

GET BIGGER, LEANER & STRONGER

WITH ANTAGONISTIC TRAINING

# MUSCLE

evolution

## IFBB SA's KING LOUIS REIGNS!

THE CHAMP'S FULL BLUEPRINT REVEALED

REV UP YOUR CARDIO!

### SUPPS THAT PACK A PUNCH

WHAT DO THE BEST USE & WHY?

### THE HARD TRUTH HGH

IS YOUR GROWTH UNDERDOSED?

- SHOWS**
- NABBA NATIONALS
  - MR OLYMPIA
  - IFBB SA CHAMPS
  - ROSSI CLASSIC
  - IBFF NATIONALS

Vol 13, Issue 6 **R45.00**



November - December 2019  
Printed in South Africa  
Other Countries R37.47 excl Tax



ROXY BARKER  
**WONDER WOMAN**



# PACK ON FREAKY SIZE

5 BRUTAL ISOLATION WORKOUTS  
**INSIDE!**



*William Bonac*

8<sup>TH</sup> MR. OLYMPIA 2015.  
USN AMBASSADOR.

USN

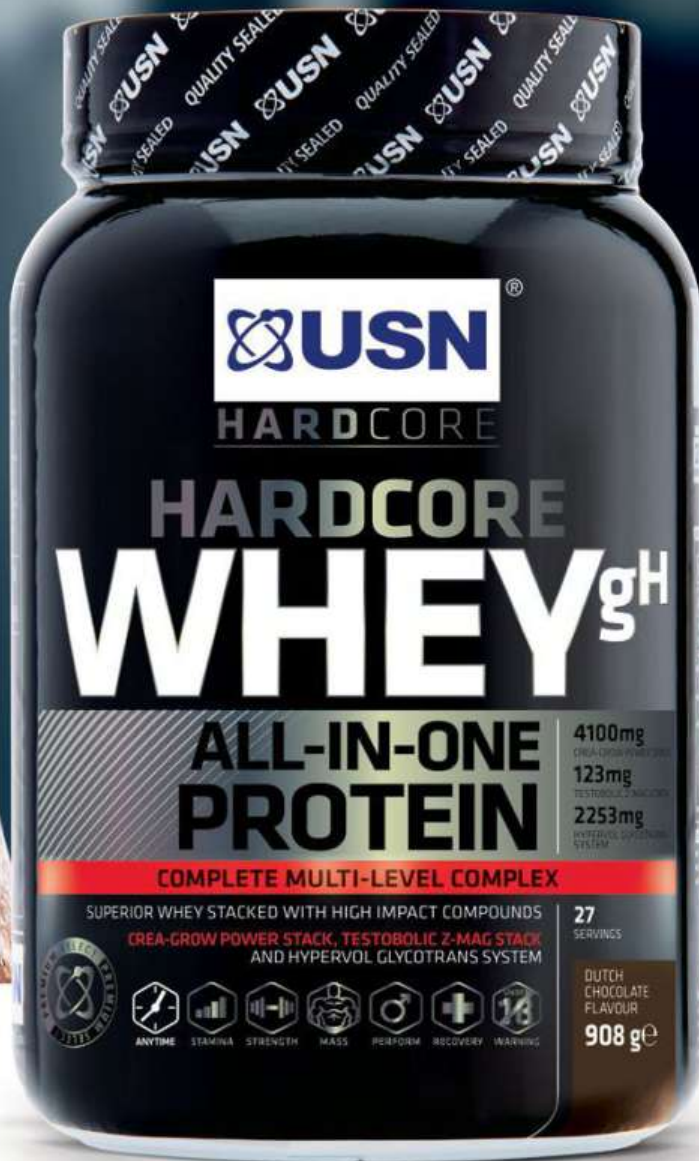


USN PRODUCTS ARE



# HARDCORE WHEY FOR HARDCORE GAINS

#CHALLENGEYOURSELF



26g PROTEIN / 33g SERVING

**ALL-IN-ONE HIGH PROTEIN MUSCLE MASS STACK**

**+ 4 100mg**  
CREA-GROW POWER STACK

**+ 123mg**  
TESTOBOLIC Z-MAG STACK

**+ 2 253mg**  
HYPERVOL GLYCOTRANS SYSTEM

ALL-IN-ONE PROTEIN ANY TIME, BEFORE AND AFTER WORKOUT

**SUPERIOR PROTEIN WITH HIGH IMPACT COMPOUNDS.  
MORE STRENGTH. MORE GROWTH.**

EXPLODE THROUGH MORE SETS, RECOVER FASTER AND DEVELOP MAXIMUM MUSCLE.

# KEVLAR RAPID FIRE LOCKED & LOADED

## SUSTAINED & RAPID RECOVERY ENERGY SOURCE

- POTENT ACTIVATION OF ANTI-CATABOLIC SIGNALS
- PATENTED GLYCOGEN REPLENISHING SUPERCARBS
- MUSCLE pH CORRECTING ALKALINE BUFFERS



PATENTED & TRIAL BASED  
**CARB**  
TECHNOLOGY

pH CORRECTING  
ALKALINE BUFFERS

**Vitargo**<sup>®</sup>

DUAL PHASE  
RELEASE



Nett. Weight **1 kg**

TURBO TANGERINE FLAVOUR

Engineered For Improved  
Muscle Endurance And  
Rapid Recovery

**HIGH ELECTROLYTE**  
GLUTEN FREE / SUCROSE FREE  
WAXY MAIZE FREE

**HIGH ELE**  
GLUTEN F  
WAXY MA



PATENTED & TRIAL BASED  
**CARB**  
TECHNOLOGY

pH CORRECTING  
ALKALINE BUFFERS

**Vitargo**<sup>®</sup>

DUAL PHASE  
RELEASE

**27g** Performance Carbs  
**987mg** Electrolyte  
**5000mg** pH+ Alkaline Buffers

**KEVLAR**  
**RAPID FIRE**  
PRE-INTRA WORKOUT  
SUSTAINED & RAPID RECOVERY  
ENERGY SOURCE

**KEVLAR**  
**RAPID FIRE**  
PRE-INTRA WORKOUT  
SUSTAINED & RAPID RECOVERY  
ENERGY SOURCE

**HIGH ELE**  
GLUTEN F  
WAXY MA

Nett. We

NEW

**27g** Performance Carbs

**KEVLAR**  
**RAPID FIRE**  
PRE-INTRA WORKOUT  
SUSTAINED & RAPID RECOVERY  
ENERGY SOURCE

**KEVLAR**  
**RAPID FIRE**  
PRE-INTRA WORKOUT  
SUSTAINED & RAPID RECOVERY  
ENERGY SOURCE

OPEN  
HERE

BLUEBERRY BLITZ  
FLAVOUR

TITAN NUTRACEUTICAL TECHNOLOGIES

OPEN  
HERE

TURBO TANGERINE  
FLAVOUR

TITAN NUTRACEUTICAL TECHNOLOGIES

NEW

NEW

NEW

NEW

NEW

NEW

VUSI NJISANE  
#TNTTELITE



*What the Pros use!*

# MERCURY

HIGH PERFORMANCE COMPETITION GRADE SPORTS SUPPLEMENTS

Trade enquiries: [info@tntmercury.co.za](mailto:info@tntmercury.co.za) | Tel: (012) 361 2944 | Cell: (079) 107 7712

# Taste Summer.

NUTRITECH®



SINCE 2011

**GET YOURS**  
GET FRESH THIS SEASON

[www.nutritech.co.za](http://www.nutritech.co.za)



# NEW GRANADILLA PREMIUM PURE WHEY



**NUTRITECH**  
NUTRITION TECHNOLOGY

## PREMIUM PURE WHEY

100% PREMIUM LEAN MUSCLE PROTEIN  
HELPS OPTIMISE LEAN MUSCLE MAINTENANCE, GROWTH + RECOVERY  
MAINTAIN HIGH PROTEIN DIET + ASSIST WEIGHT LOSS

**23g PROTEIN** per serving    **0.9g FAT** per serving    **3g CARBS** per serving

31x SERVINGS    Net WT: 1.5kg (3.3lb)    **PRE** SPECIAL TRAINING USE ANYTIME

AVAILABLE THIS SUMMER ONLY!

**CHROME**  
SUPPLEMENTS & ACCESSORIES  
OFFICIAL DISTRIBUTOR

BUY NOW AT [CHROMESHOP.CO.ZA](http://CHROMESHOP.CO.ZA)

OR AT YOUR NEAREST CHROME STORE

**Alpha Pharm**  
your first step in healthcare  
Western Cape & Eastern Cape

# CONTENTS

## ON THE COVER

Cover image by Soulbj Jackson, www.skjphotography.co.za

- 24 KING LOUIS REIGNS**  
How he aced everybody at the IFBB SA Champs
- 30 ALL-OUT LEG ASSAULT**  
Work your legs to absolute fibre-tearing failure
- 40 SA CONFIDENTIAL**  
Spotlight on Human Growth Hormone
- 44 READY AND RIPPED**  
We show you how with antagonistic training
- 52 BIGGER AND BETTER**  
Brutal workouts to pack on serious size
- 60 LABEL INTERROGATION**  
Read and understand supplement labels



## Also in this issue

- 46 Supps that pack a punch**  
What to use and why
- 50 Bodybuilding's dark side**  
The bad, the ugly and the even worse
- 64 Generation S**  
What steroids do to your body
- 68 What is too much?**  
Avoid training trouble
- 72 Roxy Barker**  
Wonder Woman of your dreams
- 78 Drug files**  
Andriol: Testosterone with undecanoate ester
- 80 The cost of whey**  
Why you should stock up
- Show reports**
- 84 Mr. Olympia**
- 96 IFBB SA Champs**
- 96 Nabba Nationals**
- 100 Rossi Classic**
- 104 IBFF Nationals**



## COLUMNS THIS ISSUE



**106**  
DYLAN RIDLEY



**106**  
COBUS VAN DER MERWE



**107**  
JOHN LESLIE



**107**  
EARL ABRAHAMS



**108**  
HENNIE KOTZE



**110**  
JACO VENTER



**111**  
MARLENE KOEKEMOER



# THE BEST TASTING PROTEIN WE'VE EVER FORMULATED

QUALITY PROTEIN PER SERVING  
**21g**  
WITH PREMIUM  
**LEUCINE**

21g  
PROTEIN

3g  
CARBS

2g  
FAT

**ISO** WHEY PROTEIN ISOLATE Primary Source

**100%** OF THE PROTEIN From WHEY

**MICRO-FILTERED** WHEY PROTEIN

**MUSCLE REPAIR** AND RECOVERY



**EVOX**  
ADVANCED NUTRITION

www.evov.co.za



**SUPERHEROES**

**A**t the recent IFBB South African Championships Louis Bessinger kicked off his individual posing routine on stage using the soundtrack of a classic Superman movie we all are familiar with: "Faster than a speeding bullet! More powerful than a locomotive! Look, up in the sky! It's a bird! It's a plane! It's Superman!"

This dramatic intro made me think about our ongoing quest to transform our bodies and the phenomenal role the mind plays in the process. At one point or another we all wanted to look like the Man of Steel. In the industrial town where I grew up I started reading comics and wanted to be as strong as Superman from an early age. In my teens I watched movies like Rocky and Terminator, and spent the bulk of my days in the gym in an attempt to pursue my quest of attaining a physique worthy of a superhero.

A superhero fights against an arch-villain in every great tale to prove his mettle. When I was growing up my arch-enemy was gravity. I battled against it, bending barbells and manhandling heavy dumbbells in my quest to grow stronger and bigger.

In our pursuit of greatness we are called upon to develop little mental strategies to train ourselves to handle progressively heavier weights. It seems that I was not the only one using my imagination to pursue the dream of becoming bigger and better. The other day I read somewhere that Tom Platz, who was famous for his freaky leg development, used to wear high socks to look shorter in the mirror when he was squatting because if you're short you don't have that far to go to reach the bottom! Even Arnold Schwarzenegger began to think of his biceps

as mountains instead of flesh and blood. One of my best friends used to compete in gymnastics and struggled over and over again to master the asymmetric bars. She failed to complete the movement correctly because she could not make a fluid transition from the lower to the higher bar. After countless hours of frustration her father told her to visualise the perfect execution of the movement from beginning to end by using her imagination. She did this daily for six months while preparing for a big provincial competition. She also ran the same picture through her mind on the day of the competition. Needless to say, my friend conquered her fear and overcame her kryptonite to win her division. She used the power of the mind to overcome her physical limitations.

We have only begun to unravel the mystery of how our mind and body are interlinked and how they work in unison to accomplish athletic feats once thought to be impossible. We as bodybuilders are a resilient lot who also use our imagination to go that extra mile to reach our dreams and achieve our goals. We do this because we have a steadfast belief and an unwavering confidence that we can beat the odds no matter what and emulate the heroes in the pages of the comics of our childhood.

**Werner**  
Editor

**MY FAVOURITES THIS ISSUE:**



PUBLISHER & EDITOR-IN-CHIEF  
Andrew Carruthers

EDITOR  
Werner Beukes

MANAGING EDITOR  
Pedro van Gaalen

ART DIRECTION & DESIGN  
Tanja Schmitz  
Christian Nel

ADMINISTRATION  
Kate Rodney

ONLINE EDITOR  
Gareth Bouwmeester

ADVERTISING  
Brian Verster  
brian@muscleevolution.co.za  
011 791 3646

PHOTOGRAPHERS  
Gary Phillips, Soulby Jackson,  
Ben Myburgh, Richard Cook,  
Slade @ Pure Studio, Cindy Ellis,  
Isaac Hinds, Naco Rautenbach

CONTRIBUTORS & ADVISORY  
Anthony Roberts, Mario van Biljon,  
Marius Dohne, John Leslie, Hennie Kotze,  
Johan Boshoff, Gareth Israel, Marlene  
Koekemoer, HJ Lombard, Jack Lotter,  
Warren Germishuizen, Sean Johnson,  
Joe Pietaro

THE PUBLISHER  
**maverick**  
PUBLISHING CORPORATION

Postnet suite 99, Private Bag X8  
North Riding, 2162  
Head Office: +27 11 791 3646  
Fax: 086 660 4761  
E-mail: info@muscleevolution.co.za  
Unit 7, Ground Floor, Boskruin View  
181 Girdwood Road, Randpark  
Ridge, 2169

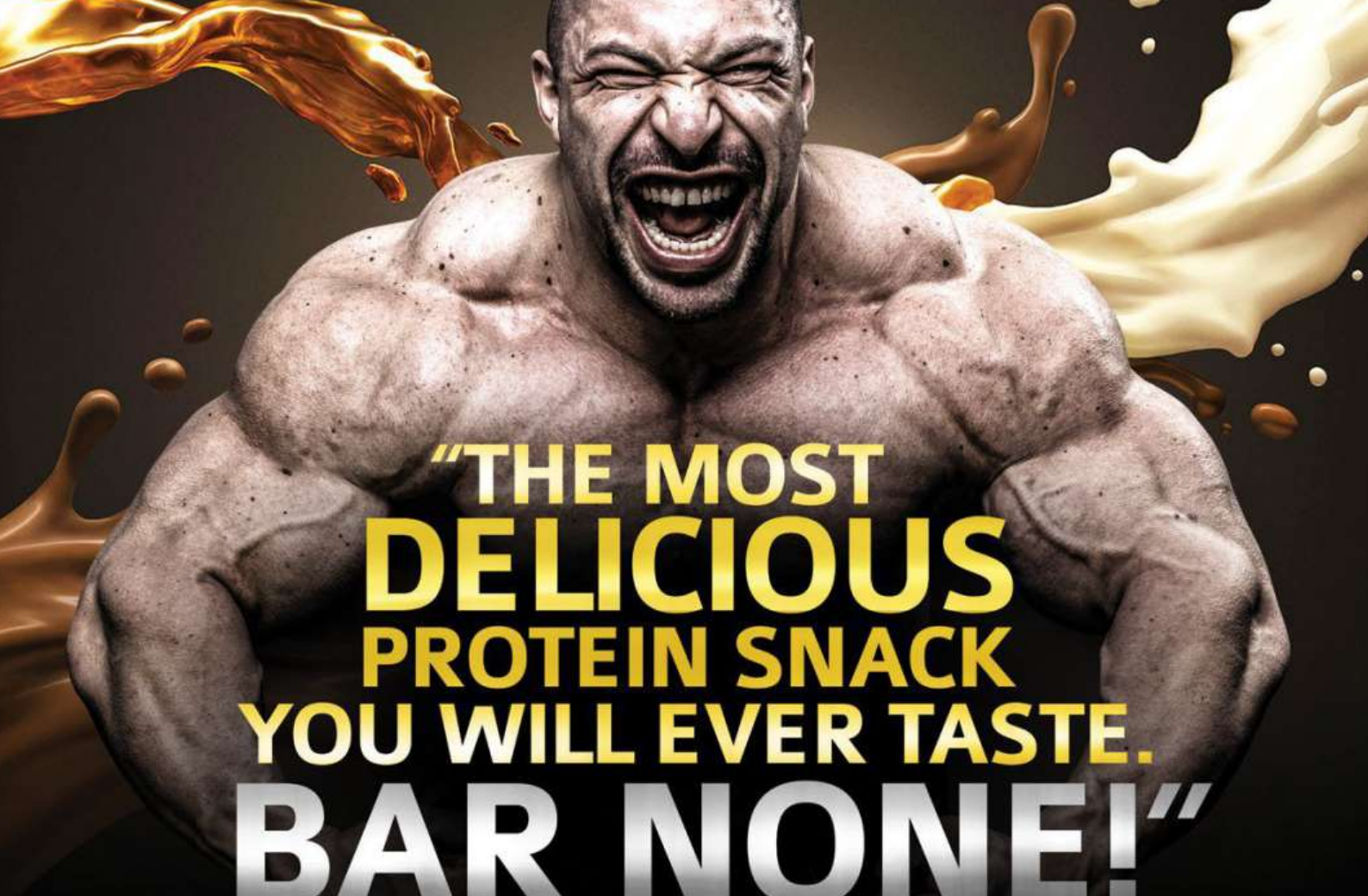
DISTRIBUTION  
RNA DISTRIBUTION, Republican News  
Agency, Tel +27 11 473 8700

SUBSCRIPTIONS  
Tel 0860 100 456; Fax 086 670 4101  
International +27 21530 3385;  
Email: subs@rnad.co.za

Printed By kzn (031) 714 4700

No liability is assumed by The Maverick Publishing Corporation, Muscle Evolution Magazine nor any of the authors of the information provided in this publication. The Maverick Publishing Corporation cannot be held liable for any advice provided in this publication. The information published in this magazine should not be considered as medical advice, please consult a registered doctor. The Maverick Publishing Corporation shall not be liable for any unsolicited material, nor photographs or manuscripts submitted to our publication office. The Maverick Publishing Corporation reserve the right to reject any advertising without notification, and will not publish any editorial material nor advertising that we feel does not comply with our readership audience.





**"THE MOST  
DELICIOUS  
PROTEIN SNACK  
YOU WILL EVER TASTE.  
BAR NONE!"**

**JOHN LESLIE**



After a gruelling 2 years of development, Supplements SA is proud to announce the release of a world first! An astonishingly delicious, extremely low carb protein bar made possible by a unique combination of egg based, sugar free nougat and whey protein to keep it unbelievably clean. So clean in fact, that even professional physique athletes, like John, can still indulge right before a show!

**CLEAN HAS NEVER TASTED THIS GOOD**

**SUPPLEMENTS SA™**

GAME STORES (NATIONAL)  
KZN MASS 083 560 2251 (KZN)  
PHOENIX PERFORMANCE NUTRITION 072 160 3410 (EAST LONDON)  
SSA DISTRIBUTORS 011 026 2466 (GAUTENG)  
SPRINGBOK PHARMACY 011 861 6900 (GAUTENG)  
SUPPLEMENTS SA HEAD OFFICE 041 451 2263 (NATIONAL)

Follow us on [www.facebook.com/supplementssa](http://www.facebook.com/supplementssa)  
for awesome deals and much more!



**WWW.SUPPLEMENTSSA.COM**



**THE PRICE OF SUCCESS**

**A** good friend of mine who lives in Durbs, Matt van der Veen recently went on social media to openly mention how self absorbed and selfish the sport of bodybuilding can be and how it impacts those who live with a competitive bodybuilder. He has just put himself through 16 weeks of one of the most gruelling preps of his life, and although he undoubtedly looked his absolute best, the real question is; who has suffered in the wake of his preparation? The fact that he is conscious of those around him and the pressures that his own prep has put on them is, in my mind at least, true testament to champion inside of him.

After I saw the post, I did some thinking and I came to a subtle yet what I feel is an accurate realisation. One of the main reasons I haven't personally stepped on stage in over 10 years is because of how contest prep draws my focus away from my commitments in the workplace. I've always been a very driven and motivated individual and publishing magazines is incredibly hard work when it comes to the pressures of deadlines and the volume of work my team has to get through to make sure we constantly deliver a quality product. What do you get when you win a bodybuilding show? Do you get lots of money? Maybe, if you've entered a few select events that offer prize money, but nine times out of 10 you have to be content with walking away with a semi-decent trophy, some good recognition, some respect, and the personal gratification that comes with achieving your goal.

But what makes a true champion? In my mind

a true champion is the guy who manages to win all of what I've mentioned above, but still goes home to a happy partner, thankful kids and a home at peace, without having to patch up a war zone after the competitions are over.

Bodybuilding is easily one of the most gruelling things you can put yourself through if you intend on being highly competitive, but at what cost to those around you? It goes without saying that there needs to be a balance in life, but bodybuilding isn't about balance. It's about excess in all arenas, and the only way to really go above and beyond your limits in this game is through mental torment and the unrelenting struggle to be better. While stepping on stage is highly admirable, never forget to pay close attention to those around you; those who you affect with your desire to be the best you can be. Always go out of your way to appreciate the support that is given to you by those who want you to succeed.

It's been an epic year for South African bodybuilding. As such we've gone out of our way, as we always do in each and every issue, to make your reading experience more informative than the ones that came before it. Much like you and your quest to be better, we don't stop in trying to improve with each subsequent edition, to help you take that next step and become better through the power of knowledge and information. Thanks once again to all who support our quest to promote and support local bodybuilding.

Until next year  
See you then!

**Andrew**  
Editor-In-Chief



**PAGE 90** IFBB SA NATIONAL CHAMPIONSHIPS

**maverick**  
PUBLISHING CORPORATION

FROM THE PUBLISHERS OF



OVER 61 000 MAGAZINES PRINTED (COMBINED) **maverick** PUBLISHING CORPORATION

# WEIDER<sup>TM</sup>

## NUTRITION

# TIP THE SCALES MASSING



### MEGA MASS 4000

- World renowned BULKING formula
- For Hard Gainers
- MEGA kilojoules – 75% carbs
- Low fat content
- Added aminos for muscle support – L-Ornithine, L-Taurine, L-Carnitine, L-Alanine
- Digestive aids for optimal digestion
- Fat burners ensure minimal fat storage

### MEGA MASS 2000

- Optimal and affordable massing formula
- 65% Carbs for ultimate gains
- 26% Protein for muscle support/recovery
- Added L-Glutamine for muscle recovery

### WEIGHT GAINER

- Mass gain & muscle support/recovery formula
- 60% Carbs PLUS MCT's for extra kilojoules
- 28% Pre-digested protein

**CERTIFIED  
DRUG &  
DOPING  
FREE**

Available from Independent pharmacies and the following Weider specialist stores:

**EASTERN CAPE:** East London: Berea Pharm, Vincent Family Pharm; **Queenstown:** Mager Pharm • **EAST RAND:** Benoni/Boksburg/Edenvale: Platinum Supplements Benoni, Pick n Pay Hyper Boksburg North & Greenstone; **Nigel:** Nigel Pharm; **Springs:** Hillcrest Pharm, Hoppies Pharm • **JHB:** North: Morningside Dispensary, Pick n Pay Hurlingham/Nicol & Woodmead; **South:** Springbok Pharm; **Central:** Pick n Pay Hyper Norwood; **West:** Pick n Pay Hyper Soweto, Pick n Pay The Falls • **PRETORIA:** North East: Kalapeng Mamelodi Crossing Pharm, Pick n Pay Hyper Montana; **Central:** Kalapeng Station Pharm, Pharma Valu Pharm Esselen Str; **East:** Pick n Pay Hyper Faerie Glen; **Centurion/Irene:** Pharma Valu Pharm Irene, Platinum Supplements Centurion • **VAAL:** Sasolburg: Leibbrandt Pharm; **Vereeniging:** Pick n Pay Hyper Bedworth • **KZN:** Durban: Sparkport City Pharm; **Greytown:** Greytown Drug Store; **Ladysmith:** Ladysmith Pharm; **Newcastle:** Scott Street Pharm; **PMB:** Macrobiotic Health, Medi-kist Pharm; **Scottburgh:** Scott Street Pharm; **Vryheid:** Van Der Nest Apteek • **LIMPOPO:** Mankweng: Kalapeng Pharm • **MPL:** Nelspruit: Mopani Pharmacy – Nelspruit Crossing Centre & Ilanga • **NORTH WEST:** Klerksdorp: Nutrition Evolution; **Potchefstroom:** Training Elite; **Rustenburg:** Chris Gibson Pharm • **OFS:** Kimberley: Pieter Muller Pharm; **Virginia:** Oranje Pharm; **Welkom:** Chameleon Pharm; **Rendezvous Apteek** • **WESTERN CAPE:** Belhar: Bel Kern Pharmacy; **Cape Town – City Bowl:** Golden Acre Pharm; **Durbanville:** Pick n Pay Tygervalley; **Northern Suburbs:** Pick n Pay Brackenfell; **Southern Suburbs:** Pick n Pay Claremont; **Somerset West:** Pick n Pay Somerset Mall; **Worcester:** Narotam Pharm



SINCE 1936

MODEL: MARCO PIRES

Weider Brand Ambassador,  
Winner Athletic Physique, Joe Weider's  
Amateur Olympia Africa

Order Online: [www.springbokpharmacy.co.za](http://www.springbokpharmacy.co.za) • +27 11 886 2932 • [www.weider.co.za](http://www.weider.co.za) • [querjes@weider.co.za](mailto:querjes@weider.co.za)

Weider Nutrition South Africa

# MUSCLE NEWS



## THE TERMINATOR WINS WBBF WORLD TITLE

John 'The Terminator' Leslie recently won the Overall title at the World Body Building Federation (WBBF) Pro Invitational show held in Lithuania, Europe. He competed in an open pro line-up as there were no weight classes at the show. Leslie, who is coached by Federico Focherini, has multiple bodybuilding titles to his name, including three IFBB SA super-heavyweight titles as well as Nabba SA and WPF SA Overall titles. John would like to thank everybody for their support and motivation while he was prepping for the competition.

