weights. Sometimes I visualise myself posing and flexing on stage and then walking off with the trophy. I am extremely competitive by nature so knowing that I am not the only one out there training and dieting hard for a show motivates me even more.

Do you keep a training journal?

No journal for me. I know exactly what I need to do to get the most out of each and every training session.

What was the best piece of advice you got from another bodybuilder?

Stay humble and enjoy the journey.

What is your goal for 2015?

I am preparing for the IFBB SA Championships in September. I am still new at this game and hopefully I will do well. I am taking one day at a time. **WRE**



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NATASCHA OOSTHUIZEN

NO STRANGER
TO THE STAGE
THIS ENERGETIC
REDHEAD BRINGS
ALL THE ELEMENTS
TOGETHER IN AN
EYE-CATCHING
PACKAGE.

ATHLETE STATS

- **Lives:** Bloemfontein
- **Height:** 1.65m
- **Off-season weight:** 58kg
- **Competition weight:** 54-56kg

CONTEST HISTORY

- **April 2013:** Completed the USN Body for Life Makeover Challenge
- **July 2013:** 1st in the Ladies Toned Figure in the Nabba Flex and Fight
- **August 2013:** 1st in the Ladies Toned Bikini, Winner of Ladies Overall, Rossi Classic
- **August 2013:** 1st in the Ladies Toned Figure, 1st in Mrs Fitness in Mr & Mrs Fitness SA, Cape Town
- **September 2013:** 1st in Ladies Toned Bikini in WPF SA's
- **November 2013:** 3rd in Ladies Fitness, 4th in Ladies Figure in Fitness America, Las Vegas
- **July 2015:** 1st in Ladies Fitness Bikini, 1st Ladies Fitness, Miss Personality, Ladies Overall Winner in the Rise of the Phoenix in East London
- **July 2015:** 2nd in Body Fitness at the Miss SA Xtreme in Pretoria
- **August 2015:** Diva Extravaganza: 1st Ladies Fitness Bikini, 1st Ladies Evening Wear, 1st Ladies Overall Fitness Bikini, 1st Ladies Overall Evening Wear, 1st Ladies Pole Fitness & Miss. Diva Extravaganza 2015

Natascha Oosthuizen, born and bred in Bloemfontein, exemplifies the perfect fitness competitor – and with good reason. She has that wow-factor that judges look for, which is something she honed from her days competing in freestyle dancing competitions. With a self-professed love for the limelight she has now found a new home on the fitness stage with a string of victories serving notice to judges, fans and her competitors that there is a new player in town. With her down-to-earth and enthusiastic demeanor Natascha has become one of our finest fitness athletes in a relatively short time. We caught up with her to learn more about her passions and pleasures while she was posing at our latest Muscle Evolution Babe shoot.

Firstly, we need to ask, what is it about Bloemfontein that keeps you there?

Bloemfontein has everything and nothing at the same time. Ha ha!

When did you first compete and who introduced you to the fitness industry?

As a dancer I missed performing on stage. That's why, in 2013, I started to compete, under the mentorship and coaching of Conrad Nagel. He took me under

his wing and is still by my side. As fitness athletes I believe that our careers are relatively short and that we should use each and every opportunity. Every day is a blessing and every show a privilege.

What is your current job?

I'm a dance choreographer and fitness instructor with a honours degree in biokinetics. I have been extremely blessed to translate my passion for fitness into a career.



What is the most rewarding aspect of competing?

Seeing results, continually making improvements and inspiring others to set goals and work for what they want, which is the ultimate reward.

Do you monitor what you eat and is it hard sticking to a diet before a show?

It is difficult for anyone to stick to a diet whether you are a competitor or not. I believe if you have your eyes set on a goal and you are driven by passion everything else becomes irrelevant.

What is your favourite body part to train and why?

Mmmm... it's difficult to say. I guess glutes. I like feeling the burn and I'm working on getting an Instagram bum!

How long do you stick to a particular training regimen?

I'm a girl who gets bored very easily so I try to change my programme every four to six weeks. I love a new challenge and would always try to add a new exercise to my routine. It is amazing how quickly your body can adapt to a particular routine and become non-responsive. Keep it fun, exciting and challenging.

You have awesome abs. How do you train them and how often?

To be honest I never isolate abs. I feel weight training alone, especially functional training, targets your abs enough. Abs are 90% diet and 10% exercise. You can do abs all day long but if you have a layer of fat over them you're not going to see any muscle definition. Genetics also play a part in abs... maybe I'm part of the Marvel family.

What is your current training split?

- **Monday:** Legs and glutes
- **Tuesday:** Chest, shoulders and triceps
- **Wednesday:** Functional training
- **Thursday:** Back and biceps
- **Friday:** Shoulders, triceps and lats
- I also do a cardio session in the evening.

What has been the highlight of your career so far?

Featuring in South Africa's leading fitness magazines, Muscle Evolution and Fitness magazine this month! Also, winning the Ladies Overall title at the Rossi Classic in 2013 and placing third in the Ladies Fitness division at Fitness America in Las Vegas in 2013 were great experiences. I have not been around for that long so I'm just getting started.

What advice would you give to someone who wants to compete?

I would tell them that this is a lifestyle and not just a phase. Remember that you are one of a kind and that you create your own limits. Never compare yourself to anyone else even though it is extremely difficult in this industry. Be positive, be proud but give each athlete the recognition they deserve. Also, make sure your coach knows what he or she is doing. Find someone you can trust and will be by your side all the way, not just before and during competitions. Personally, I have found that the hardest part of being an athlete is getting through the off-season.

What is your current pre-workout stack?

I don't use any special pre-

“NEVER COMPARE YOURSELF TO ANYONE ELSE EVEN THOUGH IT IS EXTREMELY DIFFICULT IN THIS INDUSTRY. BE POSITIVE, BE PROUD BUT GIVE EACH ATHLETE THE RECOGNITION THEY DESERVE.”



“I HAVE A HUGE SWEET TOOTH SO IF I CHEAT IT WILL MOST LIKELY BE WITH SOMETHING SWEET. I BELIEVE IN CHEAT MEALS. IT HELPS YOU STAY SANE.”

workout drinks. I like to train on an empty stomach in the morning. I will always have a strong black coffee before I head to the gym.

What are the three things you cannot live without?
Strong coffee, peanut butter and muffins.

Do you party a lot?
No not at all. Partying does not really fit into this lifestyle. I do have cheat days which is like a party to me.

Do redheads have more fun than blondes?
I know that redheads have more fire!

What is a deal breaker when you go on a blind date?
I'm picky... smoking, wearing tekkies with jeans, my friends' exes and, of course, bringing your mother.

Parachute jump or deep sea diving?
Definitely deep sea diving – I have a scuba licence.

What is your guilty pleasure?
I love baking and trying out new recipes. I have a huge sweet tooth so if I cheat it will most likely be with something sweet. I believe in cheat meals. It helps you stay sane.

Hot pants or mini-dress?
Both. Hot pants for training and a mini-dress to show off the training.

Laptop or iPad?
Laptop. I'm slow with technology and I don't have a lot of patience.

Who is your celebrity crush?
Chris Hemsworth, especially in Thor. The eyes, the body, the voice... I just wish I could see his legs to find out if there is any symmetry.

What's your favourite love song?
Anything foreign with a nice tune. I don't actually want to know what they are singing – so I won't get depressed.

What superhero abilities would you like to have and why?
Telekinesis because then I could move the weights with my mind. My training time would be cut in half! I'd also like to be able to read other people's minds... I mean who wouldn't want that ability? Memory alteration – I could erase all the bad memories and help people to only remember the good ones. I would also like to have the ability to manipulate time as I am always late. Flying would also be super cool. That way I could see the world, travel and explore new places.

Do you like muscular men?
I respect guys with muscles. It shows discipline, dedication and self-respect. I don't like guys with a big ego though... those ones who have a scary relationship with the mirror.

Any final words of wisdom before you depart?
“If you continuously compare yourself to others you become bitter, if you continuously compete with yourself you become better.” **M.E**



SUPER CHARGE

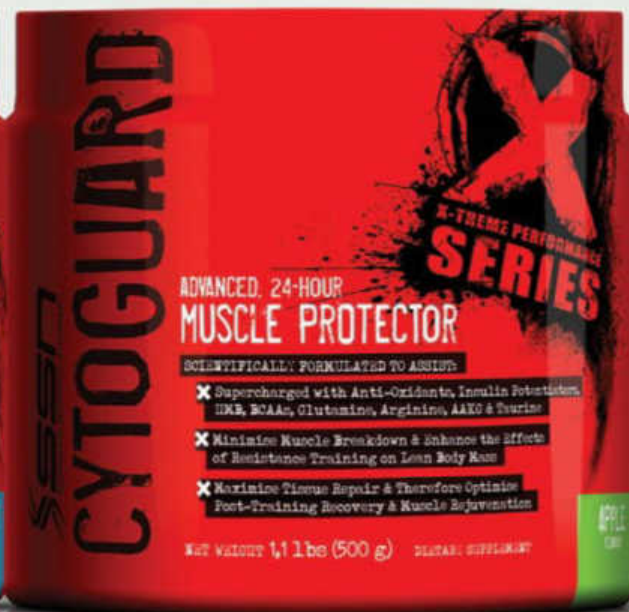
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WHEN GROWTH HORMONE WAS FIRST INTRODUCED TO THE BODY-BUILDING WORLD, EVERYONE HAD HIGH HOPES FOR IT.

DRUG FILES:

MECHANO GROWTH FACTOR

Those hopes fizzled out pretty quickly, as bodybuilders experimented with absurdly low dosages (2iu/every other day) due to its exorbitantly high cost. As growth hormone costs fell due to more efficient manufacturing processes (i.e. it was no longer being extracted from cadavers), bodybuilders were able to use more of it, and subsequently began to see better results from it. We saw the same phenomenon with IGF-1, the anabolic mediator of GH, and later with its analogue, Lr3IGF-1.

Now, we're seeing the emergence of yet another compound further down the hormonal cascade: Mechano Growth Factor. As you probably know, skeletal muscle responds to resistance training (or any mechanical overload) by increasing its size (hopefully). If you 'detrain' that muscle (i.e. don't use it regularly), it atrophies and gets smaller.

Similarly, when you are in your teens and early twenties, GH and IGF-1 levels are high, and as you age, those levels are lowered naturally. And, if you've been playing along at home, you're probably figuring out that GH and IGF-1 are pieces of the hormonal puzzle that result in this muscle growth (or loss). These growth factors are produced in the liver and other areas, but also in skeletal

muscle tissue in response to training-induced damage.

Now, pay attention, because this is the important part: growth factors produced within the muscle as a response to resistance training likely play a major role in repair, adaptation, hypertrophy (muscle growth), and ageing too. Scientists have discovered that many of the anabolic and regenerative effects of GH are actually mediated by IGF-1. Thus, the next logical step for bodybuilders – if bodybuilders ever decided to actually follow some kind of logic – was to start experimenting with IGF-1 and, later, with the more potent version, Lr3IGF-1.

The thing is, we now know that IGF-1 actually exists in the body in multiple

isoforms. The isoform that seems most useful to us differs slightly from that which is produced in the liver (IGF-1Ea), and appears to be the significantly more anabolic of the two we're considering (i.e. that which is produced in the liver vs. that which is produced in the muscle). This greater anabolic benefit is due to the fact that muscle-produced IGF-1 is hypersensitive to the signals produced by local muscular damage induced by resistance training. This more anabolic isoform of IGF-1 is called IGF-1Ec or mechano growth factor (MGF).