## BIOTECH TACTICAL POST WORKOUT RECOVERY

Speed up recovery time and increase strength before your next gym session with Biotech's Tactical Post Workout Recovery shake. Research suggests that while protein synthesis persists for at least 48 hours after exercise, it's most important to get in your post-workout nutrition immediately after training, and up to two hours afterwards. The Biotech recovery shake is designed to fuel your muscles optimally with five superior quality proteins, added BCAAs and creatine. Rapidly digesting carbohydrates help replenish muscle glycogen stores and enhances the role of insulin in transporting nutrients and amino acids into muscle cells. With the inclusion of Vitargo – a patented, molecular carbohydrate – this process is further enhanced as it is transported through the stomach faster than any other carbohydrate source.



## USN 3XT PUMP PRE-THERMO

USN's 3XT-Pump Pre-Thermo is an explosive pre-workout formulated to include the most scientifically grounded nutritional technology, to help users enhance their performance and recovery potential. Patented and licensed ingredients, which have been shown to improve exercise tolerance levels and output, are included, along with high caffeine levels (300mg per serving). Carbohydrates are included as they have been shown to improve performance levels during hypertrophy training sessions, aiding ATP production and recovery. Niacin contributes to the reduction of tiredness and fatigue. Vitamin B6 is necessary for normal protein metabolism. Folate contributes to normal amino acid synthesis and is needed for energy production.



## RIP REMEMBER SHABANGU

The bodybuilding community of South Africa was stunned and deeply saddened by the news of the passing of Clifford Remember Shabangu in a car accident on the weekend of 10 October. Remember placed third in the Men Middle Heavyweight division at the recent IFBB SA National Championships. He was regarded by many as a phenomenal athlete and a true gentleman of the sport of bodybuilding, and will be remembered for his smile and positive energy. Condolences to his family and friends.

## NEW COMPETITIVE DIVISION ANNOUNCED FOR 2016

**THE CLASSIC PHYSIQUE DIVISION, A BRAND NEW CLASS TO THE WORLD OF BODYBUILDING, WAS RECENTLY ANNOUNCED BY NATIONAL PHYSIQUE COMMITTEE (NPC) AND IFBB PRO LEAGUE PRESIDENT JIM MANION.**

The new competitive division is a bridge between Physique and open bodybuilding classes. Classic Physique will be for athletes who want to present more muscular size than is currently acceptable for Men's Physique but not as extreme as the Bodybuilding category. The new division will come in to effect in 2016 and will be judged by the following guidelines:

Muscularity and body condition – judges will look for athletes who display muscular size, symmetry, balance and proportion with an emphasis on definition and condition. The ideal physique will display an aesthetic appearance highlighted by a small waist. "Classic Physique is for guys who want to take their muscularity and size beyond the limits of Men's Physique, but not quite to

the extremes of Bodybuilding," Manion said in statement. "The sport is constantly evolving as the athletes find new ways to express their physiques and the NPC prides itself on offering a platform for these athletes to realise their competitive goals. Classic Physique will highlight proportion, symmetry, pleasing lines and a small waist. In short, the focus will be on aesthetic qualities in harmony with muscularity and condition."

Classic Physique competitors will wear spandex trunks, not

board shorts, so they can show off their muscular legs and they will be judged on the same compulsory poses as in a bodybuilding line-up except instead of a most muscular pose they may choose their favourite classic pose. The new category will have height and weight restrictions and will allow for athletes to move either up from Men's Physique or down from Bodybuilding. In addition, there will be pro qualifier shows starting next year and an intended Classic Physique Olympia.

## XTREME NUTRITION STOCKING NEW BRANDS

Insane Labz and Lecheek Nutrition are now exclusively available through leading independent supplement retailer, Xtreme Nutrition. Lecheek gained popularity for the brand's Speed X3 product which was voted number one pre-workout on Supplementreviews.com. In addition, Xtreme Nutrition is now also the exclusive stockist of the Walden Farms range of calorie-free condiments, which include syrups, salad dressings, mayonnaise, marinades and jams. The Walden Farms product range is ideal for athletes aiming to keep lean during contest prep or for those looking to lose weight without having to endure bland tasting food. **Check out [www.xtremenutrition.co.za](http://www.xtremenutrition.co.za) for more information.**



## SHOW YOUR STRENGTH AT GAME STORES

The next round of the Muscle Junkie nationwide bench press challenge, in partnership with Everlast, is taking place on Saturday 5 December at 10h00. Visit Game stores at Gateway in Durban, Canal Walk in the Western Cape, and Boksburg in Gauteng to register and participate. Those who have what it takes to out-rep their rivals can win great prizes including Muscle Junkie product hampers. The winner will receive an Everlast X-Fit cage and Hardcore bench, second place gets an Everlast squat/multi press rack and Hardcore bench, with third place receiving an Everlast Hardcore bench.



## UNIQUE WHEY NOUGAT BAR FROM SUPPLEMENTS SA

Roman philosopher Pliny the Elder said: "Out of Africa there is always something new. Ex Africa semper aliquid novi." This is especially true with the official launch of Supplements SA's delicious whey nougat protein bar, after two years of meticulous research and development. Supplements SA is proud to release the world's first delicious, low carb protein bar made possible by a unique combination of egg-based, sugar-free nougat and whey protein for people on the go who want a high protein snack option.

### Upcoming Courses EARN CPD POINTS

OCTOBER	JANUARY
<ul style="list-style-type: none"> <li>- Pilates ABC (JHB, CPT)</li> <li>- Kettlebell Instructor (JHB)</li> <li>- Yoga Muscles and Motion (JHB, CPT)</li> <li>- Pre and Post Natal Exercise (CPT)</li> <li>- Fighting FITT (CPT &amp; JHB)</li> </ul>	<ul style="list-style-type: none"> <li>- Group Fitness (JHB, CPT, DBN)</li> <li>- ILS Life Coach 101 (JHB)</li> <li>- Sports Massage (JHB, CPT)</li> <li>- Yoga Muscles &amp; Motion (JHB)</li> </ul>
NOVEMBER	
<ul style="list-style-type: none"> <li>- Pre and Post Natal Exercise (JHB, CPT)</li> <li>- Studio Cycle (JHB)</li> <li>- Kettlebell (DBN)</li> <li>- Fighting FITT (DBN)</li> </ul>	

011 807 9673
info@hpa.co.za
www.hpa.co.za

# LEAN MUSCLE BUILDING STACK



## WITH BREAKFAST

### MUSCLE VITAMIN PACKS Mega-Dosed Hardcore Training Nutrient Packs

- Muscle Performance Supporting Anabolic & Anti-Oxidant Nutrients
- High Potency Vitamin & Mineral Complex
- Energy Wielding Vitamin B Complex
- Bone & Joint Supporting Nutrients
- Omega 3 & 6 EFAs

## DURING TRAINING

### BCAA 3:1:1 Branched Chain Amino Acid Complex

- Formulated to Support:
- Reduced Muscle Breakdown During Training
  - Protein Synthesis and Lean Muscle Growth

## AFTER TRAINING

### 100% WHEY PROTEIN Ultra-Filtered, Instantised Whey Protein

- Complete Source of Essential & Non-Essential Amino Acids
- Nature's Highest Biological Value Protein
- Naturally High in BCAAs
- Ideal for Recovery & Lean Muscle Support

SSN products available at:



and other leading health shops, pharmacies & sports supplement stockists nationwide.





**CARLOS NUNES**  
SSN MUSCLE JUNKIE



Follow Us on Facebook  
& Instagram

For more information about these products and more visit:

[www.ssnonline.co.za](http://www.ssnonline.co.za)

**SSN**  
SCIENTIFIC SPORTS NUTRITION

SSN is a brand of the Ascendis Health Consumer Brands Division.



Ascendis  
HEALTH



# ask M.E

LOOKING FOR ASSISTANCE WITH YOUR TRAINING, MEAL PLANNING OR NUTRITIONAL SUPPLEMENTATION? ASK OUR PRO MARIO, FOUNDER OF BODYGURU.

## STRESS AND MUSCLE GAIN

**Q** I have a stressful job and a stressful home life. I am worried this is affecting my efforts to build muscle. What would you recommend I do to minimise the impact of my life stress? *John*

**A** Stress, either physical or psychological, is one of the worst thing that can happen to someone trying to build muscle. Stress leads to an increase in cortisol, which is basically (among other things) a muscle scavenger: it breaks down muscle tissue to produce amino acids that can be used either to produce energy (converted into glucose by the liver), to repair body structures or to fabricate neurotransmitters. In that regard, stress can literally eat up your muscle!

Sadly, some people put themselves into tremendously stressful situations. This is often due to our materialistic society: we always need more money to afford our lifestyle. To be comfortable we have to make our life miserable! Many people also put a lot of pressure on themselves and, as a result, live with a chronically high level of stress. This is obviously bad for muscle building purposes, especially considering that training is itself a form of stress.

The first thing someone with a high level of stress should do when trying to build muscle is to reduce training frequency and volume: a high cortisol level is not compatible with a high volume of work. Three weekly sessions is what I'd recommend as far as frequency goes with each session each lasting no more than an hour. Focus on basic lifts that hit a lot of muscle groups at the same time; get rid of accessory exercises that will increase training volume more than they can increase muscle volume.

The other important thing



**"The first thing someone with a high level of stress should do when trying to build muscle is to reduce training frequency and volume: a high cortisol level is not compatible with a high volume of work."**

is nutrition. Someone who is stressed out and is trying to gain muscle should eat at least 6-7 meals during the day because each time you eat you decrease cortisol levels.

Obviously we are not talking about junk food here. Stick to whole food (meat, poultry, fish, eggs, shellfish, veggies, oatmeal,

nuts and seeds) as they are easier on the body and are more conducive to developing a lean and muscular physique. On the other hand, junk food and "artificial" foods can actually add further stress on the body and might even contribute to a chronic increase in cortisol levels.

**"SOMEONE WHO IS STRESSED OUT AND IS TRYING TO GAIN MUSCLE SHOULD EAT AT LEAST 6-7 MEALS DURING THE DAY BECAUSE EACH TIME YOU EAT YOU DECREASE CORTISOL LEVELS."**

### THE ANABOLIC MIX

Lastly, the post-workout shake (a mix of fast-absorbing proteins, carbs and BCAAs) is the key to progress for every serious bodybuilder, but more so for stressed out people. As an advanced strategy I like to use what I call an "anabolic mix". This is a drink that you ingest up to five times during the day (between meals or 30 minutes before a meal) and it consists of:

- 5g of creatine
- 5g of glutamine
- 10g of BCAAs
- 5g of taurine



Question answered by Christian Thibaudeau and Anthony Roberts, authors of "Dr. Jekyll & Mr. Hyde: Body Transformation From Both Sides of the Force". \*Republished with permission.



RESULTS TALK LOUDER THAN BRANDS

# MUSCLE DYNAMIX

BE NUMBER ONE

CHAMPIONS  
CHOICE

PRODUCTS

TEAM MD

WHERE TO BUY

CONNECT



## AMINO 10

ZERO SUGAR BCAA DRINK

BUILD • BURN • FOCUS • PERFORM • RECOVER

# SHAPE

MICHELLE VAN STRAATEN  
WFF PRO / TEAM MD

CLAUDIA MORRIS  
TEAM MD



TRUSTED BY ATHLETES

FREE 1 TO 2 DAYS DELIVERY

**30% OFF** YOUR FIRST ORDER

& TO ALL SERVICE MEN!

[sales@muscledynamix.com](mailto:sales@muscledynamix.com)



ON LINE COACHING WITH MD TEAM  
[TRAINING@MUSCLEDYNAMIX.COM](mailto:TRAINING@MUSCLEDYNAMIX.COM)

## UNLEASH YOUR POTENTIAL WITH OUR SUPPLEMENT RANGE

BE NO.1 IN THE SPORT YOU LOVE BY IMPROVING YOUR PHYSIQUE IN THIS COMPETITIVE WORLD WHERE OUR FORMULATIONS CAN MAKE IT POSSIBLE TO ACHIEVE THAT.

MUSCLE DYNAMIX has been manufacturing its premium quality products and since then has become one of the best producers of whey protein & Aminos formulas. Our quality guarantee is based on our international high quality ingredients and high specifications. MUSCLE DYNAMIX has 105 products variants and growing massive selection of potencies, flavors and sizes! MUSCLE DYNAMIX is the fastest, guaranteed way for you to achieve your goals! At Muscle Dynamix we say results talk louder than brands and real supplement gives you results. GET IT RIGHT.

Muscle Dynamix is more than just a sports nutrition brand. We combine the highest quality, natural ingredients with effective formulations. Muscle Dynamix is committed to ongoing research and the development of new products that give you 100% results. Trusted by gym users, professional athletes, bodybuilders, weightlifters, and fitness enthusiasts, Muscle Dynamix is dedicated to helping you achieve success and see results on a daily basis.



**GUARANTEED FREE**  
OF BANNED SUBSTANCES

Find us on  
**facebook**

[www.muscledynamix.com](http://www.muscledynamix.com)

# M.E PEOPLE

# DREAMT ABOUT BEING FEATURED IN M.E?

SHARE YOUR HARD WORK WITH LIKEMINDED PEOPLE  
ALL OVER THE COUNTRY AND GET FEATURED HERE!



Arshad Suliman



Ryan Hardwick



Camella Reed



Kateko Marikela



Chantell Kelly



Magosi Magakwe



James Du Toit



Lizee (L) & Donique (R)



Sello Molokomme



Zack Botha



Karen Gosling



Charl Sanderson



Muaaz Asmal



Retha Van Der Linde



Rehgardt Cartwright



Justin van Zyl



Lance Hendricks



Jess Kibassa



Aadil Bassa



Thokozani Mdlalose



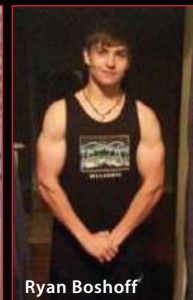
Craig Hodgson



Islam Medhat



Hannes Taljaard



Ryan Boshoff



JC



Owais Karrni



Wesley Barnard



Maritza Scheepers



Tsakudi



Dylan Nicolson



David Asbury

ALL PHOTOS, NAMES AND SPELLING AS SUPPLIED BY READERS. MUSCLE EVOLUTION ACCEPTS NO RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS.

FOLLOW: [t musclevomag](#) [i musclevomag](#) [f facebook.com/musclevomag](#) [e info@musclevolution.co.za](#)  
TAG YOUR PHOTOS #MEpeople #teamME

Ryan Terry

USN INTERNATIONAL BRAND AMBASSADOR  
4TH BEST MALE PHYSIQUE MR. OLYMPIA  
EUROPEAN ARNOLD CLASSIC CHAMP  
UK NATIONAL CHAMP, IFBB PRO  
AND MR. INTERNATIONAL

# RAPID ENERGY & FAT BURN SYSTEM\* TO GET TOTALLY SHREDDED!

#CHALLENGEYOURSELF

**ADVANCED**  
FORMULATION FOR  
REVOLUTIONARY  
ENHANCEMENTS

**300mg+**  
CAFFEINE / SERVING

**200mg+**  
ID-aIG™ / SERVING

USE BEFORE BREAKFAST AND LUNCH



**EXTREME SHREDDING ACTIVATOR**  
FOR MAXIMUM CUTS & FASTER RESULTS  
UNRIVALLED THERMOGENIC EXPERIENCE | RAPID DISPERSE CAPSULES FOR OPTIMAL ABSORPTION

WWW.USN.CO.ZA | USN SA | @USNSA | @USNSA

INDIVIDUAL RESULTS MAY VARY. FOR OPTIMAL RESULTS, COMBINE WITH A BALANCED, ENERGY-CONTROLLED LEAN MUSCLE GAIN EATING PLAN AND TRAINING PROGRAMME\*.

# TECH GEAR

## SNUG ACCESSORIES

Local branded technology distributor, Gammatek has launched the Snug range of smartphone accessories. The range includes the Snug PowerBank, a compact external battery which can fully charge a smartphone up to seven times to extend the device's battery life, anywhere, at any time. It features a dual USB to charge two devices at once. The battery life indicator shows how much power is still available. The Snug Wireless Charger is a convenient device charger that allows users to simply place their Qi device on the wireless charging mat to power up. Power is transmitted from the pad to the device without the need for a physical connector or cable.

**For info on stockists contact 011 201 0800.**



## JAWBONE UP3

**Up3™ by Jawbone® is a multi-sensor activity tracker that provides in-depth information about your health and fitness.**

Inside its slim design, the patented multi-sensor platform, which includes a new tri-axis accelerometer, bioimpedance sensors, and skin and ambient temperature sensors, collects and analyses a wide range of biometric signals to deliver insightful data such as resting heart rate and detailed sleep data including stages of REM, light and deep sleep. New smart algorithms also allow the Up3 to automatically identify workouts and classify activities. The Up App offers Smart Coach – an intelligent system that keeps track of progress and gives users personalised guidance to help them reach their goals faster. The device offers up to seven days battery life, and is shower and splash-proof.

**Available in two colours (Black Diamond, Silver Cross) for R2,399 from [Jawbone.com](http://Jawbone.com), [Superbalist.com](http://Superbalist.com) and [TakeALot.com](http://TakeALot.com), or [Dion Wired, Clicks, and Dis-Chem](http://Dion Wired, Clicks, and Dis-Chem) stores nationwide.**

## DUCATI 1299 PANIGALES

The new flagship model from Italian superbike maker Ducati sports a Superquadro L-Twin 1285cc engine, which is ingeniously incorporated into the Monococca chassis for superior handling and improved power delivery (205hp at 10,500 rpm).

Advanced engineering has enabled the manufacturer to get the dry weight of the 1299 down to 166.5kg, giving the bike a leading power-to-weight ratio in its class. Combined with advanced electronic controls,

the finest brakes, Öhlins Smart EC suspension, and a six-speed DQS Ducati Quick Shift up/down transmission, the Panigale S delivers one of the finest superbike riding experiences ever.



**Local pricing is R269,000.**  
[www.ducati.co.za](http://www.ducati.co.za)



## VERGE ACTION CAMERA ACCESSORIES

Verge provides a full range of accessories designed for GoPro® and other action camera brands. The 16 Piece Action Starter Kit comes in a compact protective travel case with a wide range of equipment, all offered with a five year guarantee. The pack includes the extendable Big Pole, a float grip which can double as a grip and is easily secured to your wrist with a tight-fitting strap, a chest strap, a head strap, a handlebar mount, a tripod, a suction cup mount, and various extra pieces such as a quick release, a flat adhesive mount, and two angle adjusters.

**Available at [Dion Wired](http://Dion Wired) at the RRP of R1299.99.**



**SPRINGBOK**  
pharmacy

# STOCKISTS OF THE **WIDEST RANGE OF SUPPLEMENTS & ACCESORIES**

\*SHOP ONLINE @ [WWW.SPINGBOKPHARMACY.CO.ZA](http://WWW.SPINGBOKPHARMACY.CO.ZA)



SPRINGBOK OFFERS A **FREE** DELIVERY SERVICE TO THESE AREAS:  
GAUTENG, SANDTON, MEYERTON, VAAL TRIANGLE, SASOLBURG, NIGEL,  
HEIDELBERG, ROODEPOORT, CENTURION AND PRETORIA

## [www.springbokpharmacy.co.za](http://www.springbokpharmacy.co.za)

**ALBERTON MALL, VOORTREKKER STR, ALBERTON**

**TEL: 011 861 6600 / 011 861 6690 EMAIL: [INFO@SPRINGBOKPHARMACY.CO.ZA](mailto:INFO@SPRINGBOKPHARMACY.CO.ZA)**

# 4 WAYS TO KEEP CARDIO INTERESTING

**C**ARDIO CAN BE A GRIND EVEN FOR THE MOST DEDICATED BODYBUILDER. HOWEVER, IT IS A NECESSARY EVIL WHEN YOU'RE CHASING SUPERIOR CONDITIONING. THANKFULLY THERE ARE A FEW TRIED AND TRUSTED WAYS TO BEAT THE BOREDOM, EVEN FOR THOSE HOUR-LONG STEADY STATE FASTED CARDIO SESSIONS ON THE TREADMILL OR STATIONARY BIKE. IN FACT, THERE ARE MANY THINGS YOU CAN DO TO MAKE YOUR GYM-BASED CARDIO MORE ENJOYABLE, OTHER THAN MERELY LISTENING TO YOUR FAVOURITE SONGS PLAYING ON YOUR IPOD...

## 1 THERE'S AN APP FOR THAT...

The gamification of fitness trend means that the world of interactive training is never more than a click away. A whole host of apps cater to those who want to add an extra dimension to their training, be it an immersive gaming experience like the app **Zombies, Run!** (for iOS and Android devices). The app lets users take on various different missions controlled, in part, by their relative pace, interspersed with songs from their playlist as they walk, jog, or run away from zombies.

There is also the rewards-based approach where achievements and the attainment of specific goals get recognition in the form of badges or credits, like on smartbands, smartwatches and fitness devices. There are also various 'motivational apps' that offer this functionality such as **AchieveMint**, **GymPact** or **FitCrown**.

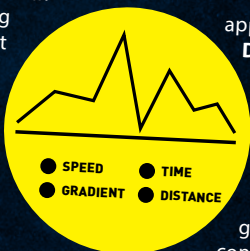
If you prefer to stick with old faithful – your iPod or smartphone and your trusty earbuds, then technology can help make that more effective too. The **BeatBurn Treadmill/Outdoor Trainer** app, for instance, uses beat-sync technology, changing the beat of your iPod music to perfectly match your pace and boost your motivation and enjoyment during cardio.



## 2 ADD SOME VARIETY

Don't limit your options to the conventional cardio machines at your local gym. While the treadmill and stationary bike are the go-to machines for steady state cardio, you can also try the rower, elliptical or stepper, or any combination of the three during a session to beat the boredom as they are all effective tools.

You can also take your cardio outdoors to enjoy some fresh air and a different challenge with a brisk walk in the park, along the beachfront or up a mountain path. Include the dogs, the wife and the kids for some valuable family time.



## 3 ENJOY SOME 'GYMTAINMENT'

A new trend emerging globally is that of 'gymtainment' – providing entertainment to gym-goers while they train. At the most basic level this could include a TV screen in the console of your treadmill or stationary bicycle that offers a variety of channels or programmes, while some gyms take it a step further with live music, DJs and even dancers during peak times.

You can also take a DIY approach by taking your **DSTV Drifta** and your **iPad** along, or you can read your latest e-book or favourite magazine in digital format on your tablet while you peddle away. If your gym has free wi-fi there are also a growing number of streaming content options available to you.



## 4 WORK ON SELF IMPROVEMENT

Your gym time need not focus solely on your physical development. You can also increase your general knowledge by listening to podcasts that offer insight and opinion on current affairs, or you can expand your horizons by using the time to learn a new language.

There are thousands of podcasts available for free download that you can listen to as you pedal or walk your way to a better body.

There is absolutely no reason why you can't tune out during lower intensity cardio as there is no evidence to suggest that this has less of an effect on your heart rate or your physiological responses while you train. **M.E**



## WEEKLY FITNESS MAG PODCAST

Listen and learn via our website or iTunes, for free! Our weekly podcast entertains and informs with interviews, discussions, and expert advice you'll get in only one place.





**MDU GREEN**  
MUSCLE JUNKIE

**MUSCLE JUNKIE**

# **CHEST PRESS CHALLENGE**

**FREE ENTRY**

**OVER R40 000 IN PRIZES TO BE WON**

**DATE:** SATURDAY 5th DECEMBER 2015  
**VENUES:** GAME CANAL WALK/ BOKSBURG/ GATEWAY

**REGISTRATION:** 10:00 – 11:00 AT EACH VENUE  
**CHALLENGE STARTS:** 11:00  
**CHALLENGE ENDS:** 13:00

EACH ENTRANT WILL RECEIVE A MUSCLE JUNKIE SHAKER AND MUSCLE JUNKIE SAMPLES.