That's right, MGF – the mysterious hormone that seems to be only whispered in e-mails and private messages on the 'net – is actually just another variant of IGF-1. Yeah, if you've used IGF-1 or even GH, then technically, you've already been taking advantage of MGF. In fact, if you train with weights you've been producing your own MGF, as this particular isoform of IGF-1 is only detected in normal muscle after mechanical stimulation (such as resistance training).

Remember, MGF is just a name for the particular type of IGF-1 that is produced locally in the muscle as part of the anabolic repair response to resistance training.

HOW IT HAPPENS

When we train with weights, the IGF-1 gene is differentially spliced during the body's response to local muscular overload. First, it is spliced to produce predominantly IGF-1Ec (called the MGF splice variant of IGF-1).

This initial splicing appears to stimulate satellite cells into activation, which in turn allows the activation of extra undamaged nuclei required for muscle fibre growth and repair to occur. In addition, the appearance of MGF initiates the up-regulation of new protein synthesis.

After this initial and

"MGF IS SIMPLY A VARIANT OF SOMETHING WE'VE HAD AROUND FOR OVER A DECADE. IT'S JUST NOT AS SEXY WHEN WE CALL IT "IGF-1EC" – REGARDLESS OF WHAT WE CALL IT, IT'S STILL JUST AN ISOFORM OF IGF-1."

short-lived burst of splicing, IGF-1 production switches to producing a systemic release of IGF-1Ea from the liver, which up-regulates protein synthesis as well, but over a longer time frame. This secondary release of IGF-1Ea is considerably less anabolic than the initial release of IGF-1Ec (MGF). It is the expression of the various IGF-1 splice variants over the course of the healing and remodelling phase of muscle repair that's responsible for a generous portion of the body's ability to engender growth in the target tissue: skeletal muscle, of course. It would appear that the introduction of this hormone – regardless of whether it's by weight training or injection – will cause a response in the area, resulting in localised muscle growth.

Still, in the end, we're just

talking about IGF-1 – just a particular form of it... Yes, as is often the case with a hot new drug on the 'net, the rabbit was always in the hat, and the magic was only a trick. MGF is simply a variant of something we've had around for over a decade. It's just not as sexy when we call it "IGF-1Ec" – regardless of what we call it, it's still just an isoform of IGF-1.

In fact, the anabolic actions of both IGF-1 and MGF are achieved by stimulating and up-regulating protein synthesis, and proliferating growth and activation of satellite cells. This latter function of MGF is actually quite important, as satellite cells are the mononucleated cells in muscle fibres located between the sarcolemma and the basal lamina. Proliferation and activation of these cells results in the creation of new muscle.

QUANTIFYING THE EFFECTS

All of this should lead us to ask the really important question: "How effective is this stuff?" Well, most of what we have to go on presently is based on a few studies in the elderly and several more in rodents. The most relevant rodent data has demonstrated that MGF is a very potent inducer of muscle growth when it is introduced into the muscle via an intramuscular injection.

In fact, in one study, MGF caused a 20% increase in the weight of the injected muscle within just two weeks! Further investigation elucidated that this was actually due to an increase in the size of the muscle fibres.

However, scientists are getting around to identifying that the one-two punch of MGF with regard to inducing satellite cell activation and protein synthesis clearly offers an advantage over other types of IGF-1 (systemic or liver-derived). In fact, when locally produced IGF-1 was compared to systemic IGF-1 (i.e. IGF-1Ea vs. IGF-1Ec) in later rodent studies, the superiority of the locally produced IGF-1 variants (MGF) was clearly elucidated.

It may just be that over-expression of MGF (IGF-1Ec) and the subsequent over-expression of IGF-1Ea are the deciding factors in whether a muscle will grow or not. With that in mind, do you remember what I told you at the beginning about GH and IGF-1 in general? Yes; until the prices on MGF go down to affordable levels, bodybuilders are probably going to be using substandard doses of MGF and reporting substandard results - or using tiny amounts with boatloads of other pharmaceuticals, and claiming absurd results. In the end, what we're looking at is another variant of IGF-1 that's probably going to be even better than LR3IGF-1 at producing muscle growth. Somebody just needs to find a way to produce it at affordable prices. **M.E.**



Disclaimer: Muscle Evolution does not condone nor promote the use of performance-enhancing drugs and steroids. The information in this article is provided solely for the purpose of fostering a clearer understanding through education, allowing readers to make informed and responsible decisions.

**This excerpt has been adapted, with permission, from the book "Beyond Steroids" by Anthony Roberts*



LADIES FITNESS BIKINI & FITNESS BIKINI 0/1.63M
Angelique Schamrel



JUNIOR BIKINI U/23
Katherine Valkenburg



JUNIOR MEN U/23
Wamba Martin



SENIOR MEN OVERALL & SENIOR MEN 1.72-1.79M
Michael Appelcryn



SENIOR MEN U/1.65M & MEN OVER 40
Olivier Attias

Not even a dose of load shedding could dampen the spirits of the enthusiastic athletes nor stop them from showing off their magnificent physiques at the Nabba/WFF Jozi Classic held at the Braamfontein Recreation Centre in Johannesburg on 20 June 2015.

Despite the lights going out more or less in the middle of the show the 43 entrants carried on with their posing routines illuminated by cellphone and camera lights.

A ripped-to-the-bone **Frikkie van Niekerk** scooped the top spot in the Men's Novice division. The hard work Van Niekerk has put in to his gym work and diet was evident when looking at his shredded abdominals, and his superior chest and shoulder development.

The Junior Bikini Under 23 category belonged to a determined **Katherine Valkenburg** who brought the crisp conditioning needed to walk away with the honours on the evening.

There was still some room for improvement for a ripped **Christopher Bell**, according to the judges, who finished in second position in the Men's over 40 years category, while his opponent, an in-shape **Olivier Attias**, bagged first place. **Thanda Shabalala** came third.

In the Fitness Bikini under 1.63m division **Jenna Raminhos** got a well-deserved first place ahead of **Kim Carnell** (2nd) and

**NABBA
WFF**

JOZI CLASSIC

DATE: 20 June 2015 **VENUE:** Braamfontein Recreation Centre, Johannesburg



MEN'S NOVICE
Frikkie van Niekerk



LADIES FIGURE O/1.63M
Chante Smit



LADIES FIGURE & LADIES FIGURE U/1.63M
Annelie Marshall



FITNESS BIKINI U/1.63M
Jenna Raminhos



LADIES ATHLETIC
Lindy Harris



SENIOR MEN 1.65-1.72M & BEST POSER
Charles Luck



SENIOR MEN O/1.79M
Shadlee Lalla



MEN'S MODEL FITNESS
Morne van Zyl

Veronique Mitchell (3rd).

Consistency, perseverance and hard work paid off for a truly gorgeous **Angelique Schamrel** in the Fitness Bikini over 1.63m category. She also won the Ladies Fitness Bikini section.

Wamba Martin showed up in excellent form to take gold in the Junior Men under 23 division, while **Morne van Zyl** was crowned the winner in the Men's Model Fitness category with his more athletic look.

Christopher Bell had to play second fiddle to **Olivier Attias** once again in the Senior Men under 1.65m line-up, while poser par excellence **Charles Luck** bagged the top spot in the Senior Men 1.65-1.72m division. It was clearly no surprise to witness Luck

also winning the Best Poser award for his energetic and entertaining routine.

The judges rewarded a passionate **Michael Appelcryn** for his eye-popping physique in the Senior Men 1.72-1.79m category. Appelcryn also won the Senior Men's Overall title. The Ladies Figure Over 1.63m division belonged to a stunning **Chante Smit**, with a radiant **Lindy Harris** claiming first prize in the Ladies Athletic division. **Annelie Marshall** made the Ladies Figure under 1.63m her own, showing her mettle against Bianca Lubbe (2nd) and **Dalene Sonnekus** (3rd).

A big thank you goes out to all who supported the 2015 Jozi Classic this year whether spectating, officiating, sponsoring or competing.

[RESULTS]

MEN'S NOVICE

- 1 Frikkie van Niekerk
- 2 Morne van Zyl
- 3 Jonge Knoesen

JUNIOR BIKINI U/23

- 1 Katherine Valkenburg

MEN OVER 40

- 1 Olivier Attias
- 2 Christopher Bell
- 3 Thanda Shabalala

FITNESS BIKINI U/1.63M

- 1 Jenna Raminhos
- 2 Kim Carnell
- 3 Veronique Mitchell

FITNESS BIKINI O/1.63M

- 1 Angelique Schamrel
- 2 Louise Ferreira
- 3 Uline Steyn

SENIOR MEN U/1.65M

- 1 Olivier Attias
- 2 Christopher Bell

JUNIOR MEN U/23

- 1 Wamba Martin
- 2 Lethumile Radisowa
- 3 Geraldtn Snyman

MEN'S MODEL FITNESS

- 1 Morne van Zyl
- 2 Roti Ratehlo
- 3 Jesse Smith

SENIOR MEN 1.65-1.72M

- 1 Charles Luck
- 2 Herbert Tukagomo
- 3 Gilbert Ndubane

LADIES FIGURE O/1.63M

- 1 Chante Smit

LADIES FIGURE U/1.63M

- 1 Annelie Marshall
- 2 Bianca Lubbe
- 3 Dalene Sonnekus

SENIOR MEN O/1.79M

- 1 Shadlee Lalla

SENIOR MEN 1.72-1.79M

- 1 Michael Appelcryn
- 2 Freddie Klopper
- 3 Andre Pieterse

LADIES ATHLETIC

- 1 Lindy Harris

LADIES FITNESS BIKINI

- 1 Angelique Schamrel

LADIES FIGURE

- 1 Annelie Marshall

SENIOR MEN OVERALL

- Michael Appelcryn

BEST POSER

- Charles Luck

* All results and spelling as supplied by the event organisers. Muscle Evolution accepts no responsibility for any errors or omissions **M.E.**

Much of the prodigious bodybuilding talent to be found in the Eastern Cape was on show at the Abbotsford Christian Centre in East London on Saturday, 4 July 2015. Athletes competing in the Rise of the Phoenix were eager to showcase the result of their hard toil in the gym when they stepped on stage at this popular non-affiliated competition.

A superbly conditioned **Ross van Recken** bagged top prize in the Teenagers under 18 section, while **Ezile Tati** out-muscled his opposition to clinch the Junior under 80kg, under 23 title.

Sibusiso Khuzwayo, **Jason Wood** and **Gareth Menton** left nothing to chance as they battled it out in the Juniors over 80kg, over 23 years division, with the talented **Sibusiso** taking top honours on the evening.

Eleanor Mollentze defeated **Danah Ayre** (2nd) and **Kristel Muller** (3rd) in the Bikini under 25 years category. The lovely **Candice Sellers** won the Bikini over 25 years division, while the Bikini Fit under 25 years title belonged to **Christine Smit**. No one could match the physique of **Karen Herbst** in the Bikini Fit Over 35 years category. A fantastically toned **Natascha Oosthuizen** won the Ladies Fitness and the Ladies Athletic Physique divisions.