*This men's only event consists of participants bench pressing their body weight for the most reps. Two judges will be assigned to each lifter, one to verify correct form (full range), and one to count reps. Competitors will be allowed to compete a maximum of 3 times within a 2 hour period. The overall winner will be the person who completes the most judge approved presses. All judges' counts and decisions are final.*

**PRIZES:**  
**REGIONAL PRIZES**  
Each winner per store receives 3 month Muscle Junkie product sponsorship + 1 year subscription to Muscōle Evolution.  
1st, 2nd & 3rd place per store receives a Muscle Junkie hamper.

**OVERALL PRIZES**  
Overall Winner:  
1 x Everlast X-FIT Cage  
1 x Everlast Hardcore adjustable bench  
Additional 3 month Muscle Junkie product sponsorship

2nd prize overall:  
1 x Everlast squat press rack  
1 x Everlast Hardcore adjustable bench

3rd Place overall:  
1 x Everlast Hardcore bench



**LOUIS BESSINGER WAS INSPIRED FROM A VERY YOUNG AGE TO LIFT WEIGHTS AND BUILD BIGGER MUSCLES. Soon a hobby to boost his performance in school athletics became an all-consuming passion.**

Now this 25-year-old is dominating the senior ranks and fulfilling the amazing potential he showed as a junior athlete with the highly sought-after combination of size and detail.

In arguably his most prestigious local win, Louis recently blasted his opposition off the stage with thick veins and deep striations for a sweet victory that has eluded him until now – the Overall title of the IFBB South African Championships.

Always one who sets high standards for himself, Louis believes his time is now. He has been competing and winning competitions since 2004 but still has a burning desire to take his body to the next level.

# KING LOUIS REIGNS

**HOW THE MAN  
FROM BUFFALO CITY  
ACED EVERYBODY  
AT THE SA CHAMPS**





# SLICED & DICED

To achieve the totally shredded condition he displayed on stage in Sandton in September, Louis would run up and down sand dunes in East London while sticking to a super strict diet.

He knew he needed to bring up his legs and back with more polish and detail to be more competitive. That is exactly what he did when he skipped the SA Championships in 2014, but he certainly made up for that when he showed up this year in a sliced and diced condition to walk away with top honours.

## CONTEST HISTORY:

- 2004, 2005, 2006, 2007, 2009 IFBB Border Junior champion
- 2004 Wabba Junior Overall champion
- 2005 WPF Novice champion
- 2006 SA IFBB Junior champion
- 2009 WBBF Junior Overall champion
- 2009 WBBF Provincial Overall champion
- 2009 WBBF Junior Overall South African champion
- 2010 IFBB Mr. Border Overall champion
- 2010 IFBB Junior SA Overall champion
- 2010 Sampson Classic Overall champion
- 2010 Muscle Evolution Grand Prix Junior champion
- 2010 IFBB Junior World Championships - 3rd
- 2011 IFBB Border Junior and Senior Overall champion
- 2012 IFBB South African Junior Overall champion
- 2012 IFBB Junior World Championships Overall champion
- 2013 IFBB South African Championships - 2nd in heavyweight division
- 2014 IFBB Battle of the Titans - 2nd
- 2015 IFBB Provincial heavyweight and Overall champion
- 2015 IFBB South African Championships Middle heavyweight and Overall champion

# FOOD FETISH

While contest dieting isn't a cake walk for any competitor, it is particularly difficult for Louis. With a nickname like 'Phatboy' it is no mystery that Louis loves food, and eats enough to feed a small village. "Apart from the sand dunes drill I also do 20 minutes of cardio here and there after a weights session or late at night to keep busy and my mind off food," he says. For Louis, sticking to his diet is a constant battle.

In the past he used to balloon up to

120kg, until he finally realised that the extra weight only made it harder on his body when he needed to get lean for competitions. "I now take my off-season eating habits very seriously and I try to keep my body fat at a low enough percentage throughout the year," says Louis, who works as an online coach and personal trainer at Body Culture. After his last show this year Louis will probably not go beyond 105kg in the off-season.

## LOUIS' PRE-CONTEST DIET:

### 03h00

- 2 scoops of Pro Supps chocolate flavoured Iso Whey.
- 1 scoop of unflavoured Karbolyn
- 6 Weetbix mixed with hot water

### 06h00

- 15 egg whites or 300g steak
- 1 serving of Pro Supps Guardian, Multivitamins, minerals and fat burners.

### 08h00

- Pro Supps Liquid L-carnitine

### 09h00

- Cooked basmati white rice (250g), 15 egg whites, 1 banana, 1 serving of digestive enzymes, and pre- and probiotics.

### 12h00 & 15h00

- Hake fillet or 200g cooked chicken breast
- 250g of rice
- 1 cup butternut cut into cubes and some green vegetables (broccoli or green beans).
- Pro Supps fat burners

### 16h00

- 5g Pro Supps creatine, Gh booster amino mixture, and glutamine (10g)

### 18h00

- 120g uncooked gluten-free rolled oats with 2 scoops of Iso Whey
- 100g of paw paw and 100g of pineapple

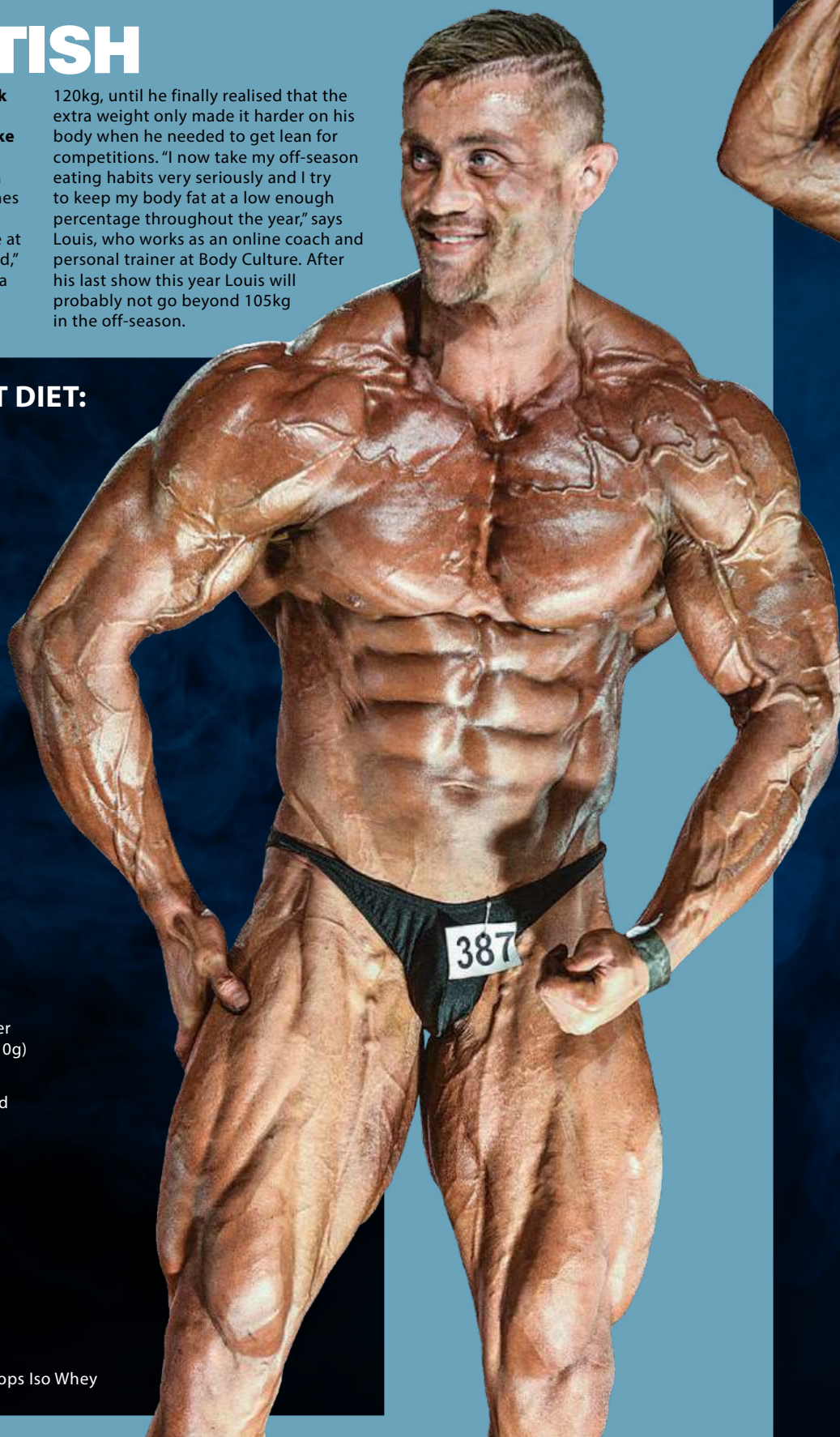
### 20h00

- 300g hake fillet or steak
- 150g basmati rice
- 200g sweet potato

### 21h00

- Pro Supps Liquid L-carnitine, glutamine and Gh booster amino mixture.

**Snack:** 2 sachets of grits with 2 scoops Iso Whey





## QUICK FACTS:

- **Contest weight:** 90-95kg
- **Off-season weight:** 105kg
- **Height:** 1.79m
- **Lives:** East London
- **Favourite body parts to train:** Back and shoulders
- **Least favourite body parts to train:** Biceps and triceps

## KEEPING IT FRESH

He also grows bored very easily so he changes his training routine frequently to avoid stagnation. "I don't like to do the same stuff over and over again. I believe you have to keep things fresh, exciting and challenging."

He trains with Michael Ott and their training style can only be described as instinctive. "To be honest, we don't follow a set plan. If we feel like doing three different body parts in one session then we go for it," says Louis.

### OFF-SEASON TRAINING SPLIT

- **Day 1:** Chest and hamstrings
- **Day 2:** Back, traps and rear delts
- **Day 3:** Quads
- **Day 4:** Deltoids
- **Day 5:** Arms and hamstrings

### PRE-CONTEST TRAINING SPLIT

- **Day 1:** Quads
- **Day 2:** Chest
- **Day 3:** Deltoids
- **Day 4:** Back
- **Day 5:** Arms

"These splits are only examples of how I train," says Louis. He trains calves abs every second day.

Louis could not sleep the night when he bagged the Overall victory and first place in his line-up at the 2015 IFBB SA Championships. It was a title he had been chasing for a long time. "I did not sleep and ate non-stop until the next morning. I kept staring at my trophies because it felt so unreal! What made this show so special to me was all the support I got from my family, friends and training partner. They were all there

every step of the way, making it so much easier for me to cope! Mike and I still trained right through till the main show."

Louis is now looking forward to competing in the IFBB Men's World Championships taking place in Barcelona, Spain on 4 November. A month after that he hopes to continue his winning streak at the Moscow Olympia Amateur World Showdown 2015 on 4 December. [M&E](#)



Earl Abrahams

Johnny Lucas

Louis Bessinger

Shanti Mitchell



**CHECK OUT THE COVERAGE OF THE 2015 IFBB SAs ON PG90**



**SCITEC<sup>®</sup>  
NUTRITION**

**NOW  
AVAILABLE  
AT CHROME**

**#ChromeBeMore**

**chromesa.co.za**

Now franchising nationwide | [franchise@chromesa.co.za](mailto:franchise@chromesa.co.za)  
Trade enquiries welcome | [wholesale@chromesa.co.za](mailto:wholesale@chromesa.co.za)

ULTIMATE PERFORMANCE

ULTIMATE HEALTH

ULTIMATE MUSCLE

**CHROME**  
SUPPLEMENTS & ACCESSORIES

**CHROME BEDFORDVIEW**

Shop 25 Bedford Village  
Cnr Nicol & Van Buuren Roads, Bedfordview  
Tel: 011 450 0415 | [bedfordview@chromesa.co.za](mailto:bedfordview@chromesa.co.za)

**CHROME BRIGHTWATER COMMONS**

Brightwater Commons (Next to Virgin Active)  
Cnr Malibongwe Drive & Republic Road, Randburg  
Tel: 011 326 4730 | [bwc@chromesa.co.za](mailto:bwc@chromesa.co.za)

**CHROME CENTURION**

Shop G19 Centurion Lifestyle Centre  
Cnr Old Johannesburg & Lenchen Avenues, Centurion  
Tel: 012 653 5509 | [centurion@chromesa.co.za](mailto:centurion@chromesa.co.za)

**CHROME EDENGLLEN**

Shop 2 Karaglen Mall  
Cnr Baker & Harris Streets, Edenglen  
Tel: 011 609 9436 | [edenglen@chromesa.co.za](mailto:edenglen@chromesa.co.za)

**CHROME KEY WEST**

Shop 213A Key West Shopping Centre  
Cnr Paardekraal & Viljoen Streets, Krugersdorp  
Tel: 011 273 0057 | [keywest@chromesa.co.za](mailto:keywest@chromesa.co.za)

**CHROME KOLONNADE**

Shop 16A Kolonnade Retail Park  
Cnr Zambesi Drive & Enkeldoorn Avenue, Montana  
Tel: 012 548 0495 | [kolonnade@chromesa.co.za](mailto:kolonnade@chromesa.co.za)

**CHROME MENLYN**

Shop UF2 Menlyn Park Shopping Centre  
Cnr Atterbury Road & Lois Avenue, Menlo Park  
Tel: 012 348 1968 | [menlyn@chromesa.co.za](mailto:menlyn@chromesa.co.za)

**CHROME NORWOOD**

Shop 1 Grant Centre  
Cnr Grant Ave & Iris Road, Norwood  
Tel: 011 483 1292 | [norwood@chromesa.co.za](mailto:norwood@chromesa.co.za)

**CHROME ROSEBANK (Opening Soon)**

Shop NM03 The Zone @ Rosebank  
177 Oxford Road, Rosebank  
Tel: 011 268 2433 | [info@chromesa.co.za](mailto:info@chromesa.co.za)

**CHROME RUIMSIG**

Shop 12 Featherbrooke Village  
Cnr Peter & Hendrik Potgieter Roads, Ruimsig  
Tel: 011 958 1175 | [ruimsig@chromesa.co.za](mailto:ruimsig@chromesa.co.za)

**CHROME STONERIDGE**

Shop U36 Stoneridge Shopping Centre  
Cnr Modderfontein & Hereford Roads, Greenstone Park  
Tel: 011 452 0553 | [stoneridge@chromesa.co.za](mailto:stoneridge@chromesa.co.za)

**CHROME THE BUZZ**

Shop SH19 The Buzz Shopping Centre  
Cnr Nerine & Witkoppen Roads, Witkoppen, Fourways  
Tel: 011 658 0183 | [thebuzz@chromesa.co.za](mailto:thebuzz@chromesa.co.za)

**CHROME TYGER VALLEY**

Shop UL619 Tyger Valley shopping Center  
Willie Van Schoor Avenue Bellville Park, Cape Town  
Tel: 0861 000 638 | [info@chromesa.co.za](mailto:info@chromesa.co.za)

**CHROME WANDERERS**

Shop 1 Inside Planet Fitness 21  
North Road, Illovo  
Tel: 011 447 3794 | [info@chromesa.co.za](mailto:info@chromesa.co.za)

**CHROME WATERGLEN**

Shop 30 Waterglen Shopping Centre  
Cnr Garsfontein & January Masilela Roads, Waterkloof Glen  
Tel: 012 993 4399 | [waterglen@chromesa.co.za](mailto:waterglen@chromesa.co.za)

## NICO FOURIE'S ALL-OUT

LEG  
ASSAULT

**Training legs is what separates the men from the boys in the gym. It weeds out pretenders from contenders. On leg day there is no place for the lame. If done correctly, it will leave you too sore to walk up a flight of stairs or even drive your car.**

For West Rand bodybuilder Nico Fourie leg training is a passion and having been involved in a contact sport like rugby he knows that you need to take the knocks and push through the pain to become truly great at it.

"Leg day is neglected by most but exceptional quad development is sought after and admired by all. I want to have 'stand-out' legs, and I love the pain involved in earning them," says Nico, who started to compete in his first bodybuilding show back in 1997 after hanging up his rugby boots.

**Muscle Evolution** caught up with Nico during a recent brutal legs session as he was busy preparing for the Nabba South African Championships. We soon came to a realisation that Nico, an advocate of strength work and voluminous training, does not treat his legs as a secondary area of importance.

Nico is coached by top American bodybuilder John Meadows, who is the creator of the Mountain Dog diet and training systems. John's

famed off-season and fat percentage methodology has Nico on a six day training week and a three day body split. In the first split he concentrates on going heavy, while the second weekly split is more about volume, and maximising blood flow and pumps. This protocol also applies when he train legs. His split for the off-season and pre-contest phases remains exactly the same.

Nico believes if the nutritional content of your diet is correct your body can withstand this brutal training regimen. Consistency with training and nutrition is what separates champions from wannabes.

His off-season weight is usually around the 124kg mark, but this year he followed the advice of Meadows and kept his weight around 114kg with a body fat percentage of under 11%. "My coach keeps very close track of my off-season weight and body fat percentage. He prefers that his athletes never exceed the 12% body fat mark. Each leg workout should be a soul-searching and gruelling event, one that you have to dig deep to get through, and I feel a sense of real satisfaction every time I complete one of these sessions the right way," says Nico.

He looks up to legendary bodybuilder Tom Platz who undoubtedly had the freakiest quads in bodybuilding history. "Although Tom never had the most pleasing physique and his legs were proportionally out of sync with his upper body, there is no denying the sheer size he was able to develop. He was also well known for his insane leg training sessions – I admire the mental ability and control he must have possessed to withstand these."

**BECAUSE  
REAL  
FRIENDS  
DON'T LET  
YOU MISS  
LEG DAY...**


## QUICK FACTS

- **Height:** 1.85m
- **Off-season weight:** 124kg
- **Contest weight:** 99-102kg
- **Supplements:** Pharmafreak products such as whey protein (Proteinfreak), creatine (Creatinefreak 5000), BCAAs (Aminofreak), pre-workout (Superfreak) and fat burner (Rippedfreak)
- **Occupation:** Dealer Principal at McCarthy Land Rover West Rand
- **Biggest supporter:** His wife Monique.
- **Motto:** Never accept failure, only the lesson



## CONTEST HISTORY

- **1997 Mr. Highgate** 1st place Senior Men Heavyweight Novice
- **1997 IFBB Gauteng Provincials** 1st place Junior Men
- **1997 IFBB Nationals** 3rd place Junior Men Heavyweight
- **In 1997 he was selected to go to the IFBB Mr. Universe in Italy but did not attend the show due to study obligations.**
- **2011 Nabba Nationals** 1st place Senior Men Class 1
- **2012 Nabba Gauteng and North Gauteng Provincials** 1st place Senior Men Class 1
- **2012 Nabba Nationals** 3rd place Senior Men Class 1
- **2014 Nabba Gauteng Provincials** 1st place Senior Men Class 1
- **2014 Rossi Classic** 1st place Senior Men over 95kg & Overall winner
- **2014 Nabba Nationals** 1st place Senior Men Class 1
- **WFF World Championships (Australia)** 5th place Extreme Physique
- **Nico qualified for the WFF Universe (France) and Lee Priest Classic (UK) but did not attend.**
- **2015 Nabba Gauteng Provincials** 1st place Senior Men Class 1



Nico's leg training changes with every workout. He likes to switch things up, such as the exercise order, reps and sets, but his primary goal always remains the same: **TO WORK HIS LEGS TO ABSOLUTE FIBRE-TEARING FAILURE.**



## **BULGARIAN SPLIT SQUATS**

These are usually done after back squats as Nico is thoroughly warmed-up by this stage. "I go straight into working sets doing 12 reps on each leg for 4 sets, each set going heavier. On my fourth set I do one leg at a time. I do 12 reps, then drop the weight 3 more times for 12 reps on each set. On my last set I will iso-hold in the bottom position for 10 seconds. This absolutely demolishes my glutes and I usually end up on the gym floor sucking hard for extra oxygen!"

**"TO BUILD WHEELS OF STEEL YOU NEED TO LEAVE YOUR EGO AT THE GYM DOOR. YOU ONLY TRAIN HEAVY AND YOU ONLY INCREASE THE WEIGHT IF YOU ARE ABLE TO DO THE EXERCISE CORRECTLY AND MAXIMALLY ACTIVATE THE MUSCLE YOU ARE WORKING ON."**

## FRONT OR BACK SQUATS

He usually starts at the squat rack with either front or traditional back squats with 3 warm-up or feeder sets to find the correct weight. This is followed by 4 sets of 12 to 15 reps.

**“WHEN I DO BACK SQUATS I WILL GO FOR 5 SETS OF 15, 12, 10, 8 AND 6 REPS. EACH SET I WILL GO UP IN WEIGHT.”**



## ZERCHER SQUATS

Nico sometimes likes to incorporate this old-school movement in his training after he has completed his split squats. You basically perform a front squat while holding the barbell in the crook of your elbows.

**“It is difficult keeping the barbell up with your arms in the required position so I do not use overly heavy weights. It is important to not compromise on form; you need to go down nice and deep.”** He knocks out 4 sets of 10 reps while sticking to the same weight.

## HACK SQUATS AND LEG PRESSES

Nico supersetts hack squats with leg presses during leg sessions where the aim is to train for maximum pump and blood flow. On the hack squats he performs 4 sets of 12 reps, really going down deep and driving up hard to  $\frac{3}{4}$  of the full range, and never locking his knees.

**“Leg presses are ideally suited to high reps as your back is fully supported and there is no balance required,”** Nico states. On leg presses he would do 4 sets of 20 reps, with an iso-hold midway in the movement for 7 seconds on his last rep on each set. On his last set he would add 10 partials from the bottom position.



**ME:** What advice would you give to other bodybuilders who are currently struggling with their lower body development?

**Nico:** "The best advice is to never skip leg day. Training legs is strenuous and takes a lot of energy being such a big muscle group. More importantly, it takes a lot of pain to fatigue the quad muscle to the point where it actually grows. In my opinion there is nothing that looks better than huge quads, and no feeling more satisfying than struggling to find trousers that will fit over big legs. Also, the feeling one gets seeing your legs taking shape when you are prepping for a contest, and then eventually seeing them ripped on stage makes all the pain and effort bearable. Training past that pain barrier is where real growth is found. Focus on the end goal, eat well and your legs will grow."



## LUNGES

Lunges are sometimes performed at the end of a leg session. Nico likes to use barbells and would usually do 12 reps per leg working the muscles from a stretched position.

**"I WILL TYPICALLY DO 6 SETS OF 20 REPS – 3 SETS WITH MY TOES POINTED UP AND 3 SETS WITH MY TOES POINTED DOWNWARD. I ALWAYS TRY AND FLEX AS HARD AS POSSIBLE AT THE TOP OF THE MOVEMENT FOR A SECOND OR TWO."**



## LEG EXTENSIONS

Nico believes nothing contributes more to detail in the quads than this exercise. He uses them after completing his heavy compound movements.



## STIFF LEG DEADLIFTS

Nico hits his hamstrings by starting off with stiff leg deadlifts. He either uses dumbbells or a barbell and maintains a slight bend in his knees at all times while keeping the movement strict and under control.

**“AT THIS POINT IN MY WORKOUT I WILL BE PROPERLY WARMED UP, SO I WILL GO STRAIGHT INTO THE WORKING SETS. I DO 4 SETS OF 12 REPS, FOCUSING ON THE STRETCH AT THE BOTTOM AND THEN PULLING WITH BOTH MY GLUTES AND HAMSTRINGS. WHEN I DRIVE UP, IT IS NEVER PAST ¾ OF THE FULL RANGE TO KEEP TENSION ON THE MUSCLES INVOLVED. I ALSO DON’T BOUNCE OR RELAX AS I DON’T WANT TO INJURE MY HAMSTRINGS OR LOWER BACK.”**



## LYING HAMSTRING CURLS

“I will do 5 sets, with each subsequent set going up in weight. I use the following rep structure – 20, 15, 12, 12, 10. On my last set I will do 15 partials from the stretched position and finish off with a 10 second iso-hold in the mid-range of the movement while someone applies slight downward pressure in this position. I also make sure that my hips stay down on the pad while I work my hammies,” says Nico.



## PERSONAL VICTORIES

For Nico, bodybuilding is all about achieving your goals. “Bodybuilding for me is about the small personal victories you experience daily when you overcome obstacles while you make sacrifices to be the best you can be. For example, getting up in the winter for your morning cardio session when your mind tells you that it’s too cold, or getting up from the couch to hit the gym after a full day at the office when your mind tells you that you are too tired and that tomorrow is another day, or not having that cheat meal when your mind tells you that you need it and that you deserve to have it.”

## CALVES ON THE HACK SQUAT MACHINE

"Here I would go heavier and perform 4 sets of 12 to 15 reps."

**NICO'S ULTIMATE ADVICE FOR ASPIRING BODYBUILDERS IS TO REMAIN BALANCED IN THEIR EVERYDAY LIVES. "BALANCE IS ALSO IMPORTANT, ESPECIALLY WHEN YOU TRAIN AND DIET FOR A SHOW. BODYBUILDING CAN BE A SELFISH ENDEAVOUR AND ONE MUST PAY SPECIAL ATTENTION TO OTHER PARTS OF YOUR LIFE AND THOSE IN IT."**

# BIG DADDY CALVES

Nico had to work extremely hard for his calves to grow. "I believe most guys don't train their calves hard enough. Many people blame genetics for their lack of calves, yet do not apply sufficient energy and focus into trying to develop them. I find that to be just another excuse to avoid training calves – which, if done correctly, can also be very painful. In my experience, the calf muscles are stimulated best with high reps and a full range of motion. I never do less than 12 to 15 reps, but often use much higher rep ranges, almost always incorporating drop sets and supersets into my approach."