Riaan Swanepoel showed that he was in the shape of his life in the Masters category relegating **Peter Willis** to second and **Billy Mollentze** to third with his memorable display. **Ricardo Viera** conquered the Men's Beach Body category, while **Arrie van der Berg** made the Men's Physique section his own against determined competitors **Sinethemba Xabela**

OVERALL MEN'S & SENIOR MEN U/75KG
Chris Nguta



RISE OF THE PHOENIX

READ MORE ABOUT NATASCHA ON PAGE 78

VENUE: Abbotsford Christian Centre, East London **DATE:** 4 July 2015



JUNIOR
0/80KG,
0/23
Sibusiso
Khuzwayo



SENIOR MEN
U/65KG
Sanga Gijana



JUNIOR
U/80KG,
U/23
Ezile Tati



SENIOR MEN
U/85KG
Xolile
Damba



BIKINI U/25
Eleanor
Mollentze



BIKINI
0/25
Candice
Sellers



SENIOR MEN
0/95KG
Remember
Shabangu



MASTERS
Riaan
Swanepoel



MEN'S BEACH BODY
Ricardo
Viera

MEN'S PHYSIQUE
Arrie van der Berg



TEENAGERS U/18
Ross van Recken



BIKINI FIT U/25
Christine Smit



BIKINI FIT O/35
Karen Herbst



SENIOR MEN U/95KG
Terra Dlodlo



MEN'S PHYSIQUE O/30
Dean Els

(2nd) and **Tsepo Thamayi** (3rd). In the Men's Physique over 30 years division, a muscular **Dean Els** walked away with the top honours, while **Sanga Gijana** had the quality and superior conditioning the judges were looking for to emerge as the winner in the Senior Men under 65kg division.

The talented **Chris Nguta** made the Senior Men under 75kg category his own by beating **Thula Sifatyi** (2nd) and **Lulamile Kotsela** (3rd). The Senior Men over 95kg crown belonged to **Remember Shabangu**, who then went up against Nguta in the Overall line-up. However, the Overall Men's title belonged to the magnificent Chris Nguta on the night. Thanks to all who competed in, sponsored and supported the Rise of the Phoenix.

RESULTS

TEENAGERS U/18

- 1 Ross van Recken
- 2 Morne Pylman
- 3 Stuart Boyd

JUNIOR U/80KG U/23

- 1 Ezile Tati
- 2 Siphamandla Mangaliso
- 3 Camagu Peter

JUNIOR O/80KG, O/23

- 1 Sibusiso Khuzwayo
- 2 Jason Wood
- 3 Gareth Menton

MASTERS

- 1 Riaan Swanepoel
- 2 Peter Willis
- 3 Billy Mollentze

BIKINI U/25

- 1 Eleanor Mollentze
- 2 Danah Ayre
- 3 Kristel Muller

BIKINI O/25

- 1 Candice Sellers
- 2 Samantha Sweetnam
- 3 Cara-Jane Stanford

BIKINI FIT U/25

- 1 Christine Smit
- 2 Carman Smit

BIKINI FIT O/35

- 1 Karen Herbst
- 2 Brenda Mollentze
- 3 Camelia Greef

LADIES FITNESS

- 1 Natascha Oosthuizen
- 2 Candice Sellers

LADIES ATHLETIC PHYSIQUE

- 1 Natascha Oosthuizen
- 2 Jaime Griffiths

FITTEST FAMILY

- 1 Sellers Family
- 2 Mollentze Family
- 3 Stanford Family

DANCE DIVA

- 1 Emma Cooper
- 2 Nicole Barnes
- 3 Dana du Preez

MEN'S BEACH BODY

- 1 Ricardo Viera
- 2 Brent Hassel
- 3 Thomas Dreyer

MEN'S PHYSIQUE

- 1 Arrie van der Berg
- 2 Sinethemba Xabela
- 3 Tsepo Thamayi

MEN'S PHYSIQUE O/30

- 1 Dean Els
- 2 Brad Swart
- 3 Justin Sweetnam

SENIOR MEN U/65KG

- 1 Sanga Gijana
- 2 Mzonhle Mdinde
- 3 Mbuthuma Mthobeli

SENIOR MEN U/75KG

- 1 Chris Nguta
- 2 Thula Sifatyi
- 3 Lulamile Kotsela

SENIOR MEN U/85KG

- 1 Xolile Damba
- 2 Anonte Ngomo
- 3 John Moutzouris

SENIOR MEN U/95KG

- 1 Terra Dlodlo
- 2 Trevor Knox

SENIOR MEN O/95KG

- 1 Remember Shabangu
- 2 Andrew Raath
- 3 Edmund Weyer

OVERALL MEN'S:

- Chris Nguta

** All results and spelling as supplied by the event organisers. Muscle Evolution accepts no responsibility for any errors or omissions **M.E.***

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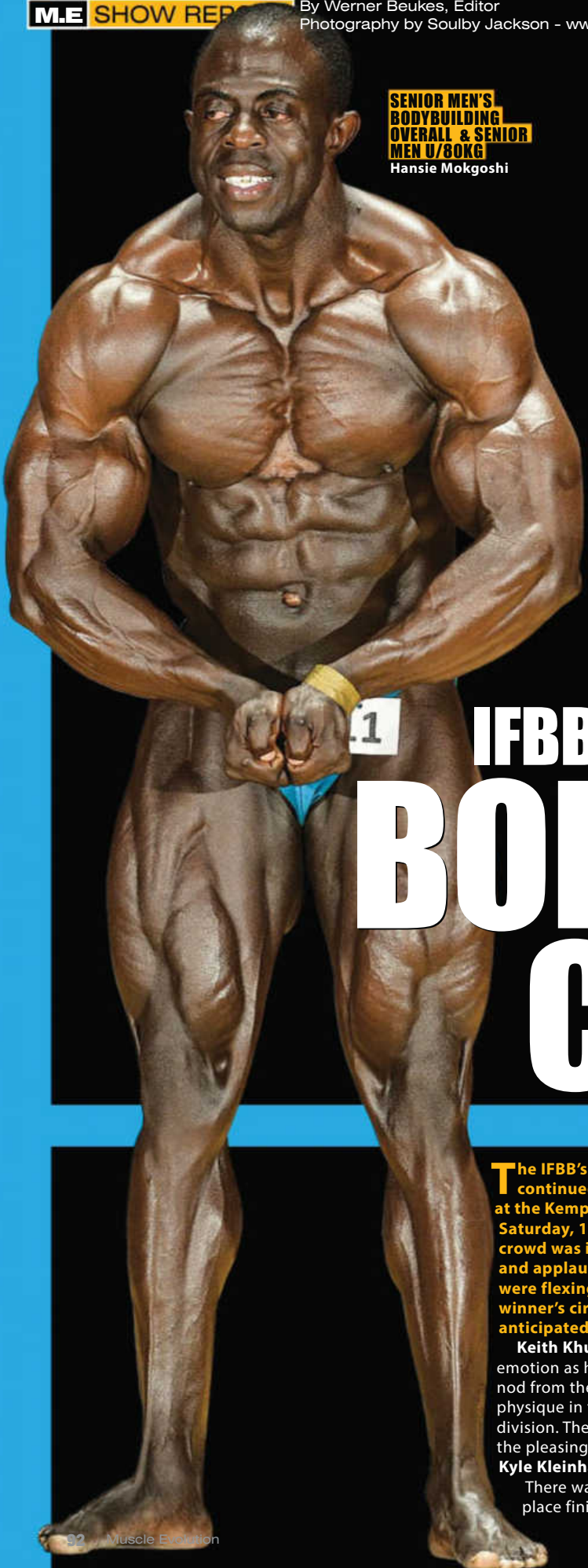
INDIVIDUAL RESULTS MAY VARY. ONLY EFFECTIVE AS PART OF A LEAN MUSCLE PROGRAMME IF COMBINED WITH A BALANCED, LEAN MUSCLE EATING PLAN AND APPROPRIATE TRAINING.

**SENIOR MEN'S
BODYBUILDING
OVERALL & SENIOR
MEN U/80KG**
Hansie Mokgoshi

**JUNIOR MEN
OVERALL
& JUNIOR
BODYBUILDING
U/23, O/75KG**
Lendo Greyling



**LADIES
BEACH
BIKINI
OVERALL
& LADIES
BEACH
BIKINI
O/1.63M**
Nastassja
Welgemoed



1 IFBB
**BOKSBURG
CLASSIC**

VENUE: Kempton Park Civic Centre **DATE:** 1 August 2015

The IFBB's tradition of excellence continued at the Boksburg Classic at the Kempton Park Civic Centre on Saturday, 1 August 2015. A capacity crowd was in attendance, all shouting and applauding the 180 athletes who were flexing hard to make it into the winner's circle in one of the most anticipated shows of the year.

Keith Khuno was overcome by emotion as he got the all-important nod from the judges for his well-defined physique in the Junior under 16 years division. The Junior under 18 line-up saw the pleasing lines of crowd-favourite Kyle Kleinhans bagging top position.

There was no debate about the first place finish of Direto Mokgwadi in

the Junior under 23, under 75kg category. Mokgwadi had the finely-tuned qualities that other athletes in the line-up lacked. Lendo Greyling bagged the Junior Men Overall title for his great shape and overall size.

A totally shredded Donaldo Sabastio got the crowd behind him and knocked Siyanda Sikhosana into second and Logan Wessels into third to take the win in the Senior Men up to 60kg section with his sliced and diced conditioning. Japie van Wyk steamrolled his way to victory in the Masters over 40 years category with his remarkably well developed and ripped physique against stiff competition in the form of Steve McLaren (2nd) and Olivier Attias (3rd). Gavin Sher edged out Pat



**SENIOR MEN
U/90KG**
Thokozani
Matambo



**SENIOR MEN
UP TO 60KG**
Donaldo Sabastio



**LADIES
BEACH
BIKINI
U/1.63M**
Paula Els



**LADIES FITNESS
BIKINI OVERALL
& LADIES
FITNESS BIKINI
O/1.63M**
Letitia du Toit



**JUNIOR
BODY-
BUILDING
U/18**
Kyle
Kleinhans



**JUNIOR
BODY-
BUILDING
U/16**
Keith
Khuno



**SENIOR MEN
O/90KG**
Emile
Zoutendik



**LADIES
FITNESS
BIKINI
U/1.63M**
Cecile Swarts



**SENIOR MEN
UP TO 70KG**
Sihle Nxumalo



**JUNIOR
BODYBUILDING
U/23 U/75KG**
Direto
Mokgwadi



**MASTERS
O/40**
Japie
van Wyk



**MASTERS
O/50**
Gavin Sher



Petela (2nd) and **Arthur Verrall** (3rd) on his way to glory in the Masters over 50 years division.

Leni Gi surpassed **Sandra Bosman** (2nd) with her outrageously energetic routine in the Ladies Fitness category. A truly impressive **Dalene Crosson** emerged victorious in a hotly contested line-up in the Ladies Fitness Bikini over 35 years section.

Although **Lalo Minisi** (2nd) was a better poser he lacked the winning qualities of **Sihle Nxumalo** in the Senior Men up to 70kg division. Top dog in the Novice Men under 75kg category **Miguel Malimo** had the quality muscle to take it all in this division. He also scooped the Men's Fitness title.

Hansie Mokgoshi pulled off an impressive double win by taking the Senior Men under 80kg division and backing that

up with the Overall title – an uncommon occurrence for men who tip the scales under 90kg. However, on the day conditioning triumphed over mass in the Overall line-up.

Paula Els came into the show in top form to win the Ladies Beach Bikini under 1.63m category, while the Ladies Fitness Bikini under 1.63m class saw **Cecile Swarts** bagging the top spot.

An enthusiastic **Castro Jose** displayed the goods to shoot to the top of the Men's Athletic Physique under 1.78m division, while **Thokozani Matambo** fended off challengers **Chuck Luck** (2nd) and **Ndumiso Dlodlo** (3rd) to claim the Senior Men under 90kg title.

Thanks to show organiser Helena Calitz and her dedicated team, the athletes, the sponsors, the IFBB and, of course, all the fans for a superb show.