## CALVES ON THE LEG PRESS MACHINE

He also likes to do his calf training on the leg press machine for 4 sets to failure using a weight that allows him to bang out no less than 15 reps. Nico believes you activate more muscle fibres with the toe press movement on a 45-degree leg press than with standing calf raises.



## STANDING & SEATED CALF RAISES

Nico superset standing and seated raises to chase the burn. "I will do 4 supersets of 15 reps. On my last set I will do 3 drop sets of 15 reps of standing calf raises and then a final set of 15 reps on the seated calf raises." [M.E](#)



Nico Fourie proudly sponsored by McCarthy Jaguar Land Rover.

# CREATING THE PERFECT HOME GYM

BUILDING THE PERFECT HOME GYM IS ABOUT MATCHING FUNCTIONALITY AND AFFORDABILITY. FORGET THE EXPENSIVE MULTI-GYMS. You can target every major muscle group with the basic compound and isolation exercises that can be done with the following four items:

## THE BASICS

● **A CAGE** This should form the focal point of any home gym aimed at making serious gains in muscle and strength because it will allow you to perform most of the important compound exercises such as squats, bench presses and pull ups. Without one, the really heavy lifts become almost impossible. It is also essential to create a safe lifting environment as you'll be training on your own. Hooks,

safety arms and latches offer peace of mind.

● **A BENCH** An adjustable bench is your best bet. It is extremely versatile, allowing you to perform flat, incline or seated exercises with the bar or dumbbells.

● **A BAR** This is the most important piece of equipment in any home gym. It's the tool needed to perform the heavy

compound lifts that add the most muscle mass and develop the greatest gains in strength.

● **DUMBBELLS** These are the tools needed to sculpt your physique or isolate smaller or accessory muscles like your arms or specific aspects of your shoulders, for example. They also offer ideal alternatives to various exercises such as lunges, squats and overhead presses.

## BENEFITS OF A HOME GYM

- Skip the travel and traffic to and from gym each day.
- No more queues to use a piece of equipment at the gym.
- No more sweaty benches or equipment that hasn't been wiped down.
- No more annual membership price increases!
- Work out any time.

## IMPORTANT ADD-ONS

- A good sound system.
- Motivational posters to keep you focused and on track.
- Storage space for your accessories.

## SELECTING YOUR SPACE

If you have the option, your garage is the perfect space to set up your home gym. The concrete floors can take a pounding from weight plates and dumbbells. It's also cooler, and the garage door can be opened for loads of fresh air. The cage can also be neatly stored away in the corner when you're done. In addition, you can create a dedicated space where you can focus on your training, away for the madness of life at home.

HOME GYM SERIES BROUGHT TO YOU BY  
EVERLAST & GAME

EVERLAST

game



# YOU CAN BE A MUSCLE JUNKIE AND TRAIN AT HOME



Everlast Hardcore Bench | 694005  
**R1200**



Rubber Hex Dumbbells  
682201 / 682202  
682203 / 682204  
**R40** per kg



Rubber Olympic Bumper Plates | 677588  
Available in 5, 10, 15, 20kg  
Available in selected stores  
**R35** per kg

## TRAINING AND SUPPLEMENT TIPS



**MUSCLE JUNKIE PSYCHO**  
Insanely powerful pre-workout formula - amplifying energy & strength!

**R295**



**MUSCLE JUNKIE WHEY O.D.**  
Leucine-enriched intra/post workout Creatine formula - assists mutant muscle growth & repair!

**R445**



**MUSCLE JUNKIE MASS FREAK**  
Gain freakish muscle mass - high in protein and calories, the ideal mass builder for those serious about their gains!

**R165**



Everlast Squat Press Rack | 677540  
**R2200**



Everlast Cross Fit Cage | 677537  
**R5000**

Available exclusively at selected **game** stores.

# STEROID EXPOSE: SA CONFIDENTIAL

## THE HARD TRUTH ABOUT HGH IN SA



"Natural growth hormone levels in the body decrease as we get older and so does its ability to regenerate human tissue."

**H**UMAN GROWTH HORMONE (HGH) IS A NATURALLY-OCCURRING HORMONE PRODUCED IN THE HUMAN BODY BY THE PITUITARY GLAND, and is of particular interest to bodybuilders because it plays a major role in the control of many complex physiological processes, most notably growth and metabolism.

Globally pro athletes have been using it for years to attain freakish amounts of lean muscle mass while also 'leaning out' for shows, and their local counterparts have followed suit.

As a continuation of our series

on steroids in South Africa we once again knocked on the door of 'Mr. X', a central role player who has been part of the steroid black market since 1991, to find out more about this hormone, albeit in its synthesised form.

I kicked off my list of questions for Mr. X with his definition of what HGH is and its benefits.

"Growth hormone is responsible for our growth as a child," says Mr. X. "It is also responsible for repairing tissue during the entire duration of our life. The problem with our natural growth hormone levels is that it decreases as we get older and so does its ability to regenerate human tissue. This includes muscle tissue but does not exclude many other tissues like bone, skin and organs. At the age of 30 our growth hormone levels can be 20% of what they were when we were teenagers. This 20% base level decreases by 10-12% every decade."

# PART 2

**"THESE DAYS EVERYONE TAKES GROWTH HORMONE. IT IS A HOUSEHOLD NAME WITH LADIES DISCUSSING ITS BENEFITS OVER COFFEE AND BODYBUILDERS TALKING ABOUT THE BEST VERSIONS OF IT, IN THE GYM BETWEEN SETS"**

## DOUBLE WHAMMY FOR POPULARITY

**According to Mr. X the muscle-building effects of HGH is undisputed and its anti-ageing properties makes it a double whammy for popularity.**

"These days everyone takes growth hormone. It is a household name with ladies discussing its benefits over coffee and bodybuilders talking about the best versions of it, in the gym between sets."

Mr. X brought 20 boxes of HGH into the country for the first time back in 1999. He struggled to sell it because most athletes back then were uneducated about its effects on the body. "Now I have to manufacture a thousand boxes per batch under my own brand and I am permanently sold out. My HGH measures 99,9888%. I am not the cheapest but for me it is all about quality before the price."

What then is the difference between steroids and growth hormone? "Anabolic steroids increase the size of the muscle cells while growth hormone increases the amount of muscle cells," Mr. X states.

He says that HGH also keeps body fat at a low percentage. "Any athlete who competes against an athlete at a bodybuilding show who has been following a growth hormone regimen

will have difficulty in competing successfully. The bodybuilder who takes it will have an advantage if he followed his diet and his body fat is low. He will have a totally different look to the rest of the line-up with leaner, denser muscle and paper-thin skin. It is a look that is hard to beat." No PCT (post cycle treatment) is necessary when you stop taking growth hormone.

However, there are numerous accounts of athletes who don't experience the expected gains when using this substance, and they often choose to discontinue use due to the high price tag. "Athletes misunderstand the substance. Growth hormone works over a very long period. This is where athletes become impatient. Usually the longer you stay on it the more beneficial it becomes."

Mr. X has seen many athletes taking growth hormone for a couple of months, only to stop because their bodies did not change dramatically. "When they stop they start regressing and the real effect of the hormone becomes evident. Change is not instantaneous and as drastic as anabolic steroids. It is however noticeable over a longer period of time."

## FRAUDULENT PRODUCTS

**An additional factor worth considering is that the words HGH and scam are synonymous. Unscrupulous suppliers are pocketing thousands of rands because of the ignorance of buyers.**

"On the Internet you will find thousands of adverts selling everything from growth hormone tablets to growth hormone sprays," says Mr. X. "Most of these products are fraudulent." According to Mr. X the growth hormone molecule is far too large to be absorbed successfully through the membranes of the mouth.

"Suppliers also claim that it gets absorbed through the stomach. This again is a fallacy because the growth hormone molecule will be destroyed in the digestive tract way before it has the slightest chance to get absorbed in the blood stream, where it belongs."

Mr. X tells a story of a lady who was paying over R2,000 for a month of supply of growth hormone in tablet form. "The lady informed me that she preferred the tablets to the HGH

injectables because when she takes them she can feel them working almost immediately. I asked her if I could try one of these growth hormone tablets. My heart started racing and my body temperature went up. I have been in the steroid business for a long time and I immediately knew that this was not growth hormone but a thermogenic sold by a fraudulent supplier with a growth hormone label."

Mr. X says that the only oral form of growth hormone a person can take is not HGH itself but a combination of L-arginine (10-30g) in the evening before bedtime and L-glutamine (2g) in the morning. "These two amino acids can increase your growth hormone levels naturally but I have found that they rarely work for anyone who is over the age of 45. Most of the growth hormone tablets, capsules and sprays are not the real thing. The only way you can elevate your growth hormone levels sufficiently and effectively is by injection. There is no other way."

## EFFECTIVENESS

What is the ideal dosage then to elicit the desired results as far as bodybuilders are concerned? (the substance is also widely used to treat a number of degenerative diseases and is also marketed as an anti-ageing product).

"If you are using a 99% pure growth hormone product you will need two International Units (IU) per day if you want to slow down the ageing process. For bodybuilders you can increase this dosage to 3IU and as much as 6IU. (2IU in three injections during the course of the day or 3IU twice a day.)"

Bodybuilders who purchase the cheaper 95% or 97% grade growth hormone will have to take more than 6IU per day. "Guys don't understand the difference between the grades of growth hormone and they normally end up increasing the dosage until they see results," says Mr. X.

"The quality of HGH you take is of utmost importance when deciding how many units you are going to take. Very few bodybuilders know that when you buy growth hormone from the factories in China they offer you different grades or percentage qualities of the hormone." According to Mr. X this is typically what he gets offered when he orders a batch from a Chinese manufacturer:

**"GUYS DON'T UNDERSTAND THE DIFFERENCE BETWEEN THE GRADES OF GROWTH HORMONE AND THEY NORMALLY END UP INCREASING THE DOSAGE UNTIL THEY SEE RESULTS."**



The purity of growth hormone is of utmost importance because the purer the growth hormone the better its effectiveness:

- **90%** If you purchase a 100 IU of 90% pure growth hormone for \$80 (selling in South Africa for between R1300 and R1800) and you inject 1 IU the result is an elevation of the growth hormone levels in your blood (blood serum) to between 1 nanogram and 9 nanograms per millilitre of blood tested.
- **95%** If you purchase a 100 IU of 95% pure growth hormone for \$100 (selling in South Africa for between R1800 to R2300) and you inject 1 IU the result is an elevation of the growth hormone levels in your blood (blood serum) to 13 nanograms per millilitre of blood tested.
- **97%** If you purchase a 100 IU of 97% pure growth hormone for \$120 (selling in South Africa for between R2300 to R2800) and you inject 1 IU the result is an elevation of the growth hormone levels in your blood (blood serum) to 18 nanograms per millilitre of blood tested.
- **99%** If you purchase a 100 IU of 99% pure growth hormone for \$140 (selling in South Africa for between R2500 and R3000) and you inject 1 IU the result is an elevation of the growth hormone levels in your blood (blood serum) to 25 nanograms per millilitre of blood tested.

If you buy 99% pure growth hormone you will pay double than what you would pay for 90% pure growth hormone but the effectiveness will be three to four times better on a 99% than what you would get on 90%. In other words, if you have a good quality growth hormone it will work out cheaper because you will only need about 3IU per day where the 90% quality growth would require 9IU to 12IU per day to get the same effect.



## LOCAL MARKET CONDITIONS

Two pharma brands, Norditropin and Humatropin are available on the South African market.

The available black market versions, according to Mr. X, include Cicconatropin by Ciccone Pharma, Nomatropin by Nomad Labs, Keifei, Platinum, Jintropin and Europharma. While anabolic steroids are manufactured in back rooms and kitchens in South Africa, growth hormone is one of those pharmaceuticals that cannot be manufactured in the country. Every brand that is on the market is imported.

- **Only buy from a reputable source who has been in the industry for many years and is not a fly-by-night supplier.**
- Make sure the growth hormone you are buying has a website with a section where you can verify the authenticity of your product by punching in a verification code.
- **Make sure the verification codes on the product check out on the website. Many unscrupulous dealers copy big brands so well that you won't be able to see the difference. When you punch the verification numbers from the stickers on the product into the website and the product fails to check out it should raise alarm bells.**
- If you pay under R2,000/100IU for HGH in South Africa

it is probably not the best quality. It might not be fake but it's definitely not A-grade. There is no way that at the current rate of exchange you will buy 99% pure growth hormone for less.

- **One practical way to see if growth hormone is working is if your hands start hurting. When you get pins and needles in your hands and fingers and you wake up at night with your hands feeling like they have no blood supply it means you are taking an effective form of growth hormone. One of the side effects of growth hormone is carpal tunnel syndrome. Not everyone gets this but if you do get carpal tunnel you know the growth hormone is legit.**

If you are considering purchasing and using HGH, Mr. X has the following suggestions: "There are suppliers who are bringing in 90% growth hormone ampules, then package and box it locally and print 99% quality on the the packaging to be able to sell it at a higher price. The difference in price between 90% growth hormone and a 99% product is double. **The difference in effectiveness between the two is about four fold.**" As such, make sure to look for the following:

- The biggest problem is athletes generally do not know what to expect from real, good quality growth hormone. The pro bodybuilders know and it is very hard to deceive them but someone who is new to the sport usually expects huge gains without understanding the exact characteristic of the substance.
- **If the water you are receiving with the growth hormone has a cap on that does not have the company insignia, while the growth ampules in the box have, you can be sure that the ampules are imported but the water and the packaging are made locally.**
- Compare the water ampules you get with locally manufactured ampules called "sterile water for injection". If the water ampules are locally manufactured then you know it's not a good quality product. The best quality growth hormones will come with special bacteriostatic water that is not the same as water for injection. This bacteriostatic water preserves the growth hormone when constituted. Bacteriostatic water also helps with a less painful injection.
- **There are not as many fake growth hormones on the market as suppliers supplying an inferior product in the packaging of a higher-grade product. This increases the profit margins of the dealers substantially and they hardly ever get exposed because the athletes still get results, but not the results they have paid for.**

## NOT A MAGIC POTION

Mr. X is quick to point out that HGH is not a magic potion that makes fat simply disappear into thin air. It only keeps body fat low when you follow a healthy diet and a solid training regimen. "Growth hormone helps to maintain a low body fat percentage with greater ease. As soon as you stop the growth hormone the body fat increases quickly and you cannot get away with eating any cheat meals."

Many competitive bodybuilders who use a combination of steroids and growth hormone have thickness and density that is difficult to attain by only using either substance in isolation. "Even the way your skin glows on growth makes the muscles appear fuller and denser," says Mr. X.

"However, many athletes will never realise the true potential of HGH because of the difficulty in getting a good quality product in South Africa." A lack of understanding on how to effectively stack anabolic steroids and growth hormone will also yield lesser results.

I asked Mr. X about health problems associated with HGH use. "Growth hormone is probably the one substance with the least side effects. The worst side effect I have seen with HGH use was carpal tunnel syndrome, a painful condition of the hands and fingers caused by compression of a major nerve where it passes over the carpal bones through a passage at the front of the wrist. Usually, when you lower the dose the condition gets better. Increasing the dose of growth slowly should keep the syndrome at bay. In rare cases the condition becomes so intense that surgery is required."

**"MANY ATHLETES WILL NEVER REALISE THE TRUE POTENTIAL OF HGH BECAUSE OF THE DIFFICULTY IN GETTING A GOOD QUALITY PRODUCT IN SOUTH AFRICA."**

## GROWTH HORMONE AND INSULIN

However, it is not just steroids that bodybuilders use along with growth hormone in their quest for maximum muscle gain. Insulin is another popular anabolic agent, but one that has the potential to be life-threatening if used incorrectly. It also has the potential to limit the effectiveness of growth hormone.

"Insulin is basically an antagonist to growth hormone.

The relationship between insulin and growth hormone does exist but it is not a very favourable one. It's important to try and keep your growth hormone as far as possible away from any insulin spikes. Insulin destroys growth hormone and can therefore not exist in the blood stream alongside it. When you take your growth hormone it is also very important not to take it within two hours after you have eaten a meal, and once you have taken it you must not eat for an hour. The reason for this is also insulin related. As soon as you eat a meal your insulin spikes and this causes your growth hormone to be less effective," states Mr. X. **ME**

*Disclaimer: Conclusions and opinions given in this article are for educational purposes only. They do not represent the views and opinions of Muscle Evolution. 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.*

# SPOT REDUCE FAT

**R450 p/bottle or two bottles for R820**



**TIGHTEN TROUBLE AREAS AND VISIBLY REDUCE THE APPEARANCE OF FAT!**

## TO ORDER

011 791 3646

[kate@fitnessmag.co.za](mailto:kate@fitnessmag.co.za)

**FREE** Delivery free in Johannesburg. Outside Joburg; courier fees apply.

\*Note: this is not a fat loss product. Body Sculpt assist with the tightening of trouble areas. Best results achieved when combined with an exercise routine and calorie controlled diet.

**S**ummer has rolled around and you are still spinning your wheels in the gym in an all-out effort to get totally shredded. We could all do with less body fat, fewer kilos and a more defined body as we finalise our plans for the end-of-year holiday.

Don't panic. Fire up your fat-burning furnace by using a method called antagonist superset training which works opposing muscle groups at the same time to build a leaner, meaner you.

Bodybuilders have for decades used this method to up the ante and drop fat when combining two opposing body parts at a time. Ideal examples include back and chest, or biceps and triceps performed with little to no rest between sets.

# RIPPED & READY

## MAKE ANTAGONIST TRAINING YOUR SECRET WEAPON AGAINST FAT

**BONUS TIP:**

To be ripped means to have muscle and a low enough body fat percentage so that this muscle can actually be seen. Adjust your diet and include cardio sessions on those days you don't lift weights.

This approach will have you train at a much quicker pace than usual as you will take minimum rest between exercises. It will also force a lot of blood into your muscles and, by using lighter weights as you go back and forth between movements, you will also build muscular endurance.

When you rest between sets at the gym your body clears out lactic acid, which isn't always desirable as this exercise metabolite has the power to boost growth hormone (GH) levels.

Therefore, by ramping up the production of lactic acid when you combine two exercises without rest you create the ideal conditions to promote increased muscle growth and jump-start the fat-burning process.

The key with this training method is speed, not only

during the sets but also when switching between exercises. Just don't sacrifice your form. You should be in control of the weights at all times.

By training this way you increase the amount of work you can perform in a specific time frame, since you are moving rapidly from one exercise to another with minimal rest between sets. This results in a more intense workout and a higher expenditure of calories.

Another important benefit of antagonistic training is that it boosts your metabolic rate as you hit two body parts in one session – a break from the norm for most bodybuilders which, in itself is worth the change. Antagonist training also helps you to develop increased motor control of your muscles while it improves your work capacity while you burn fat faster.

► **EXAMPLE FOUR DAY SPLIT:**  
Perform four sets of 12-15 reps on all exercises after warming up.

	TARGET AREA	EXERCISE
<b>DAY 1</b>	Chest, back & abs	<ul style="list-style-type: none"> <li>• Flat bench barbell press &amp; barbell rows</li> <li>• 45 degree incline bench press &amp; wide grip pull ups</li> <li>• Hyperextensions &amp; ab crunches</li> </ul>
<b>DAY 2</b>	Quads, hammies & calves	<ul style="list-style-type: none"> <li>• Squats &amp; stiff legged deadlifts</li> <li>• Leg extensions &amp; seated leg curls</li> <li>• Standing &amp; seated calf raises</li> </ul>
<b>DAY 3</b>	Biceps & triceps	<ul style="list-style-type: none"> <li>• Standing barbell curls &amp; tricep pushdowns</li> <li>• Preacher curls &amp; decline lying tricep extensions</li> </ul>
<b>DAY 4</b>	Shoulders & traps	<ul style="list-style-type: none"> <li>• Military presses &amp; barbell shrugs</li> <li>• Upright rows &amp; bent over rear shoulder raises</li> </ul>

# DIETARY PRINCIPLES

## ► PUMP UP PROTEIN

In your quest to reduce body fat levels you might reduce your calories, but if you do so in a drastic manner you could lose muscle which slows down the fat-loss process. Keep your protein intake high to preserve your muscles mass while your body burns fat. A good rule of thumb is to choose lean sources of protein such as chicken breasts, fish, egg whites and non-fat cottage cheese, and sip on amino acid supplement blends while you train to spare muscle.



## ► DON'T FORGET FATS

Certain fats such as fish oil, olive oil, avocado, fatty fish like salmon and trout and flaxseed are good to eat. Trans fats found in fried food are the bad fats because they elevate cholesterol levels. Also try to limit calorie-rich saturated fats from animal sources such as beef, pork and lamb, but don't cut them out completely as saturated fat is essential in the production of anabolic hormones.

## ► THE RIGHT CARBS

Everybody is cutting their carbs nowadays but, truth be told, a blanket ban isn't the cure-all answer. Rather cut simple carbs because they are the ones that are detrimental to your goal of shedding fat. Simple carbs are filled with sugar and the quickest source of energy as they are very rapidly digested which causes a rapid spike in your insulin levels. This will make your body hoard fat instead of shedding it.

The only time you can consume simple carbs is after your workout when you want to jump-start your recuperation process. By the time your muscles are saturated with glycogen your body will start to store any excess glucose as fat.

Avoid these simple carbs when dieting down: fruit juice, sugar, honey, syrup, jams and soft drinks and sport drinks.

Starchy vegetables should

form your main source of carbohydrates, along with a few other natural complex carbs as they serve as a slow-digesting energy source. You will stay full for longer and won't have a dramatic insulin spike. Examples include brown or wild rice, potatoes, sweet potatoes, oats, whole-wheat pasta and whole-grain breads. **M.E**




EXCLUSIVE TO

**Xtreme Nutrition**

INSANE LABZ™



FIND US ON  

SHOP ONLINE [www.xtremenutrition.co.za](http://www.xtremenutrition.co.za) E-mail: [sales@xtremenutrition.co.za](mailto:sales@xtremenutrition.co.za)

**I**N OUR ARDUOUS QUEST OF BUILDING BIGGER, MORE DEFINED MUSCLES, SUPPLEMENTS ARE CRITICAL FOR STEADY GAINS.

One, in fact, struggles to remember a time when bodybuilders depended on cups of strong black coffee, a handful of desiccated liver tablets and tablespoons of blackstrap molasses to crank up the intensity and build serious muscle.

Who could forget Rocky gulping down raw eggs for energy in one of his movies? Fortunately, with the progression of science and research, and the impact that has had on training, supplementation has evolved.

With this in mind, we approached some of the best bodybuilders in South Africa, to find out what they have in their gym bags and on their kitchen counters to boost the process of muscle growth and development.

**WHAT  
THE BEST  
BODYBUILDERS  
IN SA TAKE  
AND WHY**

**SUPPS THAT  
PACK A PUNCH**



# AWONKE NGOMA

Rising bodybuilding star Awonke Ngoma (2nd in the Men Middleweight 85kg class at the IFBB South African Championships) relies on branched-chain amino acids (BCAAs), whey protein and glutamine as part of his daily regimen.

"My top three supplements that I use are very basic, yet I feel that they are essential while I am prepping for a show. In the morning upon waking I take 5g of glutamine and 5g instantiated BCAAs from Doorman Nutrition. I then head to the gym for my morning cardio session in a fasted state. The glutamine and BCAAs help "armour coat" my muscle," he explains.

These supplements prevent catabolism while Awonke is burning fat. He consumes another 5g of glutamine and 50g of whey protein mixed with 50g of oats immediately after his cardio session.

The popular Durban-based bodybuilder likes to squeeze in another 50g of whey protein and 5g of glutamine between the six solid meals he eats throughout

**AWONKE LIKES TO MIX 20G OF BCAAS AND 10G OF GLUTAMINE WITH A SUGAR-FREE SOFT DRINK. HE SLOWLY SIP ON THIS MIX THROUGHOUT THE DAY. THIS ENSURES THAT HIS BODY IS CONSTANTLY FED WITH THE HIGHEST QUALITY OF AMINO ACIDS IT REQUIRES TO BUILD MUSCLE.**

the day.

BCAAs, which refers to the branched chemical structure of these amino acids, are essential nutrients that include leucine, isoleucine and valine. Bodybuilders use them to improve performance during exercise and reduce protein and muscle breakdown.

Glutamine is an amino acid used in the synthesis of protein and supports the production of muscle while it regulates the immune system.

Whey protein is known for its antioxidant benefits and its ability to enhance muscle recovery and growth. It digests very rapidly and is responsible for fast-tracking amino acids to the muscle cells which is essential for muscle growth.

"Prior to my weight training session in the evening I mix 5g of glutamine and 10g of BCAAs and slowly sip on that mix during my workout. After the workout I will have my 10g of glutamine and 60g whey protein."

Awonke likes to mix 20g of BCAAs and 10g of glutamine with a sugar-free soft drink. He slowly sips on this mix throughout the day. This ensures that his body is constantly fed with the highest quality of amino acids it requires to build muscle.

Awonke attributes a big part of his recent success as a bodybuilder to the high quality products manufactured by fellow competitive bodybuilder Keegan Seeram from Doorman Nutrition who understands the bodybuilding industry and how the slightest shift in nutrient ratios can effect the condition of an elite athlete.



**"WITHOUT PROTEIN WE CANNOT GROW MUSCLE AND THAT IS WHY I LIKE TO USE WHEY ISOLATE. I TAKE IT FIRST THING IN THE MORNING AND IMMEDIATELY AFTER MY WORKOUT TO KICKSTART THE ANABOLIC PROCESS."**

# JOHN LESLIE

WBBF pro bodybuilder John 'The Terminator' Leslie also lists whey isolate, amino acids and glutamine as his most important supplements. He uses products manufactured by Supplements SA.

"Without protein we cannot grow muscle and that is why I like to use whey isolate. I take it first thing in the morning and immediately after my workout to kickstart the anabolic process when it will be utilised very quickly. Protein is king for any bodybuilder and by using whey isolate it will assist me in building new muscle, and

also helps with recovery after a hard workout. Whey isolate is one of the most complete forms of protein available."

John also cannot do without his BCAAs and essential amino acids (EAAs). "Amino acids are the building blocks of protein and that is the main reason I use them."

The last item on his must-use list of supplements is glutamine. "I drink glutamine after a workout and also mix it with my whey isolate in the morning for muscle recovery. I sip it before my training session to help reduce muscle breakdown."

## JOHNNY LUCAS

Another upcoming bodybuilder is Johnny Lucas, who recently won the Men Middleweight 85kg class at the IFBB South African Championships. He says that he uses various supplements to compliment his diet and training. "If I had to pick the three most important ones it would be BCAAs, glutamine and whey protein from Pure Nutrition. BCAAs are three of the nine essential amino acids required to build muscle protein. These are essential amino acids due to the fact that the body cannot produce them and they need to be consumed in food or in a supplement form. BCAAs therefore promote muscle repair and growth over time and I would also recommend it for people just starting an exercise programme as it helps reduce fatigue," says Johnny.

L-glutamine is another essential amino acid required to help prevent muscle tissue breakdown. "I use glutamine to pull me through the high intensity sets to limit catabolism." He recommends using both BCAAs and L-glutamine at least three times per day.

Johnny also uses whey protein to help with muscle tissue growth, aid in muscle recovery and for general good health. "As a

**"I USE GLUTAMINE TO PULL ME THROUGH THE HIGH INTENSITY SETS TO LIMIT CATABOLISM. I RECOMMEND USING BOTH BCAAS AND L-GLUTAMINE AT LEAST THREE TIMES PER DAY."**

bodybuilder who engages in a lot of physical activity as part of an exercise regimen my body requires more protein and amino acids than the recommended daily allowance for the average person. With these products anyone can build slabs of muscle," says Johnny.

## JACO VENTER

Nabba bodybuilder Jaco Venter is supported by TNT Mercury and relies on vitargo-based

products. "It is absorbed straight through the stomach wall and is utilised far more efficiently than other simple carbohydrates." Jaco also uses BCAAs in his pre-, intra- and post-workout drinks. He believes in taking a BCAA product that is L-leucine dominant. "BCAAs are critical in protein synthesis, recovery and anabolism. They are metabolised in the muscles and not the liver, and unlike most amino acids they play a vital role in the synthesis of glucose."

Jaco also believes in whey protein with its great amino acid profile, bioavailability and the high levels of all the amino acids critical to building muscle.

"The problem with excessive consumption of whey protein is the rate at which it is absorbed. We can only assimilate smaller servings efficiently and if taken without carbohydrates it is generally converted into energy if used as a post-workout supplement," Jaco says.

**"BCAAS ARE CRITICAL IN PROTEIN SYNTHESIS, RECOVERY AND ANABOLISM. THEY ARE METABOLISED IN THE MUSCLES AND NOT THE LIVER, AND UNLIKE MOST AMINO ACIDS THEY PLAY A VITAL ROLE IN THE SYNTHESIS OF GLUCOSE."**

## CONCLUSION

Supplementation can greatly influence the process of muscle growth and development in a myriad ways. The most popular supplements are the ones that can offer the widest range of benefits to obtain maximum muscle gains in the quickest and most effective manner. Possibly more importantly, it means we no longer have to force down raw eggs like the legends of the past once did... **M.E.**

# REDUCE MUSCLE BREAKDOWN AND **UNLEASH YOUR TRUE** MUSCLE BUILDING POTENTIAL

WITH SSN'S LEUCINE ENRICHED BCAA 3:1:1



**AVAILABLE NOW**  
PERFECT FOR REFUELING HUNGRY MUSCLES

See in-store for our special offers on these great products.  
Offers valid from 20th November 2015 - 6th December 2015

**Dis-Chem**  
PHARMACIES

Pharmacists who care

# BODYBUILDING'S DARK SIDE

## THE BAD, THE UGLY, AND THE EVEN WORSE

**P**rofessional bodybuilding has seen better days, that's for sure. While the IFBB should have been reveling in what is akin to the sport's Super Bowl, Olympia weekend had what seemed like a dark cloud hanging over it in the Las Vegas desert.

Main players and fan favourites not taking to the stage, the main title sponsor filing a lawsuit against the promoters, and a head judge breaking away

to announce the launch of his own bodybuilding organisation were just a few of the headlines... it was quite a show, but for all the wrong reasons.

When it was all said and done, Phil Heath – who was not at his best but was good enough – won his fifth consecutive Sandow, but even that announcement was loudly booed by the fans in attendance at the Orleans Arena, the last in a string of boos on the night.

With so much coming out in the Olympia weekend wash, fans and athletes alike are asking if this is it; has bodybuilding's dirty laundry being aired? Or is this merely the tip of the iceberg for a sport that has already had its fair share of controversies? Will bodybuilding be able to rebound and if so, will it require drastic changes?

### BIG NAMES AWOL

**What has been happening over the past few years is the direct result of social media and its effects on the younger generation. The IFBB was already seeing its pros being dwarfed by the likes of Rich Piana, Bostin Loyd, Kali Muscle and CT Fletcher when it comes to followers and 'likes' on the various platforms.**

Go to any fitness expo where the aforementioned can be found and the lines at their booths are a lot longer than the ones at the booths of Heath, Jay Cutler and even Ronnie Coleman. And the two most popular IFBB pros in terms of social media

– Kai Greene and Dana Linn Bailey – didn't even compete at the Olympia, albeit for very different reasons.

Bailey has become a superstar and is adored by both men and women alike. Her various business ventures, which include fitness apparel, a supplement line, branded gyms, and more, now dominate her schedule, to the point where she no longer has the time for contest prep. So the first-ever Women's Physique pro and Olympia winner was a hit at the expo but never donned her posing suit in an attempt to reclaim her title from Juliana Malacarne.

The situation with Greene went even deeper, and by the press conference there were more questions than answers as to why he didn't even give it a shot or, more to the point, why exactly he wasn't given the opportunity to try to finally unseat Heath at the fourth time of asking? What made the fiasco even more bizarre was that "The Predator", who is a three-time runner-up to Heath and arguably his closest rival, made a guest posing appearance at the Arnold Classic Europe a week later and spoke on video about how he is still loyal to the IFBB.

ISTVANCSAK / SHUTTERSTOCK.COM

## WHAT OFF-SEASON?

Even though most of the top tier bodybuilders like Greene and Heath compete only once a year at the Olympia, their respective schedules are busy with guest posing, photo shoots, interviews, supplement company commitments and personal appearances at expos all around the world.

So one of the main questions in the Greene situation was: did he have too many distractions at crunch time near the end of his Olympia contest prep? Only he can answer that question, but speculation was running rampant if this was the cause.

Approximately one month out, Greene and his

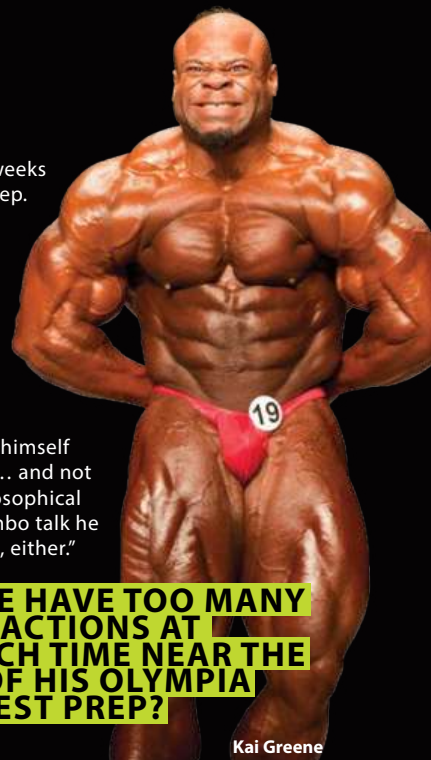
supplement sponsor Muscle Meds parted ways under cloudy circumstances. But then a week or so later, it was announced that Greene was launching his own supplement line Dynamik. Then the fiasco with his Olympia contract not being signed and returned began. The rest is (confusing) history.

"When it comes time to prep for a show, especially one as prestigious as the Olympia, you have to put everything aside – including business," said an IFBB pro who chose to remain anonymous. "Even if you have expiring contracts with companies that pay your bills, the passion for the sport has to come first. Get an extension or something and they will work with you because placing high at that type of show can only help both of you.

"Look, Kai has been damn close to winning that show and his work ethic and dedication has never been questioned before," the pro continued. "It makes no sense for him to worry about all of these other things with

only a few weeks left in his prep. Until the real story actually comes out, we all have our theories. But they mean shit without Kai himself saying why... and not in that philosophical mumbo-jumbo talk he always does, either."

**DID HE HAVE TOO MANY DISTRACTIONS AT CRUNCH TIME NEAR THE END OF HIS OLYMPIA CONTEST PREP?**



Kai Greene

## US VS THEM

When long-time IFBB judge and NPC promoter Lee Thompson suddenly announced that he was walking away to form NPC Global, a pro/am organisation that will immediately become a direct rival to both his former employers, it immediately became an 'us versus them' scenario. IFBB pros began posting on social media and via online video what appeared to be carefully scripted pledges of allegiance to the two organisations (the IFBB and NPC).

Thompson was bashed in some of these and it all seemed too convenient for him to suddenly be cast as the bad guy after 10-plus years of service. Even he had to scoff at that. "You cannot rewrite history," said Thompson. "If I was so evil, then where was all of this stuff until (recently)? I chose to resign and then all of a sudden, 72 hours later, these people start posting these things."

Perhaps the monopoly that the IFBB and NPC have enjoyed for decades was not the best thing for the growth of the sport and for individual competitors, both amateur and professional alike. But this was certainly not the agenda of the ones who decided to publicly announce that they owed everything to the bodybuilding organisation they currently belonged to, and that even included Heath.

"Phil says what the IFBB instructs him to say and is a puppet doing what he is told," said IFBB and NABBA pro bodybuilder Lee Priest. "I know that steroid use can shrink your balls but, guys, you still have them."

Added the anonymous IFBB pro: "We all know that politics come into play and Thompson knows it first-hand. So if he has

**"AT THE END OF THE SUMMER, IT WAS ANNOUNCED THAT BOTH THE IFBB AND NPC WOULD BE ADDING A NEW DIVISION IN 2016 CALLED MEN'S CLASSIC PHYSIQUE."**

any shot at succeeding, that under-the-table stuff has to come to an end. A lot of people that I spoke to are taking a 'wait-and-see' attitude with (his new organisation) and if it becomes a good option, you never know what the future holds."

## ARNOLD ROCKS THE BOAT

**Taking a step back, the start of the IFBB's bad luck seems to have began back in March when Arnold Schwarzenegger made his remarks about the quality of judging, even naming IFBB president Jim Manion in his criticism of the wide waists that have become commonplace. That's when a line in the sand was drawn...**

Many IFBB pros – including Heath and Cutler – publicly criticised "The Austrian Oak" and the former went as far as chastising him for his leg size, something that would seem

like bodybuilding blasphemy when it comes to taking a shot at the legend himself. But just when it appeared that it would be a never-ending disagreement, the brass relented.

At the end of the summer, Manion announced that both the IFBB and NPC would be adding a new division in 2016 called Men's Classic Physique. This seems to be a move to please Schwarzenegger and the people who agreed with him that some kind of change needed to be made. However, this seems like one that won't fix the problem, but rather just invite more to the table.

At shows that already drag on for hours on end, was it really necessary to add yet another division to the mix? An attempt to fix what was wrong in the existing line-ups could have been an alternative; one that would have been viewed as a proactive move instead of one that will put more money in the pockets of the promoters and higher-ups in the two federations.

## CONCLUSION

**Yes, bodybuilding has a dark side and it rears its ugly head more often than not of late. What occurred directly before, during and certainly after the Olympia was the culmination of years of issues building up that finally came to a head. It may take some work to correct everything at this point, but even if it does go that way we have to ask, is some of that damage irreparable? ME**

**T** rue power is synonymous with great traps. So is chest. And more often than not your ab workout could probably use a tune-up too.

**What is a most muscular pose on stage without big traps and what is a side-chest pose without an impressive chest?**

For bodybuilder Michael Appelcryn the development of these muscles did not happen by chance. You cannot have a symmetrically superior physique without giving them the necessary attention they need.

Michael has been training and competing for more than 8 years and made some steady gains in this time, most notably in beefing up his chest and trapezius muscles.

"I like to move heavy weight but will never compromise on form," says the 32-year-old who recently won the Nabba/WFF Josi Classic's Seniors 1.72-1.79m category as well as the Senior Men's Overall title. "In the gym my mentality is to get things done. It's a do-or-die environment where failure is not an option."

While prepping for the Nabba National Championships it seemed only fitting to find out how Michael turned his traps, chest and abs into areas of excellence.

# TERRIFIC TRAPS, & SHR

CHART A STEADY COURSE FOR GREATER GAINS WITH MICHAEL APPELCRYN'S TOP MOVES

## TRAINING SPLIT:

### MONDAY

Chest and triceps

### TUESDAY

Back and biceps

### WEDNESDAY

Quads, hamstrings, calves

### THURSDAY

Shoulders, traps, abs

### FRIDAY

Chest and biceps

## ATHLETE STATS:

OFF-SEASON WEIGHT: 101kg

CONTEST WEIGHT: 90kg

HEIGHT: 1.72m

LIVES: Vaalpark, Free State

CONTEST HISTORY:

- 2007** ▶ IFBB Sedibeng  
Novice - 1st place (men's middle weight)
- 2008** ▶ IFBB Sedibeng Championship  
2nd place (middle weight)  
▶ IFBB Night of Champions  
3rd place (light middle weight)
- 2009** ▶ IFBB Sedibeng Championship  
2nd place (middle weight)  
▶ IFBB Night of Champions  
2nd place (middle weight)  
▶ W.P.F Welkom Classic  
Senior U/75kg - 1st place  
▶ W.P.F southern provincials  
Senior U/75kg - 1st place
- 2010** ▶ WBBF Millennium Gold Plate - 6th place  
▶ W.P.F Seniors U/85kg - 6th place  
▶ IFBB Night of Champions  
Middle weight - 4th place  
▶ IFBB Sedibeng Championship  
Middle weight - 1st place  
▶ W.P.F Southern Provincials  
Middle weight - 1st place  
▶ IFBB SA Championships - 2nd place  
▶ W.P.F Welkom Classic - Senior U/85kg - 1st place  
▶ W.P.F Southern Provincials - Overall Winner
- 2011** ▶ IFBB Night of Champions  
Middle weight - 3rd place  
▶ W.P.F Welkom Classic  
Senior U/85kg - 1st place
- 2012** ▶ IFBB Sedibeng Provincials  
Middle weight - 1st place  
▶ IFBB Sedibeng Provincials - Overall Winner  
▶ IFBB H&H Classic - Up to 90kg - 2nd place  
▶ W.P.F Welkom Classic - Up to 90kg - 1st place  
▶ W.P.F Welkom Classic - Overall Winner  
▶ W.P.F TTT Nutrition Classic  
Middle weight - 1st place  
▶ TTT Nutrition Classic - Overall Winner  
▶ W.P.F Welkom Classic - Up to 90kg - 1st place  
▶ W.P.F Welkom Classic - Overall Winner  
▶ W.P.F SA Championships - 1st place up to 90kg
- 2014** ▶ Rossi Classic - 2nd place  
▶ WBBF SA Championships  
Light heavy weight - 1st place
- 2015** ▶ Nabba/ W.F.F Classic Men's  
Overall class 2 - 1st place  
▶ Nabba Josi Classic - Men's class 2 - 1st place  
▶ Nabba Josi Classic - Overall Winner



# BIGGER CHEST REDDER ABS!

# TRAP ATTACK

**F**or Michael shows are won from the back and part of it is the trapezius muscle.

"I believe in using a slow but strong shrug action with barbells and dumbbells to build my traps. Nothing fancy...just straight-forward, hard work," states Michael.

"Everybody wants traps that will jump up on stage when they hit a most muscular pose. My philosophy in bodybuilding and in life is that if you believe you can do something you can do it if you work hard enough."

He starts off his trap blasting on shoulder day with standing barbell shrugs to the front.

## BARBELL SHRUGS:

Stand with your feet shoulder width apart. Grasp a barbell with your palms facing in. Raise your shoulders, hold for a second and slowly return to the starting position. A different version is to hold the barbell behind your back as popularized by 8 x Mr. Olympia Lee Haney. "I like to blast my traps with a barbell before using dumbbells. This movement targets the trap fibers perfectly," says Michael who believes that with all bodybuilding movements full-range-of-motion is the fastest way to make progress.

4 SETS OF 8 REPS



3 SETS OF 12 REPS

## UPRIGHT ROWS WITH E-Z BAR:

Michael also hits his traps with upright rows with an e-z bar using a shoulder wide grip. Grasp the bar with an overhand grip. Lift the bar up without jerking it until it is at the level of your chin. Slowly lower the bar and repeat.

Michael alternates between this version and using a bar attached to a cable to counter boredom.

**TIP: YOUR ELBOWS SHOULD BE HIGHER THAN THE BAR THROUGHOUT THE MOVEMENT.**

## DUMBBELL SHRUGS:

Hold dumbbells and stand with your knees slightly bent. Raise your arms to your ears, pause and return to original position. "Slowly lower the dumbbells to the starting position to fully benefit from the exercise." Michael will continue with shrugging the dumbbells even after failure employing a rest/pause strategy. He'll keep his focus on the mind-muscle connection and will take each rep slowly and smoothly through the full-range of the movement sometimes doing unilateral shrugging to slam on the size. "I like to make a workout harder so I will sometimes continue the movement with one dumbbell at a time to get a peak contraction. The tension is constant and I will burn my traps further by holding each squeeze for a second or two."

4 SETS TO MAX



## MICHAEL'S ADVICE ON TRAPS:

"To roll your shoulders back and forth while shrugging won't add anything to the effectiveness of the movement. My main goal is not to reach a pre-determined rep target but rather to feel the muscle working. I make absolutely sure that there is constant stimulus on the muscle I am working on. The plan is to always make it more difficult than the previous workout. By keeping constant tension on the traps for the duration of a set you can improve the quality and make it harder to execute. Do this and your traps will have no other option but to grow."



# BLOW UP YOUR CHEST

## FLAT DUMBBELL PRESS

While doing this exercise Michael constantly reminds himself to work the muscles and not the weight. "The sloppier you train the more secondary muscles will take over and leave you without maximum contraction in the pecs."

Grasp dumbbells while lying on a flat bench with your feet flat on the floor. Lower the dumbbells toward your chest as far as you can before pressing the weights back up.



**"THE INCLINE IS EXTREMELY EFFECTIVE AT STIMULATING NEW GROWTH FOR ME. I LIKE DOING THEM BECAUSE THEY DELIVER THE GOODS."**

4 SETS OF 10 REPS

## INCLINE BARBELL PRESSES

It is almost a cliché that most top bodybuilders get their bums on a flat bench press at the start of a chest workout but Michael likes to start his by doing incline barbell presses. He would rather perform the flat bench press with dumbbells to fully stretch his pecs.

He warms up thoroughly before embarking on heavy pressing. Lie on an incline bench and grasp the bar with a medium to wide grip. Unrack the bar and lower it down to the upper chest, stop momentarily, then press it back up to the original position.



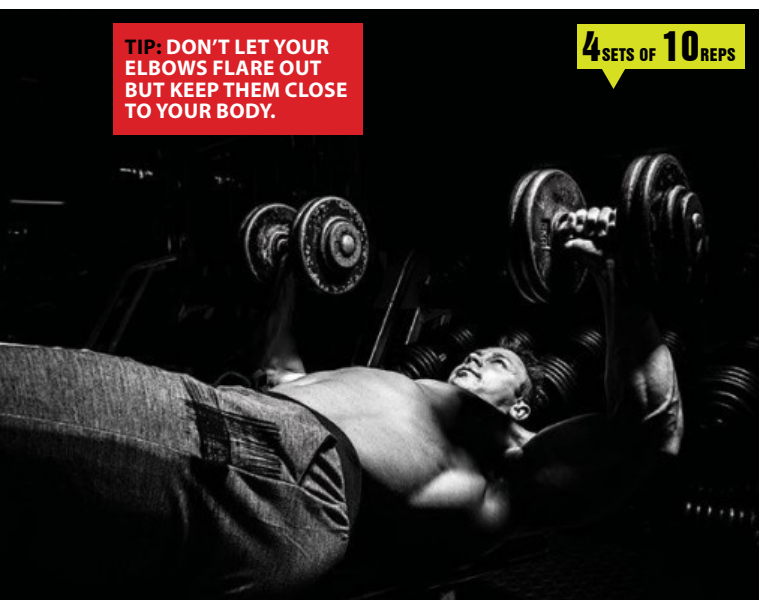
## DECLINE DUMBBELL PRESS

"Don't be afraid to add some decline presses to your chest workout. I wouldn't be where I am today without them," Michael adds. Take a dumbbell in each hand and lie on a decline bench. Lift the dumbbells straight up overhead. Now slowly lower them. Squeeze your chest at the bottom of the movement and return to the original position.



**TIP: DON'T LET YOUR ELBOWS FLARE OUT BUT KEEP THEM CLOSE TO YOUR BODY.**

**4 SETS OF 10 REPS**



**"PUT THESE AT THE END OF YOUR WORKOUT FOR AN UNBELIEVABLE PUMP. BY THIS TIME YOUR MAJOR CHEST MUSCLES WILL BE FATIGUED AND YOUR INNER PECS WILL DO ALL THE WORK AND THAT IS WHAT YOU WANT."**



**4 SETS TO MAX**

## INCLINE CABLE FLYS

"If used correctly, incline flys with cables can take your physique to the next level," says Michael. Lie back on an incline bench between two floor pulleys. Take each handle and bring your hands together. With your elbows slightly bent, lower your hands out to either side in a wide arc until you feel your pecs contract to a maximum. Bring your arms back to the original position and complete the set.

## MICHAEL'S ADVICE ON CHEST:

"I like to do chest predominantly with dumbbells because it is impossible for a stronger side to take over. In my opinion, there is too much emphasis on the barbell bench press. I focus on feeling the muscle and squeezing at the top when I use dumbbells. Don't bench press for maximum sets of low reps because you will only end up with injuries to your shoulders, elbows, wrists and pecs. Sometimes we bench too much too often for too many sets of too few reps."

# ABS. LEANER, HARDER & MORE DEFINED

**F**or a head-turning midsection Michael employs ab exercises to add value to a strict diet. "Abs are made in the kitchen," says Michael. "Great ab definition only comes through eating clean, doing cardio and performing a lot of reps and sets to get into proper contest shape."

## CABLE CRUNCH FOR UPPER ABS

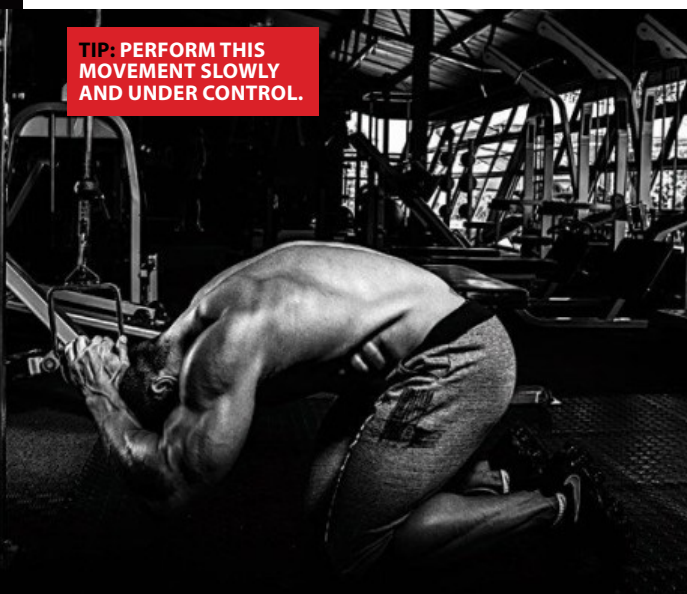
Attach a handle to the pulley of a cable station. Kneel down facing the weight stack so your knees are bent 90 degrees. Crunch your chest toward your hips and contract your abs. Slowly return to the starting position.

Although Michael aims to increase the resistance in his exercises he will always try and perform more reps when he is training his abs. "I also decrease the rest period between sets to step up the intensity level."