RESULTS

JUNIOR BODYBUILDING U/16
1 Keith Khuno
2 Jason Lopez
3 Vusi Nkosi

JUNIOR BODYBUILDING U/18
1 Kyle Kleinhans
2 Johan Coetzee
3 Emile Meyer

JUNIOR BODYBUILDING U/23 U/75KG
1 Direto Mokgwadi
2 Jason Henry
3 Lenox Morwatshehla

JUNIOR BODYBUILDING U/23, O/75KG
1 Lendo Greyling
2 Michael Clark
3 Francois Labuschagne

LADIES BODY FITNESS
1 Mel Knoeze
2 Lee Chaldecott
3 Meldnie Fourie

SENIOR MEN UP TO 60KG
1 Donald Sabastio
2 Siyanda Sikhosana
3 Logan Wessels

MASTERS O/40
1 Japie van Wyk
2 Steve McLaren
3 Olivier Attias

MASTERS O/50
1 Gavin Sher
2 Pat Petela
3 Arthur Verrall

LADIES FITNESS
1 Leni Gi

LADIES FITNESS BIKINI O/35
1 Dalene Crosson
2 Anelien Schmulian
3 Kim Carnel

SENIOR MEN UP TO 70KG
1 Sihle Nxumalo
2 Lalo Minisi
3 Danie Butler

NOVICE MEN U/75KG
1 Miguel Malimo
2 Danie Butler
3 Siyanda Sikhosana

NOVICE MEN O/75KG
1 Hector Theto
2 Duane Joubert
3 Justice Mokoena

SENIOR MEN U/80KG
1 Hansie Mokgoshi
2 Morne van den Berg
3 Suger Chimuchenga

MEN'S FITNESS
1 Miguel Malimo

LADIES BEACH BIKINI U/1.63M
1 Paula Els
2 Talisha Strydom
3 Carmen Verrall

MEN'S ATHLETIC PHYSIQUE U/1.78M
1 Castro Jose
2 Dave Shanley
3 Reinhard van Wyk

LADIES FITNESS BIKINI U/1.63M
1 Cecile Swarts
2 Francisca van Heerden
3 Cristi Theron

SENIOR MEN U/90KG
1 Thokozani Matambo
2 Chuck Luck
3 Ndumiso Dlodlo

LADIES BEACH BIKINI O/1.63M
1 Nastassja Welgemoed
2 Anelicke Neetling
3 Angelique Erasmus

MEN'S ATHLETIC PHYSIQUE O/1.78M
1 Henning Viljoen
2 Antonie Holtzhausen
3 Clinton Crous

LADIES FITNESS BIKINI O/1.63M
1 Letitia du Toit
2 Benita Theron
3 Bianca van de Berg

SENIOR MEN O/90KG
1 Emile Zoutendik
2 Mwila Chitenge
3 Andre Pieterse

JUNIOR MEN OVERALL
Lendo Greyling

LADIES BEACH BIKINI OVERALL
Nastassja Welgemoed

MEN'S ATHLETIC PHYSIQUE OVERALL
Castro Jose

LADIES FITNESS BIKINI OVERALL
Letitia du Toit

SENIOR MEN'S BODYBUILDING OVERALL
Hansie Mokgoshi

* All results and spelling as supplied by the event organisers. Muscle Evolution accepts no responsibility for any errors or omissions **M.E.**

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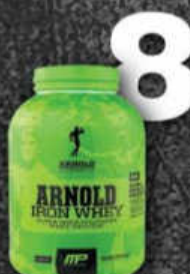
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OVERALL & LADIES BEACH BIKINI UP TO 1.63M
Rachelle Havenga

From the moment athletes arrived at the Cape Peninsula University of Technology in Bellville on 20 June, for the third edition of the annual independent Battle of the Titans bodybuilding competition, one could feel the excitement in the air.

Undefeated bodybuilding champion **Xolile Damba** from Langa once again retained the top spot and successfully defended his title. It was clearly still a great honour for the superbly conditioned Damba to stand on the podium among other respected bodybuilders and bag the Overall title for the third time in a row. However, he didn't win the Overall title without first putting up a fight as **Chris Ngutu**, one of the country's top athletes and the winner of the Senior Men under 80kg line-up, also showed up in magnificent condition.

Matthew Parker was all smiles as he won the Junior division. He also placed third in the Novice Men under 75kg line-up, with **Dillon Klaasen** taking the top honours in that division.

Rachelle Havenga raked in more medals by winning the Ladies Beach Bikini up to 1.63m division along with the Overall Beach Bikini title. **Melissa Strijdom** and **Letitia de Jongh** came in second and third respectively in a hotly contested, quality line-up.

Theresa Schoeman made the Ladies Beach Bikini over 1.63m and the Ladies Beach Bikini over 35 years titles her own on the night, while **Heinrich Visser** retained his title in the Classic Bodybuilding division by beating **Lindsay Pentolfe**. **Howard Claddingbowl**, a crowd favourite, took the Masters division.

Alan Valentine walked away with the top honours in the Men's Beach Physique over 1.74m division, as well as the Overall Beach Physique title.

In the Senior Men under 90kg category it was **Ndoyisiwe Thetani** from the Free State who got the nod from the judges as he narrowly beat one of the Eastern

OVERALL CHAMPION & SENIOR MEN U/80KG

Xolile Damba



BATTLE OF THE TITANS III

VENUE: Cape Peninsula University of Technology, Bellville, Cape Town **DATE:** 20 June 2015

**MEN'S ATHLETIC
PHYSIQUE U/1.78M**
Karel Assenmacher



**SENIOR
MEN
U/60KG**
Basil Janse



**LADIES
FITNESS
BIKINI
U/1.63M**
Claire Schrikker



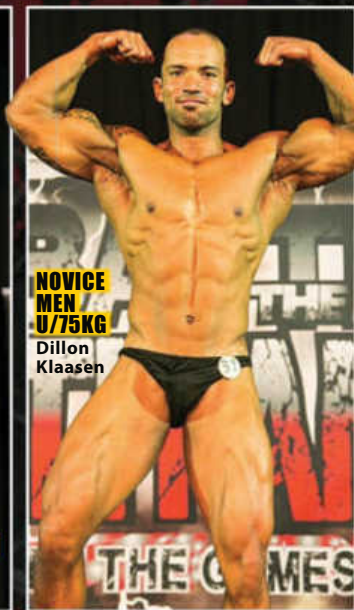
**SENIOR
MEN
U/100KG**
Ryno
Cordier



**SENIOR MEN
CLASSIC
BODY-
BUILDING**
Heinrich
Visser



**NOVICE
MEN
U/75KG**
Dillon
Klaasen



**MEN'S
ATHLETIC
PHYSIQUE
U/1.70M**
Marius
Loots



**NOVICE MEN
U/75KG**
Chris Visagie



**SENIOR MEN
U/100KG**
Riaan Ferreira



**OVERALL LADIES
FITNESS BIKINI**
Inka van Rhyn



**LADIES BEACH
BIKINI O/1.63M
& O/35YRS**
Theresa Schoeman



MASTERS
Howard Claddingbowl



SENIOR MEN U/70KG

Khangelani Siyephu



OVERALL & MEN'S ATHLETIC PHYSIQUE U/1.74M

Stefano Bothma



JUNIORS UNDER 23

Matthew Parker



LADIES FITNESS BIKINI O/35YRS

Helene Lourens



LADIES BODY FITNESS & WOMEN'S PHYSIQUE
Sonja Vos



OVERALL & MEN'S BEACH PHYSIQUE O/1.74M

Alan Valentine



Cape's finest bodybuilders, **Terra Dlodlo**. **Ryno Cordier** came in super shredded and won the Senior Men under 90kg division, beating out the bigger **Remember Shabangu** for the top podium position. In the Senior Men over 100kg division, **Riaan Ferreira** won first place, with **Vernon van Rhyn** having to settle for second on the evening.

Battle of the Titans owner Kevin Schwartz also awarded two bursaries valued at R50,000, courtesy of Oxifa and BN Academy, to assist aspiring fitness professionals to study towards attaining a qualification and start a career in the fitness industry. **Stephan Blake** and **Dorpa du Toit** were the two lucky recipients on the night.

Greater things are expected for the Battle of the Titans in 2016, with double the prize money and an even bigger line-up of athletes promised by event organisers.

[RESULTS]

NOVICE MEN U/75KG

- 1 Dillon Klaasen
- 2 Emih e Baneti
- 3 Matthew Parker

JUNIORS UNDER 23

- 1 Matthew Parker
- 2 Forreston Matthews
- 3 Marcel Erasmus

NOVICE MEN O/75KG

- 1 Chris Visagie
- 2 Adrian Cole
- 3 Dorpa du Toit

LADIES BEACH BIKINI UP TO 1.63M

- 1 Rachelle Havenga
- 2 Melissa Strijdom
- 3 Letitia de Jongh

LADIES BEACH BIKINI O/1.63M

- 1 Theresa Schoeman
- 2 Krystin Morgenrood
- 3 Bethany Simpson

LADIES BODY FITNESS

- 1 Sonja Vos

SENIOR MEN CLASSIC BODYBUILDING

- 1 Heinrich Visser
- 2 Lindsay Pentolfe
- 3 Justin Stevens

MASTERS

- 1 Howard Claddingbowl
- 2 Joe Koffman
- 3 Johan du Toit

SENIOR MEN U/60KG

- 1 Basil Janse
- 2 Nikelo Mpana
- 3 Silver Mene

LADIES BEACH BIKINI O/35YRS

- 1 Theresa Schoeman
- 2 Mandy Viljoen

SENIOR MEN U/70KG

- 1 Khangelani Siyephu
- 2 Loyiso Mapekula
- 3 Zuks Mhlekwla

COUPLES

- 1 Johan and Desray du Toit

MEN'S BEACH PHYSIQUE U/1.74M

- 1 Thiaan Barnard
- 2 Hein Theart
- 3 Sias Theron

WOMEN'S PHYSIQUE

- 1 Sonja Vos
- 2 Brenda Baliso

SENIOR MEN U/80KG

- 1 Xolile Damba
- 2 Chris Ngutu
- 3 Tyron Fortuin

MEN'S ATHLETIC PHYSIQUE U/1.70M

- 1 Marius Loots
- 2 Hein Theart
- 3 Jean Visser

MEN'S ATHLETIC PHYSIQUE U/1.74M

- 1 Stefano Bothma
- 2 Thiaan Barnard
- 3 Shane Kruger

SENIOR MEN U/90KG

- 1 Ndoiyisi Thetani
- 2 Terra Dlodlo
- 3 Francois de Wet

MEN'S ATHLETIC PHYSIQUE O/1.78M

- 1 Storm McDonald
- 2 Stephan Blake
- 3 JD Louw

MEN'S BEACH PHYSIQUE O/1.74M

- 1 Alan Valentine
- 2 Jacque du Plessis
- 3 Ryan Engelbrecht

MEN'S ATHLETIC PHYSIQUE U/1.78M

- 1 Karel Assenmacher
- 2 Sazi Solwandile
- 3 Riaan Heinse

LADIES FITNESS BIKINI U/1.63M

- 1 Claire Schrikker
- 2 Alana Kruger
- 3 Bianca Douglas

LADIES FITNESS BIKINI O/35YRS

- 1 Helene Lourens
- 2 Desray du Toit

WOMEN'S FITNESS ROUTINE

- 1 Leigh Purcell
- 2 Claire Schrikker

SENIOR MEN U/100KG

- 1 Ryno Cordier
- 2 Remember Shabangu
- 3 Adrian Cole

SENIOR MEN O/100KG

- 1 Riaan Ferreira
- 2 Vernon van Rhyn
- 3 Ronnie Moore

OVERALL LADIES BEACH BIKINI

- Rachelle Havenga

OVERALL BEACH ATHLETIC PHYSIQUE

- Alan Valentine

OVERALL MEN'S ATHLETIC PHYSIQUE

- Stefano Bothma

OVERALL LADIES FITNESS BIKINI

- Inka van Rhyn

OVERALL CHAMPION

- Xolile Damba



SENIOR MEN U/90KG
Ndoiyisi Thetani

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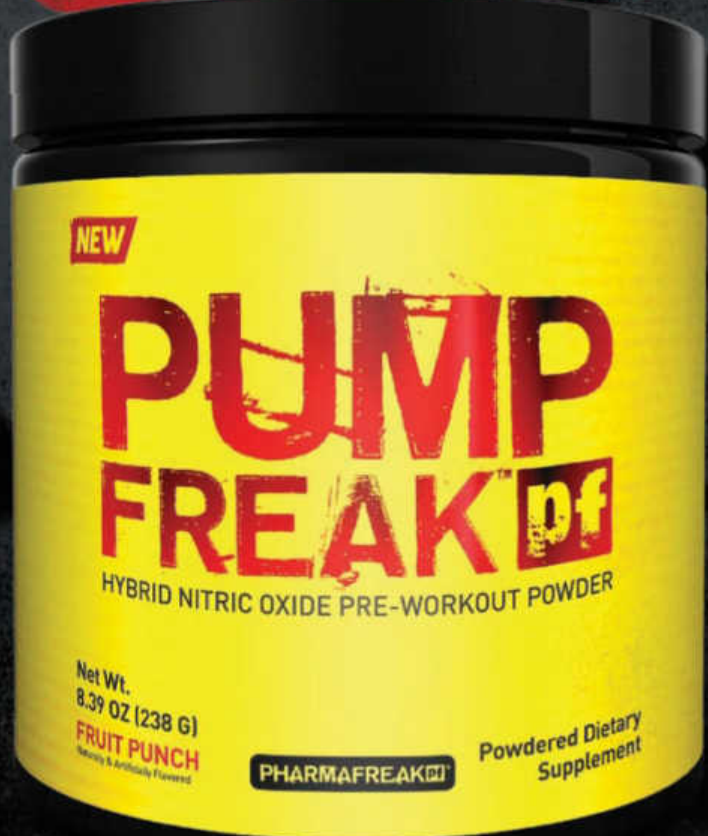
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MEN 70-80KG
Siphu Zulu



MEN U/70KG
Vuyo Vanda



OVERALL WINNER & MEN O/80KG
Mohamed Chili



BEACH BIKINI O/1.63M
Alisha Robertse



BEACH BIKINI U/1.63M
Mbalenhle Shabalala

Over 103 athletes from all over KwaZulu-Natal converged at the University of Durban Westville to battle it out for supremacy at this year's IFBB East Coast Classic, which took place on Saturday, 27 June 2015.

Athletes brought well-conditioned physiques and powerful posing to the stage, and it was clear from the start that the judges would have an arduous task to spot the best of the best in the line-ups.

A determined Sihle Tati proved to be a cut above his opponents, Mandisi Majola (2nd) and Khawulani Mazibuko (3rd), in the Juniors under 23, under 75kg division. The Juniors

under 23, over 75kg category winner Sechaba Mathews presented a solid physique that propelled him past his competitors.

Sally Ensor-Smith was in excellent shape to bag first place in the Ladies Body Fitness division, while Sean Gibb claimed the Over 40s category. Jackie Lewis was awarded for her superb conditioning against opponents Barbara Joubert (2nd) and Michelle van Niekerk (3rd) in the Fitness Bikini Over 35 section.

The physique of winner Richard Daniels compared favourably in every pose in the Men's Classic Bodybuilding category. Gold in the Novice Men under 75kg line-up belonged to a ripped

IFBB 2015 EAST COAST CLASSIC

DATE: 27 June 2015 VENUE: University of Durban Westville, Durban



LADIES BODY FITNESS
Sally Ensor-Smith



FITNESS BIKINI U/1.63M
Roxy Barker



NOVICE MEN U/75KG
Samuel Gordon



MEN'S ATHLETIC PHYSIQUE
David Watkeys



NOVICE MEN O/75KG
Sabelo Mathendwa



FITNESS BIKINI O/1.63M
Kirsten Allnutt



FITNESS BIKINI OVER 35
Jackie Lewis



MEN'S CLASSIC BODYBUILDING
Richard Daniels



OVER 40
Sean Gibb

Samuel Gordon, while it was no surprise to witness **Mbalenhle Shabalala** taking top honours in the Beach Bikini Under 1.63m category. **Courtney Smith** (3rd) and **Lourika Bekker** (2nd) could not compete against the shapely **Alisha Robertse** in the Beach Bikini Over 1.63m, while **David Watkeys** displayed the right combination of muscle and conditioning on the evening to win the Men's Athletic Physique title.

Mohamed Chili showed that he was a huge threat in any line-up, bagging the top spot in the Men over 80kg category. Chili also had the size and refinement to claim the title of Overall winner.

Thanks to all the incredible athletes who made the IFBB East Coast Classic a monumental success as well as the sponsors and fans who supported the event.

RESULTS

JUNIORS U/23, U/75KG
1 Sihle Tati
2 Mandisi Majola
3 Khawulani Mazibuko

JUNIORS U/23, O/75KG
1 Sechaba Mathews
2 Sithembekhle Henry Buthelezi
3 Jared Pieters

LADIES BODY FITNESS
1 Sally Ensor-Smith
2 Shannon Walton

OVER 40
1 Sean Gibb
2 Mhlawukelwa Malinga

FITNESS BIKINI OVER 35
1 Jackie Lewis
2 Barbara Joubert
3 Michelle van Niekerk

MEN'S CLASSIC BODYBUILDING
1 Richard Daniels
2 Sandesh Moothee Ram
3 Dylan Moran

BEACH BIKINI U/1.63M
1 Mbalenhle Shabalala
2 Kimberley Rube
3 Cheresse Harmse

NOVICE MEN U/75KG
1 Samuel Gordon
2 Thobani Ngcobo
3 Owen Dunderdale

BEACH BIKINI O/1.63M
1 Alisha Robertse
2 Lourika Bekker
3 Courtney Smith

NOVICE MEN O/75KG
1 Sabelo Mathendwa
2 Garry Jackson
3 Mondli Zwane

FITNESS BIKINI U/1.63M
1 Roxy Barker
2 Desiree Maple
3 Shayna Atkinson

MEN'S ATHLETIC PHYSIQUE
1 David Watkeys
2 Vaughn Davies
3 Brad Hilder

FITNESS BIKINI O/1.63M
1 Kirsten Allnutt
2 Amore Coetzee
3 Sam Schoeman

MEN U/70KG
1 Vuyo Vanda
2 Ndimiso Shude
3 Sudeshan Naidoo

MEN 70-80KG
1 Siphon Zulu
2 Trevor Alexander
3 Marius Radyn

MEN O/80KG
1 Mohamed Chili
2 Sibusiso Khuzwayo
3 Thokozani Mntambo

OVERALL WINNER
Mohamed Chili



**SENIOR MEN
OVERALL &
SENIOR MEN
U/80KG**
Muzi Maluleke



**SENIOR
MEN
U/100KG**
Chi
Ndyamba



**LADIES FITNESS
BIKINI OVERALL &
LADIES FITNESS
BIKINI U/35**
Daleen Crosson



**LADIES FITNESS
BIKINI U/1.63M**
Wourine Brink



**SENIOR MEN
U/100KG**
Roelof Coertze

Attendance at the IFBB's H&H Bodybuilding & Fitness Classic has become an annual ritual for lovers of the iron game and this year's eighth edition was no exemption. The popular show, held in Pretoria North on Saturday, 8 August 2015, sported a record number of 144 athletes with spectators eager to see a hotly contested battle between some of the finest athletes in the north. The entire show, professionally run and promoted by Hennie Kotze and Herman Du Plessis, left a lasting impression as one of the best shows on the IFBB's circuit.

Devin Stewart displayed an impressive and balanced physique en route to winning the Juniors under 23, under 75kg division. An ultra-ripped Lendo Greyling was unstoppable against Bonginkosi Martin Sifundza (2nd) and Hannes Alberts (3rd) when he presented his defined X-frame on stage to clinch the title in the Juniors under 23, over 75kg category. In the Ladies Beach Bikini under 1.63m category winner Anesca Gouws bolted the door on challenger Micaela Markides who had to be content with silver on the night. A sensational Leana Viviers took the crown in the Ladies Beach Bikini over 1.63m category. Viviers also won the Overall Ladies Beach Bikini title thanks to her superb physique. Daleen Crosson drew big cheers from the crowd when she won the title in the Ladies Fitness Bikini over 35

IFBB H&H BODYBUILDING & FITNESS CLASSIC

DATE: 8 August 2015 VENUE: Pretoria North



SENIOR MEN U/70KG
Sihle Gregory Nxumalo



LADIES FITNESS BIKINI U/1.63M
Cecile Swart



LADIES BEACH BIKINI U/1.63M
Anesca Gouws



LADIES BEACH BIKINI OVERALL & LADIES BEACH BIKINI O/1.63M
Leana Viviers



JUNIOR BODY-BUILDING U/23 U/75KG
Devin Stewart



JUNIOR BODYBUILDING U/23 O/75KG
Lendo Greyling



MASTERS MEN OVERALL & MASTERS O/40 U/80KG
Japie van Wyk



SENIOR MEN U/90KG
Johan Boshoff



MASTERS O/40 O/80KG
Gawie Nel



LADIES FITNESS
Amanda Janse van Vuuren



WOMAN'S PHYSIQUE
Regina Jonga



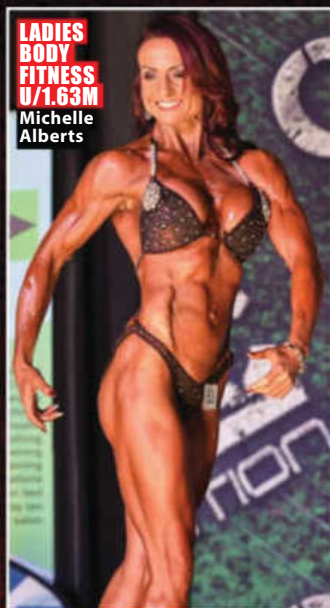
MEN'S ATHLETIC PHYSIQUE
Donovan Sudds



LADIES BODY FITNESS OVERALL & LADIES BODY FITNESS O/1.63M
Louise Scholtz



SENIOR MEN U/60KG
Lalo Mnisi



LADIES BODY FITNESS U/1.63M
Michelle Alberts



MEN'S CLASSIC BODYBUILDING
Edward Jackson



LADIES BODY FITNESS O/35
Carina Lourens

years division. She also took the Overall title in that division.

Masters Over 40 years and under 80kg champion, **Japie van Wyk** was topped from head to toe with defined muscle and striations to match. Van Wyk's superior conditioning also bagged him the Overall title in the Masters category.

It was a battle of epic proportions in the Ladies Body Fitness up to 1.63m between **Michelle Alberts** (1st), **Caryn Tyler** (2nd) and **Lee Chaldecott** (3rd). Alberts took the honours with the overall package she presented to the judges.