**3 SETS TO MAX**

**TIP: PERFORM THIS MOVEMENT SLOWLY AND UNDER CONTROL.**



## CAPTAIN'S CHAIR FOR LOWER ABS

Michael targets his lower region with this exercise right after the cable crunch. He holds his upper body steady while raising his legs and flexing his abs.

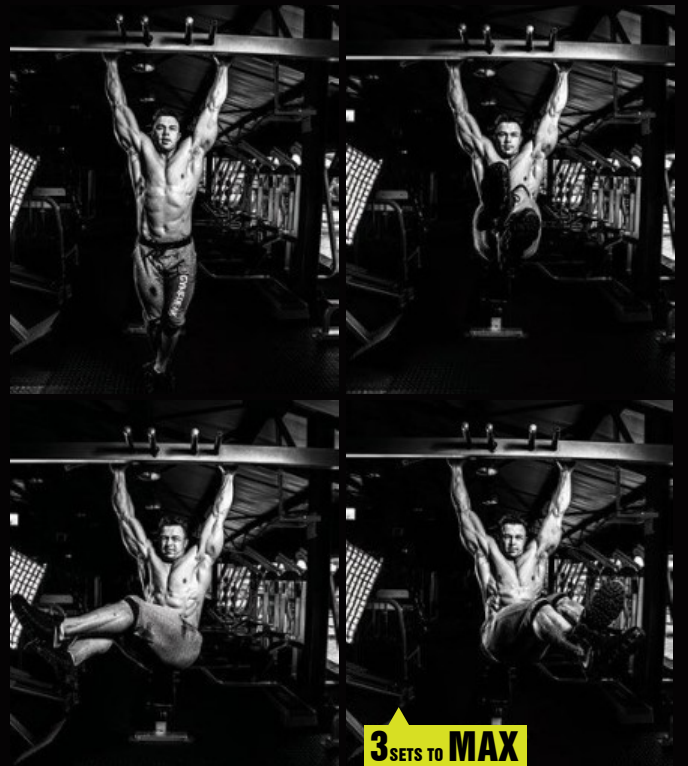
**3 SETS TO MAX**



**"DON'T LIFT YOUR LOWER BACK OFF THE BACK SUPPORT WHEN YOU DO THIS EXERCISE."**

## HANGING LEG RAISES FOR OBLIQUES & INTERCOSTALS

Take hold of a chinning bar and hang from the bar. Lift your legs and work either side of your abdominals by twisting to work your obliques and intercostals.



**3 SETS TO MAX**

**MICHAEL APPELCRYN HAS SHOWN US THAT hardcore is all about dedication and determination. Follow his lead and it will also translate into gains for you. M.E.**



USN PRODUCTS ARE



*William Bonac*  
8<sup>TH</sup> MR. OLYMPIA 2015.  
USN AMBASSADOR.

 **USN**

EXTREME PRE-WORKOUT

# INSANE PUMPS. EXPLOSIVE POWER.

#CHALLENGEYOURSELF



## NEW

### ADVANCED DOUBLE IMPACT FORMULATION

PER 2 SCOOP SERVING

- + 300mg**  
CAFFEINE ANHYDROUS
- + 7850mg**  
NITRO-X PROPRIETARY BLEND
- + 25mg**  
ASTRAGIN™ 



THE ALL-NEW ALL-IN-ONE  
EXPLOSIVE PRE-WORKOUT + EXTREME THERMOGENIC.  
**PUSH HARDER, SHRED MORE.**



# LABEL INTE

## LEARN HOW TO READ AND UNDERSTAND SUPPLEMENT LABELS

**A**S CONSUMER AWARENESS AROUND ADDED SUGAR, ARTIFICIAL INGREDIENTS AND THE CALORIE CONTENT OF THE FOODS WE EAT IN MODERN SOCIETY HAS GROWN MANY PEOPLE HAVE BECOME PROFICIENT FOOD LABEL READERS.

However, how many of us consider supplements as food, and how many of us even bother to read the labels on the tubs and bottles of whey, mass builders, pre-workouts and fat burners we buy in our quest for optimal health and the ultimate physique?

While the debate about whether supplements should be classified as food or as medicine rages on, it pays to understand what the labels on these products signify, and to factor these data into your daily diet.



## FOOD OR MEDICINE?

**A**s Mario van Biljon, co-founder of local supplement brands SSN and Supashape, explains, depending on the types and/or levels of the ingredients different laws and rules apply. "For most 'foodstuffs', labelling legislation is governed by the Department of Health. However, the inclusion of certain ingredients or ingredients above certain specified levels can result in the product being classified

as a 'listable' or 'registerable' medicine." Medicines labelling is governed by the Medicines Control Council (MCC).

"The most important information that you should see and refer to on properly labelled nutritional supplements on the local market should include the ingredient statement, the nutritional table, and the vitamin, mineral and amino acid profile per serving," continues Van Biljon.

**"THE MOST IMPORTANT INFORMATION THAT YOU SHOULD SEE AND REFER TO ON PROPERLY LABELLED NUTRITIONAL SUPPLEMENTS ON THE LOCAL MARKET SHOULD INCLUDE THE INGREDIENT STATEMENT, THE NUTRITIONAL TABLE, AND THE VITAMIN, MINERAL AND AMINO ACID PROFILE PER SERVING."**



# PROGATION

ABELS TO MAKE MORE INFORMED PURCHASE DECISIONS



## BRANDING & PACKAGING

**M**ark Wolff, founder of supplement manufacturer 32Gi, adds that a product label, if done according to proper legislation, will empower consumers who have the right knowledge to make more informed buying decisions to better meet their performance-based nutritional needs.

“Firstly, it is important to understand that product packaging is there to attract potential customers and drive sales. It is therefore very easy for consumers to make a purchase decision based on the look, feel and the claims made on the front of a product. Unfortunately most buyers ignore the most crucial part of the product packaging which is the content in the nutritional table on the back of the product. And it’s at the back

for a reason – it’s granular information that doesn’t make a product look attractive and may seem confusing and overwhelming for uninformed consumers.”

According to Wolff there is local legislation governing claims made on packaging but it is not proactively enforced to any significant degree. “There are however locally manufactured products that currently meet European standards where products are governed by the European Food Safety Authority (EFSA). In these cases the labelling needs to adhere to the strictest of standards as product naming conventions are not allowed to also be claims. Any claims need to be scientifically and medically proven and authorised as an approved claim by the EFSA.

**“AS WITH ANY CONTRACT, ALWAYS LOOK AT THE FINE PRINT. TURN THAT PRODUCT AROUND AND INTERROGATE THE INGREDIENT LIST BECAUSE THAT IS WHAT YOU ARE ACTUALLY BUYING.”**

Unfortunately in South Africa we have not yet reached that level of policing and this is where consumers can be led into buying supplements based on unfounded or even dubious claims.”

When consumers are able to look past the design elements, marketing speak and product claims, and are able to read and understand the nutritional label, Wolff suggests that they then have the power to make informed decisions. “As with any contract, always look at the fine print. Turn that product around and interrogate the ingredient list because that is what you are actually buying.”

# KNOW YOUR INGREDIENTS

**V**an Biljon explains that the **ingredient statement is simply a list of all the constituents in a particular formula. "You can consider it as the 'recipe' for the formulation, without listing the level of each ingredient. The most important thing to remember here is that according to current labelling legislation, ingredients in the product must be listed in order of descending concentration – the highest concentration in the formulation will be listed first and the ingredient with the lowest concentration listed last."**

Wolff elaborates that this is extremely useful information because a simple glance at the first two or three ingredients listed will let you know what the product is primarily composed of. "Companies do not have to specify exact amounts when listing ingredients on the label to protect intellectual property rights. However, by analysing the ingredient list you get a pretty good idea of what is included."

You may also find ingredients that are represented by proprietary names, but Wolff says this is generally more prevalent in the United States. "Manufacturers may formulate a specific compound, like a specific combination of amino acids, and then register its name with the authorities. This name is then added into the ingredient list. Generally product labels will state the breakdown of these ingredients but sometimes there is just a trademark name and more in-depth analysis needs to be done to verify the content of it. In general it is best to avoid something if you don't understand all the ingredients in it."

Another point of contention is ingredients that are listed as numbers with an 'E' prefix before them. "Consumers often think these ingredients are hazardous, however this couldn't be further from the truth. *The E-number system is a classification system used to identify food additives, many of which aren't necessarily bad for you. Some can be but, as an example, beetroot natural colour extract will be listed as E162 and carrot extract as E160a.* However, some colours such as Quinolone yellow, denoted by the number E104, has been deemed to be hazardous. Manufacturers in the EU that use it in their formulations have therefore been requested to state on product labels that this product can have an effect on concentration in children. However, in South Africa it is not policed so consumers buy these products without knowing exactly what the contents of the products are. Colouring and flavouring should always be taken into consideration when purchasing a product and the ingredients will definitely show you exactly what has been included. It is best to go for natural colours and flavours whenever possible

**"COMPANIES DO NOT HAVE TO SPECIFY EXACT AMOUNTS WHEN LISTING INGREDIENTS ON THE LABEL TO PROTECT INTELLECTUAL PROPERTY RIGHTS. HOWEVER, BY ANALYSING THE INGREDIENT LIST YOU GET A PRETTY GOOD IDEA OF WHAT IS INCLUDED."**

## COMPREHENDING COMPOSITION

**W**hile nutritional tables often look confusing to uninformed consumers they're actually very simple to read once you know what you're looking at, says Wolff. **"The table is broken down into a few sections. Firstly, at the top of any nutritional table is the serving size of the product. This is critical information as it will allow the consumer to determine how much of the product to use each time and what the composition of each serving is."** Stating the number of servings in the container is a statutory requirement.

The nutritional table should also offer information on aspects such as the energy content and the macronutrient content per 100g. "A few important points to remember include the fact that the per 100g column is also a statutory requirement for products produced in South Africa. This allows consumers to make direct comparison between different brands and products. Conversely, the per serving listing is currently optional," explains Van Biljon.

Some confusion can arise when people

only refer to the per 100g content label, continues Wolff. "This can cause confusion if someone looks at the amount of carbs or protein per 100g as it may seem very high. However, more often than not, it does not reflect the actual serving size." Most serving sizes are between 30-50g, depending on the product and formulation.

Van Biljon adds that another important piece of information is the energy content of the product. In South Africa the energy content is listed in kilojoules (kJ), whereas in other countries such as the USA the term 'calorie' (kCal) is still used. "The kilojoule content of foods depends on the amount of carbohydrates, fats and proteins present in the food," explains Van Biljon.

"If a consumer is following a calorie restricted diet it's critical to understand the energy content of each serving," adds Wolff. "If an athlete is using it as an energy product then the portion, calorie content (derived energy) and macronutrient ratios will determine the suitability of the product."

**"A FEW IMPORTANT POINTS TO REMEMBER INCLUDE THE FACT THAT THE PER 100G COLUMN IS ALSO A STATUTORY REQUIREMENT FOR PRODUCTS PRODUCED IN SOUTH AFRICA. THIS ALLOWS CONSUMERS TO MAKE DIRECT COMPARISON BETWEEN DIFFERENT BRANDS AND PRODUCTS. CONVERSELY, THE PER SERVING LISTING IS CURRENTLY OPTIONAL."**



# A DISCERNING EYE

**A**rmmed with this basic knowledge you'll be able to make more informed decisions when faced with the wall of brands and products found in most supplement stores and pharmacies today. However, there are a few other important elements to consider before you swipe your card at the checkout counter.

When it comes to recovery and muscle building products, Van Biljon suggests that you pay careful attention to the protein content listed on the label. "Any added free form amino acids shouldn't be claimed against the protein content. If it is, there is a good chance the manufacturer is employing the practice of protein spiking – a means to increase label claims regarding protein content without using complete proteins."

For example, a manufacturer might use a low quality amino acid such as glycine, which has little benefit to muscle repair and development, because it is cheap – often a third or a quarter of the price of protein – and it also has a more palatable taste. The beneficial amino acids such

as BCAAs and glutamine are more expensive than pure protein so there is no incentive to spike products with these substances.

"By adding glycine to a whey product offering 80g of protein per serving, for instance, you reduce both the cost and quality of the product. So look at the ingredient statement. If you see amino acids listed then ask why they are included in a whey or diet protein product. Sometimes manufacturers won't list added amino acids, despite the statutory requirement to do so. This is when buying quality verified products and those backed by independent, third party assurance programmes is preferable."

You may also find that products offer protein blends, perhaps in the form of whey, casein and soy. "Any blended protein needs to list its sources, which are commonly proprietary names like MetaMyosin or Anabolic Protein X. Either way the types of proteins used need to be listed," continues Van Biljon.

**"LOOK OUT FOR MALTOSE, DEXTROSE, GLUCOSE, AND HONEY. HONEY IS A PURE SUGAR AND WHEN PROCESSED IT DOESN'T OFFER MANY HEALTH BENEFITS."**

spike won't be excessive when consumed," he continues. "However, when

consumed in high volumes it can result in glycaemic loading. More specifically, fructose is a form of sugar that is often used due to its low GI. However, it has been shown to have health implications when consumed in high volumes. Accordingly, South African labelling legislation now dictates that fructose can no longer be used as an ingredient in products that claim to be low GI."

According to Wolff, other types of sugars to be wary of include the milk sugars, lactose or galactose. "Also look out for maltose, dextrose, glucose, and honey. As much as people think honey is healthy it's a pure sugar and when processed it doesn't offer many health benefits. All the aforementioned sugars are labelled as sugars on a product."

"You may also find ingredients such as modified starch, which is commonly used as a thickener or stabiliser. This ingredient must be listed in the carb section but should be at low levels and shouldn't materially affect nutritional value," explains Van Biljon.

Wolff adds that due to their molecular structures these starches are often not classified as sugars on the label. "Depending on the type of starch used the effect they have on the body can be far worse than sugar. Maltodextrin and corn starch, for instance, have a higher GI than glucose, and vitargo is even higher. This often slips past the consumer's eye and these products are perceived to be ideal for low carb or sugar-free diets when, in fact, they aren't."

This reiterates the point that sugars and carbs should be included only when they fulfill a specific requirement, like increased glycogen production or restoration, or glucose availability during exercise. For instance, energy supplements should offer a blend of carbs and sugar, with 5-10% of its content coming from fructose. "Fructose is better at restoring liver glycogen than glucose, but athletes need more glucose-type sources to derive bioavailable energy during exercise. As such a combination is best, but with only a small amount of fructose," elaborates Van Biljon.

One final point to consider is the use of starches as a filler, which is sometimes done to bring down the cost of production. "This will reduce protein content per 100g, often to as low as 50-60g. Whey products should have a protein content that is closer to 75g or more. Flavouring systems and sweeteners will bring the protein content of a whey product down a bit – another reason why labelling a product as 100% whey contravenes labelling laws – so be wary of label claims to the contrary," concludes Van Biljon.

# SWEET IMPOSITION

**"YOU MAY ALSO FIND INGREDIENTS SUCH AS MODIFIED STARCH, WHICH IS COMMONLY USED AS A THICKENER OR STABILISER. THIS INGREDIENT MUST BE LISTED IN THE CARB SECTION BUT SHOULD BE AT LOW LEVELS AND SHOULDN'T MATERIALLY AFFECT NUTRITIONAL VALUE."**

**T**he other important ingredient to look out for is added sugar. When considering products aimed at improving aesthetics, Van Biljon states that only mass builders and products that have a specific purpose, like insulin spiking, have a requirement for carbs and sugar.

Added sugar has also been given a really bad name in the food industry and for good reason. "It's the most addictive foodstuff and it causes havoc with most people as it is over-consumed in our modern diets," explains Wolff. "However, it is important to discern between the types of sugars used as some have a specific role in certain products."

Sugar in its raw, natural state has a glycaemic index (GI) of around 64. "This ranks as medium on the GI scale which means the blood sugar

**"ANY BLENDED PROTEIN NEEDS TO LIST ITS SOURCES, WHICH ARE COMMONLY PROPRIETARY NAMES LIKE METAMYOSIN OR ANABOLIC PROTEIN X. EITHER WAY THE TYPES OF PROTEINS USED NEED TO BE LISTED."**

**I**n closing, Wolff states that it's important that consumers empower themselves with as much knowledge as possible to ensure they make the correct purchase decision. "Understand the contents of what you are buying,

always make sure that you have a snap shot of your health and understand what ingredients could impact you negatively if consumed. Remember, there are no short cuts or miracle products. It all boils down to hard work

in the gym, out on the road, and in the kitchen, and knowing what you're putting into your body plays a central role in that equation. Always put your health first, and only supplement a healthy diet with these products." **W.A.B.**

**I**t was a shock to the system for many when Dorian Yates, Shawn Ray and Kevin Levrone recently revealed the real steroid cycles they used to reach the heights of competitive success in the bodybuilding arena. Steroid stacks used by these iconic musclemen of the 1990s were regarded as extremely conservative when looking at what today's bodybuilders use to build lean mass and cut body fat.

Modern bodybuilders don't cycle their drug use and most of them would laugh in the face of what these legends were using to get a competitive edge over their challengers on the international stage.

The prevailing "more is more" mantra seems to be the only thing bodybuilders hear when they look to boost the effects of their time spent pounding iron in the gym and their approach to eating and supplementation.

However, this extreme 24/7 approach, where the only form of cycling seems to be the type of stack used, is not without its risks. Professor Brandon S. Shaw (PhD) from the Department of Sport and Movement Studies at the University of Johannesburg explains...

## A MULTITUDE OF 'DISEASES'

**"W**hen the liver is filled with toxins, such as anabolic androgenic steroids (AAS), blood from the gastrointestinal (GI) tract and spleen cannot enter the hepatic portal vein to enter the liver. When there are too many toxins in the body, the liver effectively 'dams' up," he elaborates. According to Shaw this is problematic in that the liver receives about 75% of its blood through the hepatic portal vein and when further toxins cannot be filtered it becomes swollen and enlarged, resulting in congestion of all glands, muscles, joints and body structures.

From the liver, toxins flow out into the blood vessels and the heart. Once toxins enter the

heart, they are pumped and carried all over the body where they enter into joints, muscles, nerves, glands, the brain and every other vital organ.

Toxins can go 'unrecognised' if they're permitted to remain in these structures leading to the direct cause of a multitude of eventually diagnosed conditions. So, while the heart may pump blood all over the body through the arteries, a liver congested with toxins may not permit the blood to flow back to the heart from a group of organs, or other tissue elsewhere in the body. Shaw says bodybuilders using AAS should take note that the same toxins that stress the liver could also impair thyroid function.

**GENERATION S:**

**THE HARD TRUTH**

**WHAT 'ROIDSDO TO YOUR BODY**

## OTHER ORGANS AT RISK

**A**AS can also cause the development of benign and malignant tumours in the prostates of men. This is because AAS use has been found to have a significant effect on the prostate by increasing prostatic volume, reducing urine flow rate and by altering voiding patterns.

In addition, steroid use typically alters blood lipids, increases blood pressure and increases the risk of abnormal blood clotting. The extent of these effects may differ depending upon the type, duration and volume of AAS use. "If the abuse continues for a prolonged period of time the risk for developing cardiovascular disease becomes high," says Shaw. As such, heart attacks are the most common cardiovascular event associated with steroid abuse. Abuse has also been linked to increases in blood pressure, blood platelet stickiness leading to unwanted and excessive blood clotting, which can result in a sudden blockage of arteries (especially in the heart and lungs), unwanted increases in heart size, specifically the left ventricle, an inability of the left ventricle to contract properly, increases in bad (LDL) cholesterol and decreases in good (HDL) cholesterol, life-threatening irregular or abnormal rhythms of the heart and even sudden cardiac death. Once again, while some of these changes are permanent, a degree of reversibility seems to happen after ceasing AAS use.

**"RESEARCH HAS FOUND THAT BODYBUILDERS WHO USE AAS FOR MANY YEARS DEVELOP PROTEIN LEAKAGE INTO THE URINE AND SEVERE REDUCTIONS IN KIDNEY FUNCTION."**

## LIVER, KIDNEYS

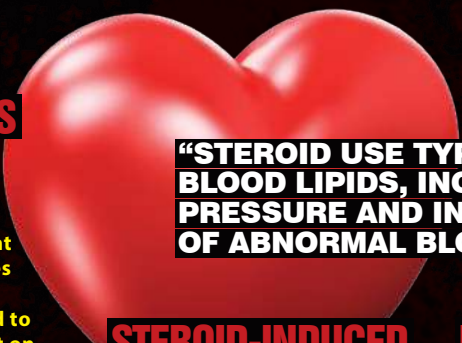
**T**he liver is the primary site for steroid clearance and abuse increases the risk of liver tumours (benign and/or malignant), liver damage, and blood-filled cavities throughout the liver (Peliosis hepatitis). This is particularly true for oral AAS and steroids that contain a 17-alpha-alkyl group.

Research indicates that 17 alpha-alkylated steroids, such as methyltestosterone, oxymetholone, and stanozolol, are directly toxic to liver cells and can cause liver injury, including cholestasis (interruption in the excretion of bile), peliosis hepatis (blood-filled cavities throughout the liver), hyperplasia (hazardous liver enlargement), and benign and malignant tumours.

"Thankfully, some of these conditions have been shown to be reversible," says Shaw.

What is the effect of AAS on the kidneys then which, like the liver, are also responsible for filtering waste products? Shaw says that the kidneys can be injured in diverse ways by many drugs, both legal and illegal. "Athletes who use AAS can destroy their kidney function. Research has found that bodybuilders who use AAS for many years develop protein leakage into the urine and severe reductions in kidney function that result in a variety of kidney disorders, including the development of tumours and scarring within the kidneys."

When AAS use is discontinued, kidney abnormalities improve but not in a case where the use resulted in advanced kidney disease. "Some extreme cases even ended in kidney failure," Shaw warns.



**"STEROID USE TYPICALLY ALTERS BLOOD LIPIDS, INCREASES BLOOD PRESSURE AND INCREASES THE RISK OF ABNORMAL BLOOD CLOTTING."**

## STEROID-INDUCED DIABETES

**T**here are also several factors at play that will increase a user's risk of developing steroid-induced diabetes. These include the dose and length of AAS use, family history of diabetes, obesity, a history of high blood glucose levels, and whether the AAS is taken orally or injected.

"Older individuals are more at risk," Shaw says. In many users who develop steroid-induced diabetes, the hazardous effects will go away after they stop using steroids. In some cases, however, bodybuilders will continue to have diabetes after they have stopped using drugs.

## TENDON AND LIGAMENT TEARS

**A**AS use has also been linked to increased risk of muscle belly injuries, torn ligaments and ruptured tendons. According to Shaw steroid use while exercising may cause a proliferation of collagen cells, which can decrease the tensile strength of tendons, change the rupturing strain of tendons and the normal biomechanics of the extremities.

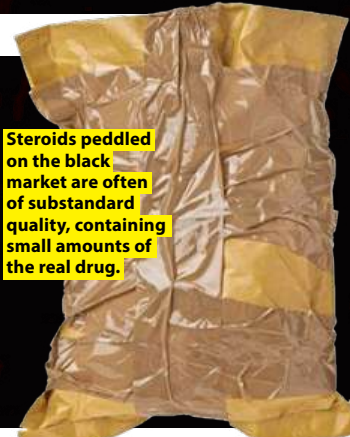
"This is the reason for the increased incidence of tendon and ligament tears in AAS users," he says. Other common musculoskeletal problems arising include bursitis, tendinitis and capsulitis injuries, especially in bodybuilders who have recently stopped using AAS (most prevalent 2-4 weeks after stopping AAS use). This is likely as a result of the sudden decrease in testosterone. Therefore, there is a rebound period with low testosterone levels. As such, a "safe" workout should be followed for about six weeks after a bodybuilder stops his cycle.

## IGNORANCE IS BLISS

**T**he side effects of synthetic drugs, designed to mimic the effects of the hormone testosterone, are not frequently discussed in gyms and locker rooms and are totally ignored by some bodybuilders.

Steroids peddled on the black market are often of substandard quality, containing small amounts of the real drug. And counterfeit steroids are also a growing trend in developing nations like South Africa and are widely recognised as a public health risk. These drugs are fraudulently produced, mislabelled steroids and purchased by users who believe them to be the real thing. Fake AAS may look identical to genuine AAS, but may be incorrectly formulated or produced in substandard and unsterile conditions, such as someone's garage or kitchen. Problematically, these counterfeit AAS are not subject to the same regulatory analysis as legitimate AAS. As such, these steroids often have incorrect amounts of active ingredients and are often "up-labelled" by drug dealers in a process in which dosages are placed in containers or vials listing higher dosages. Some counterfeit AAS have little or no active pharmaceutical substance and may contain ingredients that may have no effect, cause a range of serious health concerns, or may even be fatal.

**Steroids peddled on the black market are often of substandard quality, containing small amounts of the real drug.**



## ETHICAL DILEMMA

**S**haw says that there are huge differences in the side effects of steroids used under medical supervision and the abuse of them by the ill-informed at high dosages. "The clinical investigation of steroid use remains limited because there is a reluctance of institutional review boards to approve studies related to steroid use in a non-clinical population."

Doctors have struggled with the ethical side of becoming involved with bodybuilders using AAS because of the severe ramifications for those accused of prescribing it to athletes to improve their physiques and performance in the gym and on the bodybuilding stage.