Lalo Mnisi gained momentum when he realised that he had the edge over **Donaldo Sebastio** (2nd) and **Percy Mosala** (3rd) in the Seniors up to 60kg line-up. **Muzi Maluleke**, **Hansie Mokgoshi** and **Morne van der Berg** battled it out in the Senior Men under 80kg category, with Maluleke

"BODYBUILDING IS AT ITS HEART A WONDERFUL SPORT THAT HAS CHANGED THE LIVES OF MANY FOR THE BETTER AND LOOKING AT THE SUCCESS OF H&H IT WILL CONTINUE TO DO SO."

emerging as the eventual winner with his unbelievable size and shape. He seemingly became thicker with muscle in every quarter turn on stage.

Johan Boshoff was back to his best, exhibiting extraordinary conditioning to bag the Senior Men under 90kg title.

Bodybuilding is at its heart a wonderful sport that has changed the lives of many for the better and looking at the success of H&H it will continue to do so.

RESULTS

JUNIOR BODYBUILDING U/23 U/75KG

- 1 Devin Stewart
- 2 Lennox Morwatshehla

JUNIOR BODYBUILDING U/23 O/75KG

- 1 Lendo Greyling
- 2 Bonginkosi Martin Sifundza
- 3 Hannes Alberts

LADIES BEACH BIKINI U/1.63M

- 1 Anesca Gouws
- 2 Micaela Markides

LADIES BEACH BIKINI O/1.63M

- 1 Leana Viviers
- 2 Angeliqwe Erasmus
- 3 Thealize Maritz

LADIES FITNESS

- 1 Amanda Janse van Vuuren

MASTERS O/40 U/80KG

- 1 Japie van Wyk

MASTERS O/40 O/80KG

- 1 Gawie Nel
- 2 Olivier Attias
- 3 Ryno Greeff

LADIES BODY FITNESS U/1.63M

- 1 Michelle Alberts
- 2 Caryn Tyler
- 3 Lee Chaldecott

LADIES BODY FITNESS O/35

- 1 Carina Lourens

LADIES BODY FITNESS O/1.63M

- 1 Louise Scholtz
- 2 Cianda Nel

SENIOR MEN U/60KG

- 1 Lalo Mnisi
- 2 Donaldo Sebastio
- 3 Percy Mosala

SENIOR MEN U/70KG

- 1 Sihle Gregory Nxumalo
- 2 Lehlonolo Seleke
- 3 Frans Hloi

SENIOR MEN U/80KG

- 1 Muzi Maluleke
- 2 Hansie Mokgoshi
- 3 Morne van der Berg

LADIES FITNESS BIKINI U/1.63M

- 1 Cecile Swart
- 2 Marjorina Bruyns
- 3 Therese Kruger

LADIES FITNESS BIKINI O/1.63M

- 1 Wourine Brink
- 2 Cassandre de Jager
- 3 Anchen Fouche

LADIES FITNESS BIKINI O/35

- 1 Daleen Crosson
- 2 Anelien Schmulian
- 3 Karin Dercksen

MEN'S ATHLETIC PHYSIQUE

- 1 Donovan Sudds
- 2 Neil Madden
- 3 Dave Shanley

MEN'S CLASSIC BODYBUILDING

- 1 Edward Jackson
- 2 Pieter Janse van Rensburg
- 3 Nico Basson

WOMAN'S PHYSIQUE

- 1 Regina Jonga

SENIOR MEN U/90KG

- 1 Johan Boshoff
- 2 Johnny Lucas
- 3 Ndumiso Dlodlo

SENIOR MEN U/100KG

- 1 Roelof Coertze
- 2 Andrew Raath
- 3 Jacques Muller

SENIOR MEN O/100KG

- 1 Chi Ndyamba
- 2 Jacques van Der Walt

LADIES BEACH BIKINI OVERALL

- Leana Viviers

MASTERS MEN OVERALL

- Japie van Wyk

LADIES BODY FITNESS OVERALL

- Louise Scholtz

LADIES FITNESS BIKINI OVERALL

- Daleen Crosson

SENIOR MEN OVERALL

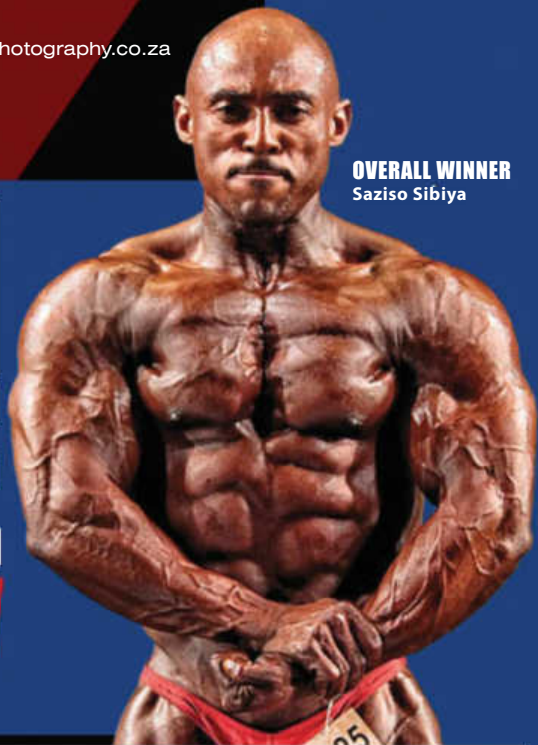
- Muzi Maluleke

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IFBB

SSN TEAM UNIVERSE BODYBUILDING SHOW

DATE: 8 August 2015 **VENUE:** Opera Theatre – The Playhouse Company, Durban, KwaZulu-Natal



OVERALL WINNER
Saziso Sibiya



JUNIORS U/23 (L to R)
5th Steven McLeod
3rd Michael Wood
1ST TYRORNE DU TOIT
2nd Khawulani Mazibuko
4th Mandisi Majohp



NOVICE MENS BODYBUILDING (L to R)
4th Alias Mabhida
2nd Thoboni Nellbo
1ST JOHNATHAN KOEBERG
3rd Stephen Horne
5th Shadrack Mlotshwa



LADIES BODY FITNESS (L to R)
5th Sally Ensor-Smith
2nd Nohzobo Cuba
1ST CHANTEL SWART
3rd Leanne van Heerden
4th Shannon Walton
6th Zenell Wentzel



LADIES FITNESS BIKINI 0/35 (L to R)
 5th Carrie-Ann van Heerden
 3rd Barbara Joubert
1ST JO-ANNE VAN DER VLUGT
 2nd Angela Howden
 4th Jacqueline Lewis
 6th Helene McGinn

Competitors travelled from all over to showcase their excellent proportions, tight waists and pleasing lines at the **SSN Team Universe Bodybuilding Show, held at The Opera Theatre in Durban on Saturday, 8 August 2015.**

The show was a qualifier for the Arnold Classic South Africa, taking place from 27-29 May 2016, and also aimed to raise funds for athletes representing South Africa at the IFBB Amateur World Championships.

At the show Tyronne du Toit sported a polished physique to power his way to the top of the Juniors under 23 category. The crown for the best novice bodybuilder belonged to Johnathan Koeberg with

Thoboni Nellbo placing 2nd and Stephen Horne in 3rd.

Among the ladies, Chantel Swart, Angelique Roux and Kirsten Allnut were the standout performers on the night. Swart brought her best shape to the stage to nab first place in the Ladies Body Fitness category, while the Ladies Beach Bikini title belonged to a terrific looking Roux, with Kelly Ainsworth taking 2nd and Courtney Smith 3rd. Allnut scooped top honours in the Ladies Fitness Bikini category.

"THE SHOW WAS A QUALIFIER FOR THE ARNOLD CLASSIC SOUTH AFRICA, TAKING PLACE FROM 27-29 MAY 2016, AND ALSO AIMED TO RAISE FUNDS FOR ATHLETES REPRESENTING SOUTH AFRICA AT THE IFBB AMATEUR WORLD CHAMPIONSHIPS."

A dense and detailed Stone Cele was on the mark once again to claim the Masters Over 40 title, while the outstanding Saziso Sibiya made the Men's under 80kg division his own. Sibiya was cut and as sharp as a razor on stage so it was no surprise when he also scooped the prestigious Overall title on the evening.

In the Men's over 100kg line-up Ashton Mitchell had the overall shape and size to outclass competitors Etienne Botha (2nd) and Jason McGinn (3rd).



LADIES BEACH BIKINI (L to R)
 6th Jade Warman
 4th Naadiya Rawat
 2nd Kelly Ainsworth
1ST ANGELIQUE ROUX
 3rd Courtney Smith
 5th Laurika Bekker



MEN U/70KG (L to R)
 5th Johannes Magilo
 4th Vuyo Vanda
 2nd Sipho Ngidi
1ST BOYSIE NGCOBO
 3rd Miquel Malimo



MEN U/80KG (L to R)
 6th Vicky Segone
 4th Mandla Msongelwa
 2nd Chris Pillay
1ST SAZISO SIBIYA
 3rd Njabulo Cele
 5th Trevor Alexander

MASTERS OVER 40 1 Stone Cele, 2 Terrence Pillay, 3 Jabulani Buthelezi **MASTERS OVER 50** 1 Naiem Ally, 2 Benny Pillay
MEN'S ATHLETIC PHYSIQUE 1 Bertu Moolman, 2 Sarel Breedt, 3 Vaughn Davies



LADIES FITNESS BIKINI (L to R)

- 5th Roxy Barker
- 4th Shannon Fennell
- 2nd Candice Schaller
- 1ST KIRSTEN ALLNUT**
- 3rd Paula Wessels
- 6th Amore Coetzee



MEN'S CLASSIC BODYBUILDING (L to R)

- 3rd Phillip Sithole
- 1ST BRETT SCHOEMAN**
- 2nd Oliver Williams



MEN UNDER 90KG (L to R)

- 5th Jared Read
- 6th Firebulous Daniel Asare
- 2nd Bongani Myaka
- 1ST SANJAY JAGGERNATH**
- 3rd Gary MacDonald
- 4th Junaid Shaik



MEN UNDER 100KG (L to R)

- 5th Andrew Seikaneng
- 4th Kwazi Sosibo
- 3rd Andre Muller
- 1ST NKULULEKO CELE**
- 2nd Darren Smit
- 6th Irvine Dekeya



MEN OVER 100KG (L to R)

- 3rd Jason McGinn
- 1ST ASHTON MITCHELL**
- 2nd Etienne Botha

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HENNIE KOTZE

THE QUESTION OF DIGESTION

Most bodybuilders place immense focus on hitting their required daily calorie intakes and macronutrient ratios. However, many aren't realising the full value of their eating efforts because, as the saying goes, "it's not just about what you eat, it's about what you can absorb." I don't believe that most athletes absorb and assimilate everything they eat during each meal due to the quantity of food they try to consume. Take a 500g steak for example. A man can generally only assimilate 40-45g of derived protein per meal, and females even less at about 20-25g. That equates to a 200-300g steak. So instead of the ½ kilo option at a single meal, it is better to split the steak up over two or more meals to ensure all those amino acids can be used and wastage is minimised. Also, a man's stomach is generally the size of two fists. While it can expand, filling it with 400g of protein and 300g of rice in one sitting doesn't make sense. That's why I eat 6-7 smaller meals every two hours,



HENNIE SAYS

"It's also a good idea to limit the amount of fluid you ingest when you eat as this dilutes the hydrochloric acid in your stomach which slows the digestion process."

instead of 4-5 bigger meals a day. My day starts very early which makes it easier for me to fit in all these meals, which ensures that I can meet my macros by consuming just 200g of protein per meal, which delivers the best results for me. This way of eating also keeps my digestive system functioning optimally and limits the bloating that normally happens in the midsection. And a lot of that bloating is also caused by eating processed foods and sugar, as well as stress. These factors cause inflammation in the gastrointestinal tract which reduces your body's ability to absorb nutrients. In much the same way, allergens like lactose and gluten can also result in inflammation if you're sensitive to these substances, so avoid them if you can.