Most physicians have limited knowledge about steroid use and tend to have an exaggerated understanding of the risks. This results in an aversion by doctors to adequately care for athletes who are suspected of or are obviously using steroids.

Most users are also extremely cautious about disclosing it to their doctor out of fear of being judged or it being reported to authorities.

Shaw says that there is a specific tendency to inject AAS directly into the muscle and not the glutes.

"Some people are tempted to inject steroids into various areas of the body reasoning that those areas are very soft and can easily be penetrated. However, anyone considering injecting themselves for whatever reason should have proper knowledge, proper supplies and maintain proper sterility. If a person ignores proper procedure or does not prepare adequately, it can lead to inflammation, infections, abscesses, scar tissue development, muscle damage, nerve damage and even death."

Shaw gives an example of athletes who injected steroids in the lower part of their buttocks by accident and punctured the sciatic nerve in the process.

**"ANYONE CONSIDERING INJECTING THEMSELVES FOR WHATEVER REASON SHOULD HAVE PROPER KNOWLEDGE, PROPER SUPPLIES AND MAINTAIN PROPER STERILITY."**



## EDUCATION IS IMPORTANT

**M**ore importantly, bodybuilders should never re-use needles, share them with others or try to sterilise them by rubbing them with alcohol or exposing them to a flame. It is also well known that steroids can be manufactured under non-sterile conditions and sold out of kitchens, garages, car boots and back yards. If you buy from these dealers and don't sterilise needles they are running the risk of life-threatening infections such as hepatitis B and C as well as HIV.

However, Shaw says the prevalence of these life-threatening effects seem to be low in steroid users. "Severe adverse effects of steroids are under-recognised and in the majority of cases under-reported, mainly due to these developing several years after use."

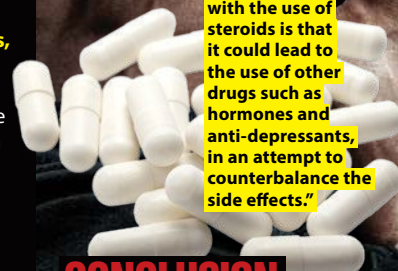
Irreversible adverse effects include cancers, heart attacks and strokes, male-pattern baldness in males and females as well as breast development (gynecomastia) in males. Women who abuse steroids can suffer from reduced breast size, coarse or thickened skin, clitoris enlargement and a deepened voice over the long-term. Another long-term consequence of steroid use in adolescents is, somewhat ironically, the possibility of stunted growth.

## TOXIC COCKTAILS

**B**odybuilders are extremists by nature. With the "more is more" notion they often opt to use a range of oral and injectable steroids at the same time. These drugs are also taken in extreme dosages in terms of what is generally recommended. How a person responds to a specific steroid depends on what he is using, how the substances interact with the user's genes, the specific dosage and the duration of the cycle.

It is no surprise then that the irresponsible use of steroids, in most cases by the ill-informed, can lead to health problems, but perhaps the biggest risk is that it could also lead to the use of other drugs such as hormones and anti-depressants, sometimes in an attempt to counterbalance the side effects. Human Growth Hormone (hGH), often used while a bodybuilder is in his post steroid cycle, is also one of the most sought-after bodybuilding drugs due to its ability to strip body fat and increase muscle mass. It is well known in bodybuilding circles that hGH allows fats to be used as a primary energy source and bodybuilders often go on it for long periods of time to reduce excess body fat. Synthol, an enhancement oil used to add size to weaker or imbalanced muscles as well as insulin, which works in synergy with steroids, are also abused. Steroids spawn new muscle while insulin inhibits catabolism in the muscle and liver by increasing the synthesis of glycogen and protein and promoting the entry of glycogen and amino acids into the muscle cells before a workout. This leads to improved stamina.

**"The biggest risk with the use of steroids is that it could lead to the use of other drugs such as hormones and anti-depressants, in an attempt to counterbalance the side effects."**



## CONCLUSION

**I**t is common knowledge that steroids are part and parcel of any highly competitive sports environment and are used for their ability to add muscle and improve athletic performance. Steroid use has filtered through to people who are not necessarily competing in any sport or fitness event but still like to add muscle mass to their frames and achieve minimal fat levels. It remains the decision of an individual to use steroids but it should never be taken lightly and in a hurry. Always remember, informed decision-making requires adequate time and the balance of weighing the pros and cons. **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.*

# ACCREDITED FITNESS COURSES

MAKE YOUR  
**PASSION**  
YOUR  
**CAREER**  
TODAY

Trifocus Fitness Academy is South Africa's leader in Sports and Fitness Education, offering National and International Sports and Fitness qualifications. Our qualifications are Accredited, recognised and accepted at all commercial and private health clubs in South Africa and in 46 Countries around the world.

#### Our qualifications include:

- Personal Training Certification
- Personal Training Diploma (Advanced)
- Exercise Science Certification
- Comprehensive Nutrition Certification
- Sports Management Certification
- Comprehensive Pregnancy Certification
- Comprehensive Bootcamp Certification
- Pilates Certification
- Yoga Certification
- Group Aerobics
- Comprehensive Boxing Certification
- Comprehensive Exercise for Children
- Comprehensive Sales in Health & Fitness
- Rugby Coaching Certification
- Gym Instructor Short Course
- Comprehensive Special Populations & Exercise
- Comprehensive Exercise for the Elderly
- Sports Conditioning Coaching Certification
- National Certificate of Coaching Science


**REGISTER NOW!**

CALL: 0861 444 765  
[WWW.TRIFOCUS.CO.ZA](http://WWW.TRIFOCUS.CO.ZA)



**B**odybuilders always want to gain some sort of tangible payback from their training. Physical rewards like a bigger chest or a wider back warrant the relentless attention and time we give to our training activities to extract payment. But what happens when you push yourself over the edge?

Popular YouTube celeb and gym aficionado CT Fletcher claims overtraining is a myth. Fletcher says people use overtraining as an excuse not to push themselves harder. Overtraining as a symptom has been widely documented in numerous studies in the field of exercise science. It is, however, a much rarer occurrence than it is usually made out to be.



**"RESEARCHERS HAVE FOUND THAT SUBJECTS WHO TRAINED THE BIG THREE COMPOUND MOVEMENTS - DEADLIFTS, SQUATS AND BENCH PRESSES - SIX TIMES PER WEEK ACTUALLY INCREASED THEIR STRENGTH AND HYPERTROPHY."**

# HOW REAL IS THE THREAT OF TRAINING TOO MUCH?

**PUNCH THROUGH PROGRESS BARRIERS TO AVOID TRAINING TROUBLE**

## OVERTRAINING DEFINED

**The correct definition for overtraining is when a muscle is damaged at a faster rate than the body can recuperate from.**

Overtraining is an extremely individualised reaction. If you ask ten different bodybuilders what overtraining is you will most probably end up with ten different answers. It is believed in gym circles that smaller muscles can take more workout frequency than larger muscles but in the same breath frequent intense training elicits a pronounced stress response and bodybuilders who continue to hammer

their bodies will most probably reach the upper limit of biological adaptation after three to four weeks.

Exercise scientists believe the continuation of such a high-intensity routine may lead to overtraining. Basically, if you stay long enough in the fire you will get burned. But isn't that what we want? To obliterate our bodies to come back stronger and more resilient?

High frequency and volume are more often than not blamed for the symptom described as overtraining but research, interestingly enough, shows the opposite. Most lifters rather under-train

than overtrain. Norwegian researchers have found that subjects who trained the big three compound movements – deadlifts, squats and bench presses – six times per week actually increased their strength and hypertrophy (Raastad T. et al. July 2012). In the study researchers compared two groups of competitive powerlifters with the only difference being their training frequency. There was a dramatic difference in both the strength and muscle mass gained after the 12-week study period in powerlifters who trained more frequently over those who trained less.

**“HIGH FREQUENCY AND VOLUME ARE MORE OFTEN THAN NOT BLAMED FOR THE SYMPTOM DESCRIBED AS OVERTRAINING BUT RESEARCH, INTERESTINGLY ENOUGH, SHOWS THE OPPOSITE. MOST LIFTERS RATHER UNDER-TRAIN THAN OVERTRAIN.”**

## LESSONS FROM THE RUSSIANS

**Pavel Tsatsouline, one of the world's premier strength and conditioning coaches and former trainer of the Russian special forces, analysed literature on how the most successful athletes in the Soviet Union trained when they performed Olympic movements from the 1960s to 1990s and found the following:**

- 1. Athletes did not go too heavy too often while they were building strength.** Most lifts were in the 70-85% of max range, with a lot of strength built by remaining in this sub-maximal range. This rule is difficult to follow because most lifters are tempted to see how much they can lift.
- 2. Athletes performed their lifts in a heavier range for low reps while completing multiple sets.** Reps were kept in a lower range to recover from

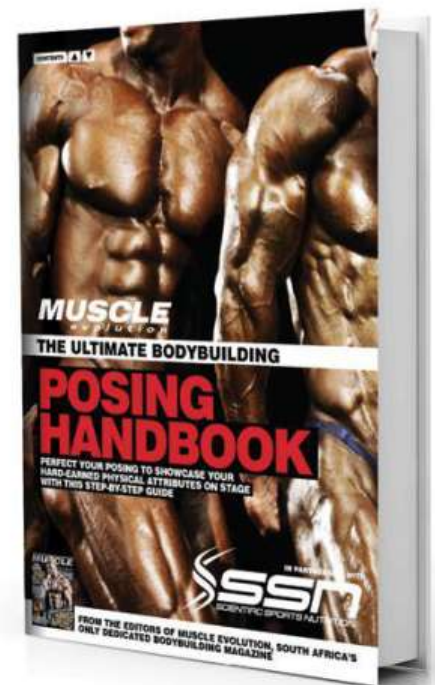
workouts quicker. They successfully uncoupled the relationship between intensity and volume. Their approach was to vary their intensity but not in concert with volume. The rep scheme used allowed them to warm up properly and reserve strength for heavier sets. It also allowed lifters to recover quicker.

- 3. They varied the number of reps they performed each day.** This also changed weekly and also within certain periods of the week. The greater variability in how many

reps you do is much easier on your body than massive jumps in heavy poundages. Pavel said: "In the West, the key in strength planning is progression. In the East, it is variability." The Soviets lifted their weights in a 'wavy' pattern with higher and lower volume days.

- 4. The Russians followed a method called synaptic facilitation** where they performed lifts more frequently to teach the body to do these lifts more efficiently which resulted in improved strength.

Bodybuilders can take a leaf out of the Russian training manual by reviewing training volumes and rep schemes in an attempt to find a sufficient stimulus that they easily can recover from. Strength is a skill and like any other skill it should be practiced.



## THE ULTIMATE BODYBUILDING POSING HANDBOOK

PERFECT YOUR POSING TO SHOWCASE YOUR HARD-EARNED PHYSICAL ATTRIBUTES ON STAGE WITH THIS STEP-BY-STEP GUIDE.

# FREE EBOOK

**SIGN UP AND DOWNLOAD IT TODAY!**



## STILL FEELING ZAPPED?

Exercise scientists teach us that when a muscle is put under mechanical or metabolic stress it releases enzymes that will cause catabolism. Realising this, the body tries to repair the damage and build muscle and supportive structures. Factors that all lead to increased muscle damage include limiting rest between sets, increasing volume or load, and the selection of multi-joint over isolation movements such as squats over leg extensions when targeting the quadriceps muscle in the legs, for instance.

To avoid injury while you crank up intensity in the gym you need to build your underlying fitness to be able to handle higher volumes. Fitness development will speed up your ability to recover from training. **Tell-tale signs that you might feel a little zapped from workouts include:**

- You feel demotivated to train,
- You are irritated and you have a reduced enjoyment of your training,
- You are prone to infection,
- Irregular sleeping patterns,
- Prolonged muscle soreness,
- Low energy levels,
- Zero progress,
- Loss or stagnation of strength.

However, it is more than merely too much training that can lead to this state, something that many gym-goers fail to understand. Poor rest, social stressors, work stress, illness, genetics and nutrition are all pieces of the same puzzle in terms of how you recover from training. Chances are if you are stressed out you will have high cortisol levels and this will have a serious impact on your gains and recovery.

By simply improving your nutrition and sleeping patterns and reducing your stress you will notice a boost in training performance.

The other important factor that is often overlooked by bodybuilders when they feel run down is hydration. By keeping hydrated throughout the day you will immediately assist your body with muscle growth, fat loss and maintaining general health.



**"TO AVOID INJURY WHILE YOU CRANK UP INTENSITY IN THE GYM YOU NEED TO BUILD YOUR UNDERLYING FITNESS TO BE ABLE TO HANDLE HIGHER VOLUMES."**

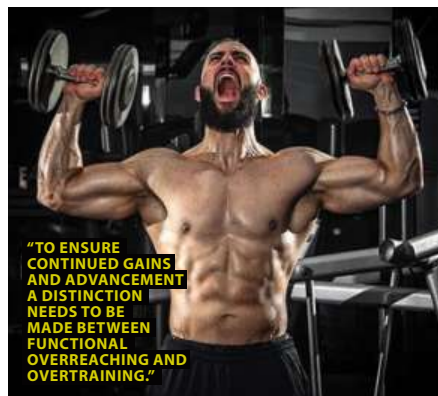
## PRACTICAL WAYS TO COMBAT THE SLUMP

To avoid burnout you can do the following:

- Work at a variety of intensities to work different energy systems.
- Avoid overloading multiple energy systems.
- Make use of recovery workouts where you use lighter resistance to keep your body fresh and injury-free.
- Don't overload your muscles without a logical weight progression over time. You will only get injured. Add weight that your body can handle while still training with strict form.
- Always warm-up properly before you start your training session.
- Good nutrition is one of the best ways to optimise your performance in the gym. The right combination of protein, fats and carbohydrates will lead to increased recovery from workouts and add muscle to your frame.
- Stretch tight muscles to remain injury free. Tight muscles can often cause other muscles to overcompensate.
- Get plenty of sleep to recover from workouts.
- Incorporate regular rest days into your exercise regimen.

## TAKE HOME MESSAGE

**We always want to train harder but we must also learn to train smarter, like the Soviets did when they dominated the weightlifting scene.** While overtraining is a rare phenomenon more commonly seen in competitive and professional athletes, the cumulative fatigue encountered by average individuals due to the demands of daily life, when coupled with the muscle damage and soreness caused by regular, intense training, can cause issues. However, to ensure continued gains and advancement a distinction needs to be made between functional overreaching and overtraining. Deliberately pushing your limits by upping the quantity or intensity of the exercises you do is highly beneficial and should not be sacrificed or limited in the name of avoiding overtraining. The objective is to enhance the super-compensation effect and



**"TO ENSURE CONTINUED GAINS AND ADVANCEMENT A DISTINCTION NEEDS TO BE MADE BETWEEN FUNCTIONAL OVERREACHING AND OVERTRAINING."**

stimulate extra gains – it's working to the outer limits of your physical capabilities to derive the greatest gains. It is important that you understand and acknowledge where that outer limit lies as it is different for everyone. **M.E**



#CHALLENGEYOURSELF

# TWO NEW DELICIOUS WAYS TO GAIN!

ENJOY OUR NEW UNBELIEVABLE FLAVOURS



CHOCOLATE-PEANUT  
FLAVOUR

PEANUT BUTTER  
& BANANA FLAVOUR



USN PROTEINS

100%

**CERTIFIED**

**MELAMINE  
FREE**

**A MEGA-CALORIE CATALYST, DEVELOPED TO  
INCREASE PROTEIN SYNTHESIS AND GAIN MORE MASS**  
CONTAINS 51g ANABOLIC PROTEIN MATRIX & 29.5g HYPERBOLIC STACK PER SERVING TO  
OPTIMIZE MUSCLE GROWTH

WWW.USN.CO.ZA USN SA @USNSA @USNSA

INDIVIDUAL RESULTS MAY VARY. FOR OPTIMAL RESULTS, COMBINE WITH A MASS-BUILDING EATING PLAN AND TRAINING PROGRAMME.



**"LIVE SIMPLY, BE THANKFUL, GIVE A LOT, LOVE A LOT AND DON'T LOSE YOUR SENSE OF HUMOUR."**

**ROXY BARKER**

# **WONDER WOMAN**

**SEXY ROXY BARKER IS ABSOLUTELY CRAZY ABOUT DOUGHNUTS BUT SHE IS ALSO THE KIND OF GIRL WHO GOES BEYOND THE LIMITS TO GRIND IT OUT IN THE GYM** – even if that means training seven days a week, twice a day to bag that winner's trophy at her first competition. After all, Roxy is not known as 'Wonder Woman' for nothing. Read how this talented newcomer from Durban stays in shape and how she rocked our world while posing as our latest Muscle Evolution Babe feature.

## **How did you start your fitness journey?**

For as long as I can remember, I have always been active doing athletics at school, playing soccer and even participating in CrossFit. I used to think I could eat everything I wanted and still stay in shape by only training harder in the gym but we all know it does not work like that.

## **What made you decide to compete?**

I never really noticed a big change in my condition until I joined Cindy Marshal at CM Fitness this year. Cindy is a seasoned athlete who assists ladies who want to compete on the local and international bodybuilding and fitness circuit. Once I joined Cindy she put me on an eating and workout plan and I started to see results. My friends encouraged me to start competing as they thought I had potential. After two months of strenuous training seven days a week, and most times twice a day, I entered my first IFBB Bikini competition.

## **What happened at your first competition?**

I entered the Novice Beach Bikini under 1.63m division at the IFBB KZN Iron Man Novice show in March this year and took first place. After that I was completely hooked! I decided to go up a division, to Fitness Bikini which caters for girls with a fitter, more toned physique, as opposed to the softer look required in the Beach Bikini division. I then set my sights on the IFBB East Coast Classic in June. I had two months to change my look to meet the new judging criteria. With a lot of hard work I leaned out, gained muscle and took first place at the show. Needless to say I was totally overwhelmed... and I could not wait to have my doughnuts!

## **What? Do you eat doughnuts at shows?**

Ha ha! That is my main weakness; my kryptonite. Kelly Ainsworth, my friend and fellow competitor, and I are known as the 'Doughnut Sistas'. We are ambassadors for the best doughnuts in the country, Wicked Donuts. Yes, that is quite ironic... we're fitness competitors and doughnut ambassadors.

## **QUICK FACTS**

- **HEIGHT:** 1.6m
- **CONTEST WEIGHT:** 49kg
- **OFF-SEASON WEIGHT:** 53kg
- **HAIR:** Dark brown/black
- **EYES:** Brown
- **BIRTHPLACE:** Durban
- **OCCUPATION:** Administrator



**Where did the 'Wonder Woman' nickname come from?**

Getting the body you desire happens through consistently eating right and training hard. My best friend Charlene Brancart started to call me that because of all the hard work I put in to my diet and workouts.

**How do you keep on track physically and mentally?**

Look, I won't lie and say it's easy. To know that you are in shape when you step on stage makes all the hard work and sacrifice worth it. I have goals and systematically pursue them. It certainly takes a tremendous toll on your body and although I battle with sweet cravings I always ask myself how badly I want to succeed.

In tough times I look up to influential athletes like fitness diva Andrea Brazier as inspiration to keep me going.

**What is your current training split?**

- **Monday:** Legs, calves and abs
- **Tuesday:** Back, shoulders and arms
- **Wednesday:** Glutes and functional training
- **Thursday:** Arms
- **Friday:** Legs and calves
- **Saturday:** Abs

On most exercises I do four sets of 20 reps. I include exercises such as squats, stiff leg deadlifts, pull-ups and lunges. I also do 40 minutes of incline walking on the treadmill and stepper four times a week.

**What are your favourite and least favourite body parts to train?**

I love to train my glutes – no one ever wrote a song about a small booty... I don't train chest.

**Are there any tips on training style, sets and reps you can recommend to keep improving?**

I have found that my legs improved tremendously by doing low weights and a lot of reps. When I train glutes I like to increase the weight – go as heavy as possible – and then do drop sets to increase the intensity. I'm not one to hang out during social hour at the gym. I take my training very seriously. When I grind I'm in the zone!

**If you could pick three favourite machines from your gym you'd like to have at home which would they be and why?**

Definitely the Smith machine, step and pull-up bar machines because they target the areas I love to work the most – glutes, legs, arms and shoulders.

**What does your current diet consist of?**

- **Meal 1:** 4 egg whites, 50 grams oats
- **Meal 2:** 150 grams of hake, 100 grams of sweet potato
- **Meal 3:** 150 grams of chicken, 140 grams of basmati rice
- **Meal 4:** 150 grams of hake, 100 grams of cucumber and two rice cakes
- **Meal 5:** 150 grams of chicken, 150 grams of sweet potato

**"I'M NOT ONE TO HANG OUT DURING SOCIAL HOUR AT THE GYM. I TAKE MY TRAINING VERY SERIOUSLY. WHEN I GRIND I'M IN THE ZONE!"**



## UNDER THE LID.

Only a select few know what's inside. I am one of them. The desire. This effort. My dedication. The years of paying dues. Overcoming obstacles, one after the other. Beneath the surface and under this lid, lies pride... and prodigious power. The sort of force capable of propelling me towards greatness. My journey is still ongoing and the fire inside still burns, hotter than ever. What's inside, what's under this lid, can't be contained.



Animal.

**30** YEARS OF  
POWER

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

**What does your supplement plan look like?**

Biogen CLA, Supashape whey protein, Supashape Carnitine Lean, SSN BCAAs and a multivitamin.

**You were recently invited to compete at next year's Arnold Classic in South Africa. What are your thoughts and feelings about this golden opportunity?**

At the beginning of the year I heard about the Arnold and I actually joked with my fiancé about it saying I would absolutely love to experience the show, either as a competitor or a fan! Then I received the invitation from the IFBB and I was completely overwhelmed with emotion! I have my invite stuck up on my partition at work so I can look at it every day to remind me that anything is possible if you put your heart into it.

**What motivates you the most in life?**

Where I was, compared to where I am now, and where I want to be.

**What advice would you give young girls who want to get into the competitive scene?**

Start by doing it for you and no one else. Go all in or not at all. Don't be afraid to ask questions, follow your heart and don't give up on your dreams.

**What have you learnt about the local bodybuilding and fitness industry?**

I don't think a lot of people understand what athletes go through when they prep for shows. It takes unbelievable willpower, focus and tons of determination to give your body what it needs to build muscle and lose fat and achieve superb stage-ready shape. I train hard and push myself because I love the sport and I am passionate about it. Being able to relate to other competitors, share my struggles with them and confide in them has really taken a lot of strain off me. Making wonderful friends in the industry has also kept me going.

**What traits do you admire the most in a man?**

I like a gentleman who is not afraid of romance and sweet gestures. A good sense of humour is a must and I don't like a mommy's boy. Luckily I'm already engaged to the man of my dreams.

**Do you like a romantic evening at home or a night out on the town?**

I like both. If I do go out it's after a comp and it's mainly to dance. I also love romantic evenings at home with my fiancé, a home cooked meal and a good movie.

**River rafting or bundu bashing?**

River rafting sounds like fun.

**Ocean cruising or skiing in the Alps?**

Hmmmm, both! I love soaking up the sun and to test my ability as a skier in the snow. **M.E**



**“IT TAKES UNBELIEVABLE WILLPOWER, FOCUS AND TONS OF DETERMINATION TO GIVE YOUR BODY WHAT IT NEEDS TO BUILD MUSCLE AND LOSE FAT AND ACHIEVE SUPERB STAGE-READY SHAPE.”**

100% PREMIUM. TESTED. PROVEN

# WHEY MORE FLAVOURS TO LOVE!

ENJOY OUR NEW UNBELIEVABLE FLAVOURS



**100% PREMIUM MULTI-SOURCE PROTEIN FOR  
COMPLETE MUSCLE RECOVERY AND GAINS**

NO AMINO SPIKING. TESTED BY A SANAS ACCREDITED LAB.

[www.usn.co.za](http://www.usn.co.za) [f USN SA](https://www.facebook.com/USNSA) [t @USNSA](https://twitter.com/USNSA) [i @USNSA](https://www.instagram.com/USNSA)



**DRUG FILES:**

# STEROID PROFILE ANDRIOL

**A**ndriol is testosterone with the undecanoate ester attached, and produced in oral form. I can only assume that the scientists responsible for this wanted to create a viable alternative to both injectable testosterones (which, at least for hormone replacement therapy, is inconvenient), as well as other oral forms of testosterone (which have traditionally been very harsh on the liver). What they came up with has proven to be a very odd steroid in many ways.

*\*This drug profile first appeared in "Anabolic Steroids Ultimate Research Guide: Vol. 1" by Anthony Roberts, and is republished with permission.*

## STEROID FACT SHEET

- **Andriol:** Testosterone + Undecanoate ester [Androsta-4-en-3-one, 17b-ol]
- **Formula:** C<sub>19</sub>H<sub>28</sub>O<sub>2</sub>
- **Molecular weight of base:** 288.429
- **Molecular weight of ester:** 186.2936
- **Melting Point:** 155
- **Manufacturer:** Organon
- **Effective dose:** 600mgs
- **Active Life:** less than 8-12 hours
- **Detection Time:** 4-5 weeks
- **Anabolic/Androgenic Ratio:** 100:100

## LIGHT ON SIDE EFFECTS

**T**o create Andriol, the scientists involved had to come up with a solution to the problems facing methyltestosterone, namely the fact that it is harsh on the liver and needs to be taken in very high doses to produce decent results. What they did was put 40mgs of testosterone undecanoate in oleic acid (an oil), and encapsulate it. Now they use castor oil and propylene glycol laurate instead of oleic acid, but that only increases the shelf life, and doesn't do anything else.