One way to aid the digestive process is the use of digestive enzymes and prebiotics and probiotics to build up the beneficial bacteria in the gut that aid digestion and improve absorption. I generally limit these to contest prep phases when my diet is more restrictive as I get in fewer of these beneficial organisms from natural food sources than I do during the off-season. When I'm not prepping I eat foods that are high in fibre and are loaded with natural digestive enzymes and probiotics, especially raw food as cooking kills these natural, living beneficial organisms.

It's also a good idea to limit the amount of fluid you ingest when you eat as this dilutes the hydrochloric acid in your stomach which slows the digestion process.

Lastly, remember to chew your food properly and don't rush. This also aids digestion and absorption, particularly that of carbs as the process actually starts in the mouth itself.

JACO VENTER

HYPERTROPHY IS THE GOAL

Each and every day we go to the gym in our pursuit of physical perfection. If nutrition is 80% of the success you achieve in your quest to build muscle, the remaining 20% better be time well spent. When we lift weights we have to activate our muscles properly for them to grow, irrespective of whether we want huge arms or striated glutes to show off on stage. Whatever it is that drives us we must make every second count when we hit the gym. Hypertrophy is the promised land where progress happens. We grow bigger muscles by means of stress, tension and damage. The simple objective is to attain complete failure and ensure that the muscle is equipped with sufficient glycogen stores and amino acids to drive the repair and rebuilding process. When you want your muscles to grow you need an easily accessible carbohydrate source which will ensure rapid availability with no crash at the end. When you train you must aim for a 70% load of your 1 rep maximum. To me, the sweet spot for ideal growth is anywhere in the 8-12 rep range. If you are going too far beyond that you are compromising your potential for progress. If you are not pushing yourself hard enough, even if you have one rep left in the tank, the same end result applies. If you solely stick to heavy weights or only perform high-rep work you won't build your best physique possible. You need the best of both

styles of training if you want to reach your full muscular potential. As bodybuilders we are unique because we train to failure and then aim to go beyond that point. Many bodybuilders don't grasp the importance of gaining strength as it relates to muscle growth. This is the fundamental aspect of bodybuilding – to build bigger muscle we need to get stronger. By progressively overloading our muscles we impose more

stress on muscles over time forcing them to adapt by growing larger. Getting stronger is hard work and it requires consistency, determination and focus. The most effective way for me to reach the land of hypertrophy is to completely fail on the set I am doing. This is followed by partials

"THE MOST EFFECTIVE WAY FOR ME TO REACH THE LAND OF HYPERTROPHY IS TO COMPLETELY FAIL ON THE SET I AM DOING. THIS IS FOLLOWED BY PARTIALS AT THE BOTTOM OF THE RANGE. I DO THIS TO PUSH MY MUSCLES INTO A NEW ZONE OF GROWTH."

at the bottom of the range. I do this to push my muscles into a new zone of growth. I finish my set with a full ten-second stretch "under load". The pain, believe me, is beyond anything I have ever experienced in the gym but it activates each and every muscle fibre to spark new growth. I learnt this technique from the legendary John Meadows. Muscles respond to the environment and strain we place them under. By purposefully damaging a muscle fibre in the right manner will cause it to grow larger. When you see people who show no significant improvement despite working out it can almost always be attributed to either an inconsistent diet or the reluctance to push beyond the pain barrier.



Health & Fitness Professionals Academy

SIBUSISO KHUZWAYO FOSTERING A DEEPER UNDERSTANDING AMONG THE YOUTH

Building muscle is about more than merely going to gym to lift weights. There are many other factors that are also important such as reps, volume, and form, to name a few. Dieting and taking the right supplements at the right time are also vital components. As advanced as I am in my understanding of this sport in this regard I'm still learning new things from my coaches, and it is knowledge that I like to share with the youth to foster a greater understanding of our sport and of healthy living. That is why one of my goals this year has been to educate young athletes about nutrition. Together with other members of the House of Stone we've been going to schools to speak about nutrition and the importance of physical activity. It has been amazing to see how much the kids appreciate what we do. **WHEN THEY ASK ABOUT THE SPORT AND WHY THEY SHOULD GET INVOLVED I TELL THEM TO FIRST CONSIDER TWO IMPORTANT ELEMENTS:**

Firstly, it's imperative that youngsters understand why they want to do this. If your passion and drive for it isn't strong enough then you won't succeed. Half-hearted attempts at bodybuilding have never yielded inspirational results. And don't do it for the Facebook likes, the applause, or even the girls. I tell them that I keep doing this because doing anything else would feel like I'm not living, like I'm merely existing. Bodybuilding is my purpose in life.

I then tell them that without a strong work ethic and discipline they can't expect to succeed. These two elements work together and are vital to success. Your work ethic can also relate to various other aspects of your life, not merely how you train. How you deal with work and projects outside the gym environment would also benefit from a strong work ethic. Similarly, discipline extends beyond the way you train or eat. It also entails how you carry yourself. I'm a firm believer that it's none of your business what others think of you. However, it is your business what you give them to shape their impressions of you. With discipline one can be confident that the way you express yourself, even on social media, won't portray the wrong image or give people the fuel they need to judge you harshly. Too many athletes have limited their success in the way they act and carry themselves in public, be it a spat about judging or throwing a tantrum over a loss at a competition. No one wants to work with people of that calibre and inclination. Take it on the chin with a pinch of salt, then put your head down and work harder. That's my approach to building my career in the industry, which I hope will deliver a long and prosperous one.

JOHAN 'BOSSIE' BOSHOFF TRAIN TO GAIN

We all go to the gym with the idea in our heads of making new gains and reaching new physical frontiers. I know of few people who have experienced considerable muscle growth without having to lift to failure. The majority of bodybuilders need to put in an extreme effort to recruit and fatigue all the muscle fibres necessary to stimulate hypertrophy and optimise gains. Never backing down, no matter what is a sure-fire way of stimulating this growth. We need to push our sets within a few reps of failure and even beyond that to continue to grow. Creating true strength, for me, both mentally and physically, lies in the rep ranges you use and how you push yourself past failure. We all have heard the saying "no pain no gain" and that is basically where it all comes together. I like the idea of taking an exercise and pushing it to the max, then returning to the gym to do it all again, and again, and again, until we get the results we want.

To optimise your muscle gains you also need to keep your efforts consistent which requires a great deal of motivation to repeat the process, particularly with the rep ranges and weight you need to reach your specific goal. Barriers are only broken by constantly taking your body to new levels. I always try to push myself to the point where I can look back at my workout and say "that was my best". I also tell myself: "Today I train like a slave so that, on show day, I will rise like a king". To train hard and with consistency is tough and it takes more than a nuts-and-bolts training guide to achieve your goals. You have to get your muscles to work effectively and efficiently in the gym to make gains and this only comes with practice. The hours you put in is what you get out. The basic lifts I believe are the best to express true strength and set you on a path to greatness are the deadlift, squat and bench press. We have to focus our efforts on these lifts while we minimise our risk of injury. I believe anyone can develop bigger muscles when they have mastered these major lifts. If you are going to get anywhere as a bodybuilder you need to be willing to sacrifice and put in the hard yards. Of utmost importance though is to enjoy your training while you are working towards your goal. Try to have some fun along the way and it will keep you going while lifting becomes a habit because enjoyment matters just as much as progress in the gym.



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DYLAN RIDLEY THE RECOVERY MATRIX

When bodybuilders talk about recovery it normally centres around nutrition, supplementation and sleep. However, these is so much more we can do to optimise our recovery potential...

STRETCHING: Proper stretching – static and dynamic, and some form of mobility work – can enhance recovery by improving range of motion and keeping stiff and sore muscles supple. Stretching before a workout helps to circulate blood to prepare for the session, while stretching between sets and afterwards helps to get more nutrient-rich blood to fatigued muscles and removes metabolites by helping to improve circulation, which flushes out waste products.

SAUNAS: Saunas can help rid your body of toxins and can also improve circulation, which aids recovery and the repair of damaged muscle tissue. Studies also show that they help to relieve muscle tension, which improves range of motion and reduces feelings of next day soreness. This also results in a feeling of emotional and physical well-being.

FOAM ROLLING: Much of the soreness that goes along with exercise occurs when our muscles and fascia — connective tissue running throughout the body — become tense and 'knotted'. Rolling muscles with a foam or semi-rigid roller — two forms of self-myofascial release — can help

remove these knots and prevent muscle imbalances from forming. While not exactly known for its comfort, the benefits are worth it.

DEEP TISSUE MASSAGE: This form of massage therapy focuses on realigning deep layers of muscle and connective tissue. It is especially helpful for chronic aches and pains in areas that experience chronic stiffness such as the neck and upper back, lower back, legs and shoulders.

EPSOM SALT BATH: Epsom salts contain a high magnesium content which helps to alleviate the deficiencies of this important mineral that many of us have. This helps to improve heart health, insulin sensitivity, muscle and nerve function, and joint health. Magnesium also helps to remove toxins from the body and reduces inflammation, which is the major cause

of next day muscle soreness following exercise or soft tissue manipulation, such as deep tissue massage or foam rolling.

CONTRAST WATER THERAPY: Contrasting – alternating between immersions in both hot and ice-cold water – improves circulation and helps reduce the inflammation that results from exercise. This speeds up recovery, enhances muscle function and aids the tissue repair process.

I would like to take this opportunity to wish all athletes competing in the various IFBB provincial events and the IFBB SA Championships the best of luck.

"SAUNAS HELP TO RELIEVE MUSCLE TENSION, WHICH IMPROVES RANGE OF MOTION AND REDUCES FEELINGS OF NEXT DAY SORENESS."

COBUS VAN DER MERWE A BODYBUILDING LIFESTYLE WHILE YOU TRAVEL

Travelling can be quite a challenge for any pro bodybuilder. You have to find the right place to work out, maintain your diet and eat correctly. As we need to stay in shape year round it's extremely important that we don't let travelling for work or guest posing appearances hamper our ability to maintain our condition or limit our ability to continue making gains while we're away from home. For me, like so many other athletes in this wonderful sport, it's comforting to lift weights in an environment I'm used to, surrounded by friends and people I know and trust. As an athlete I find it tough to maintain a healthy lifestyle the moment I step outside my comfort zone; tough, but not impossible. If I travel I always try to find out if there is a well equipped gym close to where I will stay. If there is an exercise room at the hotel I'm staying at I will make use of the equipment available to me. The selection of equipment is usually limited in these gyms, but a few machines, some weights and a treadmill or stationary bike are more than enough for me to keep my workouts going. You just need to be creative with your approach. In the unlikely scenario of there being no gym available I will do a workout with my own bodyweight and an exercise band I take along in my suitcase.

I will do a series of supersets consisting of push-ups, bicep curls with the band, tricep dips with a chair, side delt raises with the band and crunches. I usually do between 4-6 sets of 20-40 reps. I will also include a 40-minute power walk around the neighbourhood where

I stay as additional cardio. Not having access to equipment while you're travelling should never be an excuse to miss a workout. You just need to improvise and keep moving forward if you're really serious about your training. I also carry a cooler bag with whey protein, chicken, veggies, oats and healthy snacks in containers to keep my metabolism on track when I don't have time to sit down to eat a proper meal or can't find suitable meals while on the road. When I'm staying at a hotel or a guest house I will always request a room with a microwave and refrigerator where I can reheat and store pre-cooked meals. It might take more effort to stay in shape while you're travelling but it's not impossible if you are determined enough to make things happen.

"AS AN ATHLETE I FIND IT TOUGH TO MAINTAIN A HEALTHY LIFESTYLE THE MOMENT I STEP OUTSIDE MY COMFORT ZONE; TOUGH, BUT NOT IMPOSSIBLE. IF I TRAVEL I ALWAYS TRY TO FIND OUT IF THERE IS A WELL EQUIPPED GYM CLOSE TO WHERE I WILL STAY. IN THE UNLIKELY SCENARIO OF THERE BEING NO GYM AVAILABLE I WILL DO A WORKOUT WITH MY OWN BODYWEIGHT AND AN EXERCISE BAND I TAKE ALONG IN MY SUITCASE."



JOHN 'THE TERMINATOR' LESLIE HEAVY OR LIGHT DAYS?

People at the gym often ask me for the most effective muscle-building techniques and what I believe would work for them. There has always been some controversy over what works best – heavy workouts with low reps or lighter 'pump' workouts? I don't believe in cycling heavy and light weight days. I typically do a compound exercise to reach muscular failure to overload my body before I chase the pump with lighter weights. I believe this training style makes me bigger and fuller, workout after workout. If you continue to blast your muscles to failure with heavy weights you will only short circuit your ability to make significant gains. Your joints won't be able to handle the extra stress they're subjected to when you train heavy all the time. That's why smart bodybuilders use both heavy and light weights in the same workout to make their bodies grow faster. I normally start my routine with a compound movement (squats for legs,



JOHN SAYS

"I typically do a compound exercise to reach muscular failure to overload my body before I chase the pump with lighter weights."

bench press for chest, military press for shoulders etc.). I'm a big believer in warming up adequately before hitting a compound movement with as much weight as I can possibly handle while still maintaining perfect form. From there I will normally use moderate to lighter weights for the remainder of my session and focus on peak contraction and isolating the muscle I'm training.

If I am injured I will make use of a low resistance style of training to still maintain what I have while my injury heals. I still focus on pumping the muscle full of blood because I don't believe there should be any easy days in the gym, ever. The isolation exercises I do forces more glycogen into the muscle tissue which attracts more fluid and equates to greater muscle mass. I also believe if I start out heavy it prepares my body more effectively for the lighter sets later in my workout. I don't see the lighter sets I do as less-taxing to my system but as a way to fully engorge my muscles to create the perfect environment for new gains.

Next time when you are in the gym try to incorporate heavy and light weights into your training. Do not make the mistake of relying exclusively on heavy or light weights. Rather mix it up and listen to what your body tells you. Remember, we are bodybuilders not powerlifters, although I have the utmost respect for these guys and their sport. Ultimately it is the type of training you do that will determine the type of results you get.

EARL ABRAHAMS BODYBUILDING IN THE CAPE IS ALIVE AND WELL

I have been involved in bodybuilding for a number of years and still find myself feeling excited about our sport. The scene in Cape Town, where I'm based, is a healthy one. There is an abundance of talent at every show. You don't have to look far when you go to competitions to find dozens of bikini girls

and bodybuilders in the line-ups who are eager to showcase their hard-earned bodies. Bodybuilding in these parts is alive and well and reaching new heights, offering limitless potential for all to benefit from – the athletes, sponsors and fans. Bodybuilding, however, like any sport, has its challenges with a limited number of shows in these parts and shows that are spaced months apart. This is, in my opinion, a source of never-ending frustration for unsponsored athletes who have to fork out a lot of cash to train and prepare for shows, and often have to travel to other provinces to compete. It's not surprising then that participating in the sport of bodybuilding can become an expensive endeavour when you take into account the travelling costs, overnight accommodation, food preparation and time you are spending away from work, your family and friends to follow your dream of becoming a champion.

That said, we have incredible talent here; athletes who will do whatever is needed to follow in the

footsteps of the greats our sport has produced here in the Western Cape, like Nelson Benjamin, Nico van Wyk, and Michael Adonis, to name a few. I would really like to see bodybuilding going from strength to strength here with more local shows that athletes can compete in, offering them more exposure and garnering more interest from all the folks

"IT TAKES A SPECIAL PERSON TO OVERCOME OBSTACLES, DON POSING TRUNKS AND PRESENT A STRONG PHYSIQUE TO THE JUDGES IN FRONT OF FRIENDS, FAMILY AND A CROWD OF PERFECT STRANGERS."

in the bodybuilding community. It would also be nice to see more people getting involved in the local bodybuilding circuit. Whenever I attend a show I always feel motivated by all the muscle I see on stage under the bright lights. It takes a special person to overcome obstacles, don posing trunks and present a strong physique to the judges in front of friends, family and a crowd of perfect strangers. On a personal note – I still feel honoured to have brought the heavyweight title of the first amateur African Olympia to the Western Cape. This year my main goal is to match my Olympia-winning condition or even better it for the IFBB National Championships. I'm training hard and my prep is going according to plan. I have a great support team in my training partner Carla Beukes, Best Supplements SA, 2nd chance clothing, Jack Lotter and the helpful team from Sheriff Training Systems, as well as Protein Hub. I would like to wish everyone good luck with their prep. I, for one, can't wait to get back on the bodybuilding stage.



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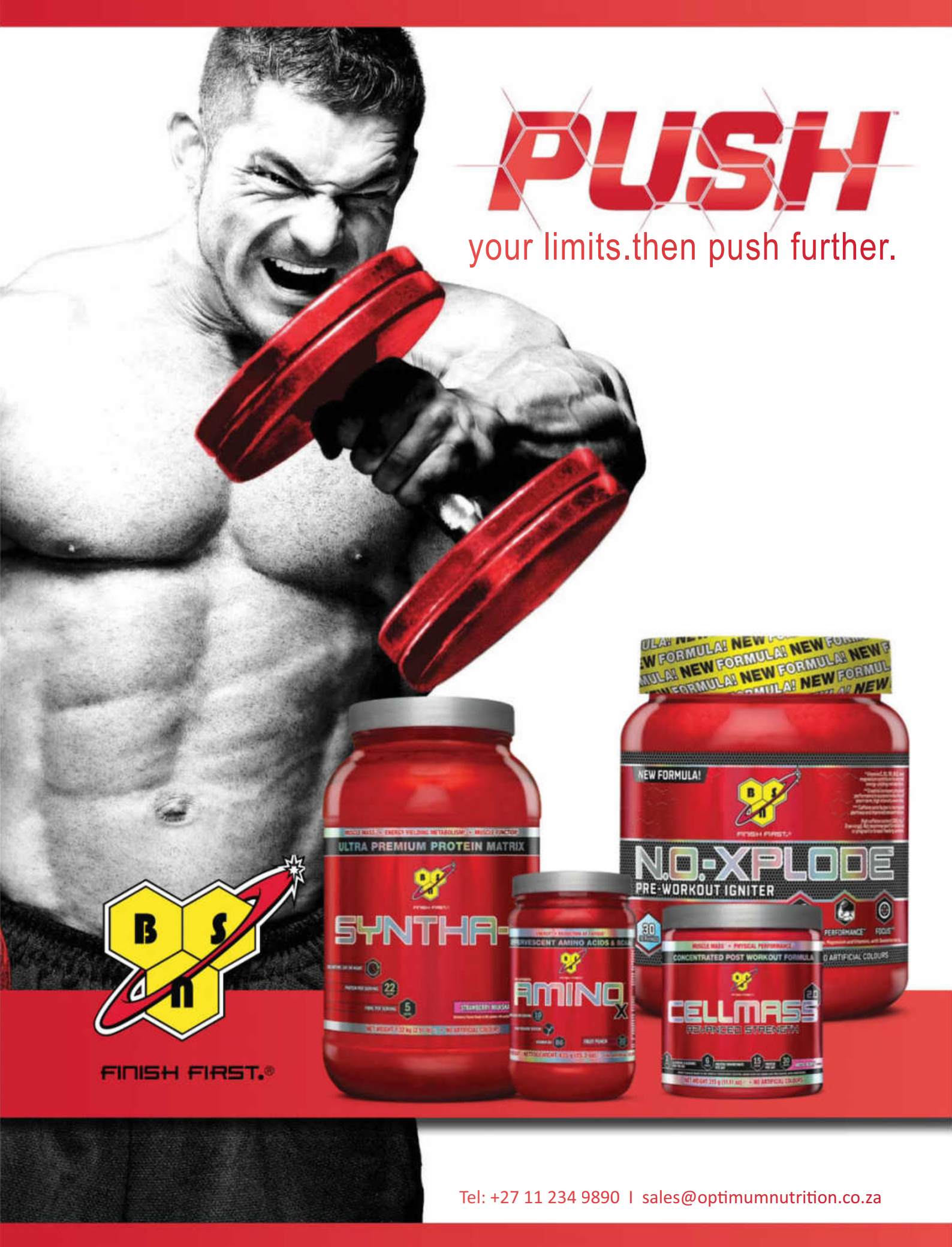
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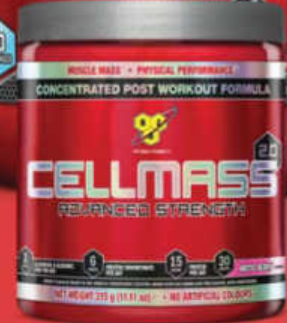


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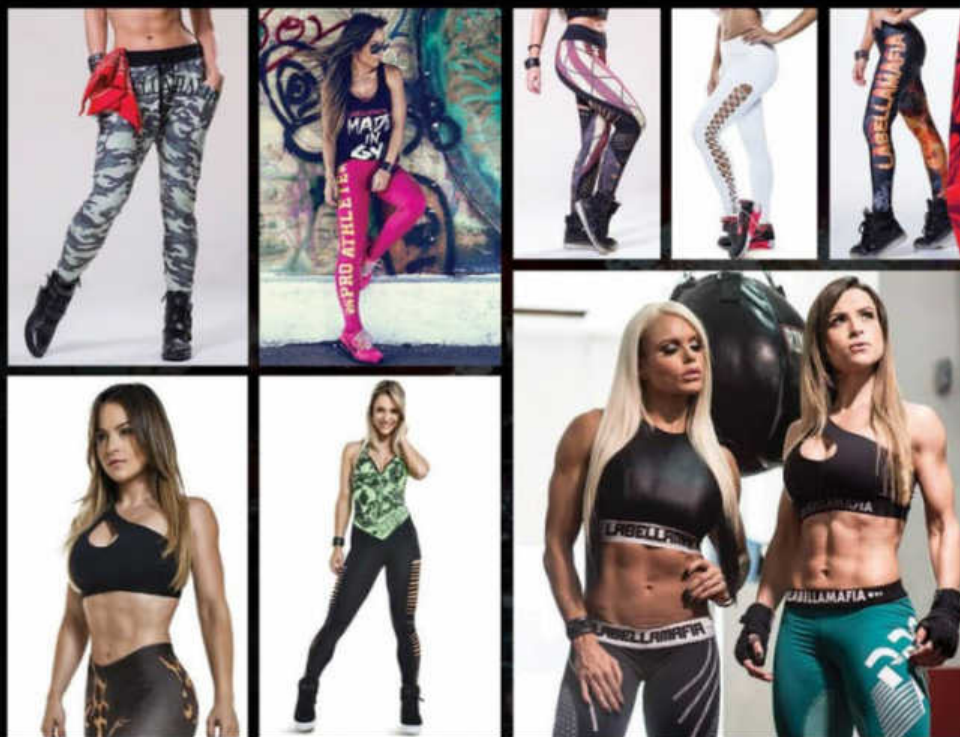
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