For some of the aspiring chemists reading this, you may be asking yourself the obvious question, and the answer is yes, you can take almost any esterified drug (nandrolone decanoate, for example), and dissolve it in castor oil and propylene glycol laurate, and create your own "Deca Caps" or whatever. The problem is that you'd need to be able to make sealed gel caps, not just the typical two-part capsules most people throw steroid powder in. Anyway, I'm digressing; lets get back to Andriol.

After you put some testosterone undecanoate in castor oil and propylene glycol laurate, you'll have a testosterone which is highly fat-soluble due to the (very large) undecanoate ester attached to it, and able to be absorbed through your small intestine via the lymphatic system. What this means is that it avoids the "first pass" through the liver, a process which could destroy much of the active steroid, and place an undue amount of stress on the liver. It also displayed a rapid absorption and turnover in one study, which may account for its ability to not cause unwanted side effects.

It's not bad for your blood pressure, and also has no adverse effects on the prostate and may even improve blood pressure. Thus, *Andriol is remarkably light on all side effects, especially those related to liver toxicity and oestrogenic sides.* In this study, done with women, it even displayed no ability to lower leutenizing hormone (LH) and follicle stimulating hormone (FSH), respectively, which are the hormones that tell your body to make more testosterone. I doubt Andriol could be properly regarded as liver toxic or too damaging to your hypothalamus-pituitary-testicular-axis (HPTA), the thing that governs your body's production of testosterone (among other things), at any kind of reasonable (or even excessive) dose. Actually, one study noted no adverse reactions or effects at all with the use of Andriol. As for your lipid profile and cholesterol, it has even been shown to have beneficial effects on them.

So, putting some testosterone undecanoate in gel caps is what the scientists at Organon did with their Andriol product. At this point it all looks good, right? The active steroid totally bypasses your liver, hence it doesn't get damaged by the liver and it doesn't damage your liver either, and gets a bunch of testosterone into your body. Great, but what happens next? Well, after the lymphatic system delivers the testosterone undecanoate into circulation in your body,





the undecanoate ester begins to be removed. This would leave you with (roughly) 25mgs of testosterone in your blood stream, as the decanoate ester takes up a lot of 'space' and the cap only contains a total of 40mgs of testosterone undecanoate (roughly 15mgs of which are ester). The end results from Andriol would be very similar to the end result of injecting almost any form of testosterone, once your body removes the ester. But remember, you'd never inject 25mgs of testosterone suspension and call it a day, but that's exactly what you are doing when you take only one Andriol cap.

So now you have 25mgs of testosterone

floating around in your body. That's not much, so if you're realistically considering using this product you'll need to take quite a few caps of it. And there's one of the first problems we encounter with this drug. You see, the method of administration of this drug provides us with a nice liver-safe product, but this stuff will peak your testosterone levels within around two hours after administration, and will only remain (at least slightly) elevated for 10 or so hours. Ideally, you'd be taking a capsule every two hours, which is inconvenient to say the least. Let's be generous and say you can simply take one every four hours.

**"The method of administration Andriol provides us with a nice liver safe product, but this stuff will peak your testosterone levels within around two hours after administration, and will only remain (at least slightly) elevated for 10 or so hours."**

## THE OBSTACLE OF COST

**P**roblem solved? Not really, because we're going to need to take at least two caps with each dose if we want to see any sort of anabolic effect, and if we're taking it every four hours (assuming we're awake for 16 hours every day), then we'll be taking around eight caps per day. Now we've shifted the problem away from the effort needed to take an effective dose to being a problem with economics. The biggest problem with this type of dose is going to be cost. Andriol is pretty expensive to be taking in an amount of eight caps per day. You can easily run a cycle with several anabolic compounds for the price of a cycle of just Andriol.

So that's our major obstacle, the expense of taking Andriol in what would be an effective dose is prohibitive to most people. One study noted that Andriol therapy, when compared with traditional testosterone injections is roughly 7-8 times more expensive.

Cost notwithstanding, let's see what kind of results we can expect from Andriol (besides the catabolic effect it will have on your wallet). Although it has a reputation for being very mild, you'll still see some results from Andriol. One study using a very low dose on adolescent boys still showed a reasonable gain in fat free mass even though the boys were not training. Another study focusing on the elderly improved their quality of life considerably (as androgens often do), and also had beneficial effects on erectile dysfunction.

However, in a world where first time steroid users expect upwards of 20lbs

per cycle, I would suspect many will be disappointed with the 5lbs or so a cycle of Andriol will produce. Granted, that's a conservative estimate, but I can't really be confident predicting much more muscle gain from Andriol. *Taking a large amount of Andriol is actually pretty safe (except for your bank account), and there was even a three month study done in Korea, where a pretty small dose of Andriol (160mg taken daily for three weeks then half that dose for the remainder of the study) resulted in a very nice rise in testosterone.* Serum total testosterone increased from 2.13 +/- 1.20 ng/ml at baseline to 6.04 +/- 3.08 ng/ml (p = 0.005) after 12 weeks.

In addition, free testosterone was (barely) significantly changed from 8.60 +/- 2.25 pg/ml to 11.40 +/- 3.81 pg/ml (p = 0.13) (10). However, there were no significant changes in liver function tests, red blood cell count or lipid profiles, nor were there any significant adverse reactions that would have led to the cessation of the administration of oral testosterone. So the scientists at Organon have succeeded in making a nice, safe, moderately effective, orally available treatment for low androgen levels. But can bodybuilders also use it?

Truthfully, I can't be confident predicting more than a 5lbs gain with the use of Andriol, because this product has a very odd property, and that is the widely varying effects it has on test subjects. In one study I read, four test subjects were each given Andriol, and one had a huge surge in testosterone levels going up to 60.1 nmol/L and the other only had a 11.5 nmol/L level.

**"Andriol is pretty expensive to be taking in an amount of eight caps per day. You can easily run a cycle with several anabolic compounds for the price of a cycle of just Andriol!"**

The remaining two test subjects fell in between those levels. I am speculating that the differences experienced by the test subjects were primarily due to the variances inherent in the lymphatic system. But to make matters even more inconsistent, there is no evidence that those variances wouldn't occur within the same person taking Andriol (i.e. you get a huge surge in testosterone one day, and a very minor one the next day). This may be associated with whether this stuff is taken with food or not. Since it operates via association with your small intestine and lymphatic pathways, taking it with food greatly enhances its bioavailability. This may be a case of "problem solved," but I'm hesitant to close the books on Andriol's absorption problems so quickly. For now, we'll just say you are spending your money much more wisely if you take your Andriol with meals.

Despite all of its problems, if I had the money to run 10-15 caps of Andriol/day and if I were looking for a standalone oral compound to safely run for a full cycle (of perhaps 12 weeks) then I have to admit, Andriol would be my number one choice. **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.*

**IN THE FACE OF  
CURRENT ECONOMIC  
TRENDS SUPPLEMENT  
CONSUMERS SHOULD  
BRACE FOR CHANGES**

# THE CURIOUS CASE OF THE COST OF WHEY

**U**nder the surface of the seemingly straightforward world of manufacturing and marketing your favourite whey protein powders lies a complex and volatile market that is affected by numerous economic factors, with complex financial instruments such as futures, exchange hedging and commodity trading at play.

You see, various dairy products, including whey, are traded as commodities on the open market. The two forms that are traded are Whey Protein Concentrate 80 (WPC80) and Whey Protein Concentrate 34 (WPC34). WPC80 is premium quality whey with a protein content of 80%, while WPC34 has a protein content of just 34%. Both are used to fortify a wide variety of manufactured foods with protein, in addition to their use in dietary and performance supplements.



As traded commodities factors such as supply and demand and the exchange rate are intricately linked with the price of whey. So, when the world experiences economic turmoil on the scale it did at the end of August this year there are serious implications for us all.

One of the more important factors affecting consumers of whey protein products is the rand/dollar exchange rate.

Having plumbed to historic lows recently, which saw the rand touch levels above R14/\$, it became inevitable that the price of whey, which is traded in dollars, would rise.

However, it is not all bad news, explains Mario van Biljon, co-founder of locally produced supplement brands SSN and

Supashape. "Thankfully we've been sheltered from the potential of a massive spike in local prices due to the low price of milk powders."

Van Biljon is referring to the current price per kilogram of whey protein, which is sitting near historically low levels last seen in 2010 due to a slump in global demand. In June 2015 the per-kilo price of WPC80 was around \$5, while the price per kilo of WPC34 was just above \$2. This is off a peak in March 2014, when a kilo of WPC80 cost around \$9 and WPC34 was \$4 per kilo.

"Unfortunately the relative strength of the dollar, which has steadily gained in value against the rand since the end of 2011, has mitigated much of the cost benefit of these low protein prices. While this has meant that prices haven't gone down, it has balanced out the other input factors that could have seen prices rise sharply a lot sooner," he explains.

And then the rand tanked in August, ending its losing streak 15% down against the greenback since the start of 2015. "Unfortunately that doesn't bode well for consumers. Whether you buy fortified foods or supplements, we need to brace ourselves for a few changes," continues Van Biljon.

## RECOMMENDATION FOR STORING WHEY PRODUCTS:

- ▶ Stored in cool, dry environments.
- ▶ Store products below 26°C with relative humidity of less than 65%.
- ▶ Store in air tight bags or containers.

**"SOME BRANDS – THOSE THAT WANT TO MAINTAIN A PREMIUM WHEY OFFERING – WILL NEED TO PASS THESE RISING COSTS ON TO THE CONSUMER, WHILE OTHERS MAY TRY TO MITIGATE RISING COSTS BY REDUCING THE PROTEIN CONTENT OF THEIR WHEY-BASED PRODUCTS."**

## CHANGES IN THE CURRENT MARKET

**T**hankfully many supplement manufacturers don't sit idly by, helplessly watching how the market dictates their prices and, ultimately, their ability to remain competitive. "Well, at least those with the financial resources to do something to mitigate these factors," says Van Biljon. "The big providers of whey and larger manufacturers have the financial resources and know-how to hedge against the cost of whey. This helps to take some of the sting out of these market shifts, but that protection only really has the potential to sustain prices for a period of three to six months."

Those that don't hedge on financial markets might take a bulk-buying approach when market factors are favourable, but all forms of whey have a certain shelf life of between nine to 12 months depending on how and where it is stored.

"As such, if markets remain the same – and there is nothing to suggest a marked improvement in market conditions over the short to medium term – then, inevitably, there will be shifts in the market," says Van Biljon. "Hedging should keep the prices of whey products from the big name brands stable for the next three to four months. The smaller players that aren't able to hedge will be able to maintain prices until current stock levels are depleted."

Van Biljon believes that one of two things will then happen. "Some brands – those that want to maintain a premium whey offering – will need to pass these rising costs on to the consumer, while others may try to mitigate rising costs by reducing the protein content of their whey-based products – using more WPC34 instead of just WPC80. Either way, something needs to give in the current market. It will either mean a change to

the label or changes to the price tag."

According to Van Biljon, the most price sensitive or less discerning supplement consumers will eventually have to move to products that offer protein contents of 55-65% as those with a protein content of 75-85% may be too expensive. That may not be too much of a trade-off for the mid-market, but the guys at the top end – bodybuilders and athletes – who aren't willing to compromise on quality will need to fork out more.

So, what then is one to do? After all, whey is the staple in most supplement cupboards so these market shifts will affect all of us in some way. "If I was a serious supplement user I would be stockpiling on my favourite whey-based products from quality brands. This will help to mitigate some of the impact of these price increases over the next six to nine months."

**"The last bit of advice I can offer is to be vigilant and keep your eyes open. In the face of these cost constraints many manufacturers will use the situation as an opportunity to innovate – develop new, effective products with different formulations which could spark growth in new product segments. Conversely, keep your eye on the price and label of the products you buy. One will have to change, and if neither does then you need to be asking questions as to how that is possible in the current market." M.E**

TYREL EKERMANS  
SA BODYBUILDER

*Tyrel Ekermans*



**WEIGHT MANAGEMENT**

**BUY NOW AT [CHROMESHOP.CO.ZA](http://CHROMESHOP.CO.ZA)**

OR AT YOUR NEAREST CHROME STORE

**MY GOALS. MY JOURNEY. MY NUTRITECH.**



# NUTRITECH<sup>®</sup>

NUTRITION TECHNOLOGY

**PREPARE FOR SUMMER 2016**  
**#MY SUMMER STARTS NOW**

# CHROME

SUPPLEMENTS & ACCESSORIES

OFFICIAL DISTRIBUTOR



**BUY NITROCUT NXT + GET A FREE CLA 1000**

CHROME SUPPLEMENTS PROUD DISTRIBUTORS OF NUTRITECH  
CONTACT 0861000638 OR INFO@CHROMESA.CO.ZA



**1st PHIL HEATH**

**F**OR SOME THE 2015 MR. OLYMPIA SHOWDOWN HAD BECOME MORE OF A LETDOWN BEFORE THE EVENT EVEN STARTED. JUST DAYS BEFORE THE MOST ANTICIPATED BODYBUILDING EVENT ON THE PLANET, IFBB PRO KAI GREENE, ARGUABLY PHIL HEATH'S BIGGEST CHALLENGER, ANNOUNCED THAT HE WAS "NOT ALLOWED" TO ENTER THIS YEAR'S EVENT.

At the press conference it was decided that Greene had had ample opportunity to sign his Olympia contract, but having missed the deadline officials notified him that he was no longer eligible to participate.

Despite Kai's absence at the annual press conference, spirits were high among the other competitors with many hopeful that the 2015

# 2015 MR. OLYMPIA



**WHEN:** 17-20  
September 2015  
**WHERE:** Las Vegas



3rd SHAWN RHODEN

2nd DEXTER JACKSON

**1st**  
PHIL  
HEATH  
\$400,000

**2nd**  
DEXTER  
JACKSON  
\$150,000

**3rd**  
SHAWN  
RHODEN  
\$100,000

**4th**  
DENNIS  
WOLF  
\$55,000

**5th**  
MAMDOUH  
ELSSBIAY  
\$45,000

**6th**  
BRANCH  
WARREN  
\$35,000

**7th**  
ROELLY  
WINKLAAR  
\$25,000

**8th**  
WILLIAM  
BONAC  
\$20,000

**9th**  
VICTOR  
MARTINEZ  
\$18,000

**10th**  
ESSA OBAID  
\$16,000



**4th** Dennis Wolf



**5th** Mamdouh Elssbiay



**6th** Branch Warren



**7th** Roelly Winklaar



**8th** William Bonac

**“Heath dominated the stage from start to finish. Displaying even greater size than before, superior conditioning and, somewhat inconceivably, improved balance and symmetry.”**

Mr. Olympia showdown would still go down as a memorable battle among the greatest physiques on earth, and they certainly didn't disappoint.

All eyes were on the reigning king, **Phil Heath** as he made his way to the stage in search of his fifth Sandow. Another win would earn him the right to stand among the other legends of the sport who have solidified their names in Olympia history with five or more wins: **Dorian Yates** (6 Sandows), **Arnold Schwarzenegger** (7 Sandows), **Lee Haney** and **Ronnie Coleman** (8 Sandows).

Once again Heath completely dominated the stage from start to finish. Displaying even greater size than before, superior conditioning and, somewhat inconceivably, improved balance and symmetry than previous years, it was going to take something truly special to beat him.

The runner-up spot went to veteran **Dexter “The Blade” Jackson**, who completely blew away both his closest rivals and the audience with an incredible display of size, balance and conditioning. Even at 45 years of age, Dex's ability to get up on a stage and compete with guys who are bigger and younger than him, and still come out on top is something truly special.

Holding the record for the



Dennis Wolf

Dexter Jackson

Phil Heath

Shawn Rhoden



**MEN'S PHYSIQUE**

**1st** Jeremy Buendia



**2nd** Sadik Hadzovic



**3rd** Jason Poston





**212**

1st Flex Lewis



2nd Jose Raymond



3rd Hidetada Yamagishi

# BIKINI



6th Narmin Assria 4th India Paulino 2nd Janet Layug 1st Ashley Kaltwasser 3rd Courtney King 5th Stacey Alexander

most Olympias ever entered by a competitor, his razor sharp upper body was easily on par with his immaculate appearance in 2008 when he went on to win the title of Mr. Olympia. His back double biceps, front double biceps and side poses made him look like he was carved out of stone. While he is not the biggest guy on stage, he is still, to this day, one of the most aesthetically pleasing physiques on the Olympia competitor list.

Third place went to **Shawn Rhoden**, to match his previous best achievements in 2012 and 2014. I thought Rhoden would bring the hardest fight to Heath this year, and while he certainly challenged "The Gift" hard in all the mandatory poses, a slight gut distention completely threw his physique off when in a relaxed state. This was the reason why he didn't place higher on the night in my opinion.

**Dennis Wolf** had to settle for fourth place. While I'm not a great fan of Wolf's physique, he was easily one of the hardest guys in the competition. He made major improvements to his back and legs, and from the front these muscle groups were incredibly balanced and hard. In my humble opinion, third and fourth places could easily have been swapped depending on what the judges prioritised as their criteria. There definitely seems to be a move back to the more aesthetic look and, as such, the three guys ahead of Wolf have him completely dominated.

Fifth place saw man mountain **Mamdouh "Big Ramy" Elssbiay** firmly slot in with conditioning that was slightly off on the Friday night, but he certainly rectified that come Saturday. The size of this man is something that has to be witnessed to be believed, and with great balance he puts up a firm fight against the guys standing between him and his first Sandow trophy.

**Branch Warren** was his usual freaky self and could be found in sixth position with some of the most vascular conditioning we have seen to date. Seventh went to **Roelly Winklaar**, who in my humble opinion was lucky to even make the top 10. Roelly is pushing the size game to new levels of freakishness, and the conditioning just isn't following suit. I would easily have placed eighth-placed **William Bonac**, ninth-placed **Victor Martinez**, and **Essa Obaid** ahead of Roelly in the top 10. **M.E**



**WOMEN'S FIGURE**

6th Gennifer Strobo    4th Camala Rodriguez-McClure    2nd Nicole Wilkins    1st Latorya Watts    3rd Candice Lewis    5th Candice Keene



**WOMEN'S FITNESS**

6th Michelle Blank    4th Regiane Da Silva    2nd Tanji Johnson    1st Oksana Grishina    3rd Myriam Capes    5th Bethany Wagner



**WOMEN'S PHYSIQUE**

6th Mindi O'Brien    4th Danielle Reardon    2nd Kira Neuman    1st Juliana Malacarne    3rd Tycie Coppett    5th Autumn Swansen

# Xtreme Nutrition

# GOOD

-VS-

# EVIL

PRE-WORKOUT STACK



Web: [www.prosupps.co.za](http://www.prosupps.co.za)  
Email: [info@prosupps.co.za](mailto:info@prosupps.co.za)



**PROSUPPS**  
RESULTS... PERIOD!

Shop online: [www.xtremenutrition.co.za](http://www.xtremenutrition.co.za) • E-mail: [sales@xtremenutrition.co.za](mailto:sales@xtremenutrition.co.za)

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



**MEN MIDDLE HEAVYWEIGHT U/95KG**  
1 Louis Bessinger (Overall Winner)  
2 Darren Smit  
3 Remember Shabangu



**MEN LIGHT HEAVYWEIGHT U/90KG**  
1 Johan Boshoff, 2 Nkululeko Cele  
3 Carlos Nunes



**MEN MIDDLEWEIGHT U/85KG**  
1 Johnny Lucas, 2 Awonke Ngoma  
3 Sergio Stanley



**MEN LIGHT MIDDLEWEIGHT U/80KG**  
1 Chris Pillay, 2 Saziso Sibiya  
3 Alfred Bethani



# IFBB SA NATIONAL

**WHERE:** Sandton Convention Centre **WHEN:** 5, 6 September 2015

**This year's IFBB SA National Championships held at the Sandton Convention Centre on the weekend of 5th and 6th September had two main aims - to showcase the best bodybuilding talent that South Africa's biggest federation has to offer, and to serve as a test run for the organisers of next year's Arnold Classic which is due to be held at the same venue.**

The championships, always the highlight of the local bodybuilding and fitness calendar, saw close to 400 athletes gathering in the heart of Sandton in Johannesburg to out-muscle their rivals and flex their way to glory and a golden opportunity to represent their country on various bodybuilding stages around the world.

The weekend was divided into prejudging

and two main shows to accommodate the large number of participating athletes and simulate the format that will be needed for the Arnold Classic, which aims to bring 10,000 athletes to Sandton when the event is held on the African continent for the first time in May 2016. The show will form part of the multi-sport and exhibition extravaganza that is the Arnold Festival, named

after the most famous bodybuilder of all time.

Bodybuilding is a sport where the body has to perform at the edge of its capacity for months on end. The athlete's biggest competitor is himself and the main aim is to better the person he was yesterday. Knowledge and experience dictates that there are many ways to get totally shredded for comp day, but in the end it boils down to who brings the best package to the stage on the day and who can convince the judges that they should be picked as the numero uno in the line-up. What the fans at a bodybuilding show don't get to see are the struggles, setbacks, long hours and all the frustration athletes endured

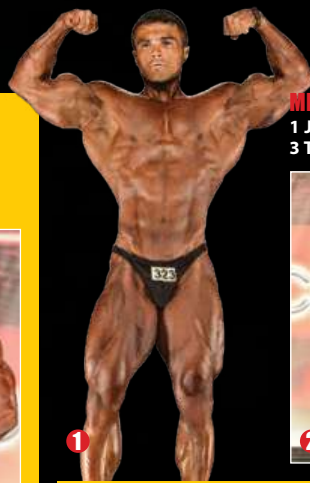
**MEN SUPER HEAVYWEIGHT 0/100KG**

- 1 Shanti Mitchell
- 2 Edmund Weyer
- 3 Chi Ndyamba



**MEN HEAVYWEIGHT U/100KG**

- 1 Earl Abrahams
- 2 Roelf Coertze
- 3 Mario van Biljon



**MEN WELTERWEIGHT U/75KG**

- 1 Julian Ramdhari
- 2 Leighton Koopman
- 3 Thulasizwe Sifatyi



**MEN LIGHTWEIGHT U/70KG**

- 1 Morne van den Berg
- 2 Boysie Ngcobo
- 3 Mveliso Tapi



**MEN BANTAMWEIGHT U/65KG**

- 1 Vuyo Vanda
- 2 Mosheen Patel
- 3 Sipho Ngidi



**VETERANS 0/50**

- 1 Jabulani Buthelezi
- 2 Pat Patela
- 3 Naiem Ally



# CHAMPIONSHIPS

to make it to the stage to showcase the fruits of their hard labour, and, for a select few, enter the winner's circle.

As is so often the case, some athletes were harder during prejudging than they were at the main show, which lost them points. Despite this it was great to witness the level of enthusiasm displayed when athletes jostled for position on stage while tensing their bodies as hard as possible during the pose-down rounds.

And the final results weren't without at least some controversy either. In my opinion there were a few decisions made which saw athletes who weren't in their best condition walk away

with gold. Other competitors had made the necessary improvements to catapult them to the next level and were rewarded with victory, but the unfortunate ones, some of them with freaky conditioning that was off the charts, had to be content with silver or even bronze medals. Some female competitors who thought they'd place higher could not hide their emotions and were visibly shocked at the results. The vocal audience also let their disapproval known when decisions went against popular opinion. However, as competition on this level is always fierce the results are often so close that judging decisions will be debated among fans and

**FOR FULL RESULTS & MORE PHOTOS:**



[WWW.MUSCLEEVOLUTION.CO.ZA](http://WWW.MUSCLEEVOLUTION.CO.ZA)

**MASTERS 0/40, U/75KG**

- 1 Japie van Wyk (Masters Overall Winner)
- 2 Gregory Harker
- 3 Wayne Niemand



1



2



3

**MASTERS 0/40, 0/75KG**

- 1 Jacob Seate
- 2 Terrence Pillay
- 3 Steven McLaren



1



2



3



1

**LADIES BEACH BIKINI U/1.63M**

- 1 Anesca Gouws, 2 Kelly Ainsworth
- 3 Naadiya Rawat



2



3

**LADIES FITNESS BIKINI 0/35**

- 1 Jo-Anne van der Vlugt
- 2 Angela Howden
- 3 Dalene Crossen



1



2



3

**LADIES BEACH BIKINI 0/1.63M:**

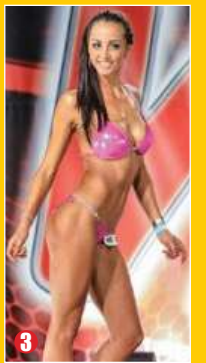
- 1 Leana Viviers, 2 Zinja Campher
- 3 Tanya Snyman



1



2



3

**JUNIOR LADIES**

- 1 Alex-Maud van der Westhuizen
- 2 Candice Schaller, 3 Amore Coetzee



1



2



3

**LADIES FITNESS BIKINI U/1.60M**

- 1 Shayna Atkinson, 2 Cecile Swart
- 3 Shannon Fennell



1



2



3

**LADIES FITNESS BIKINI U/1.63M**

- 1 Nicolene Booysen, 2 Marjorina Bruys
- 3 Anelda Jansen van Vuuren



1



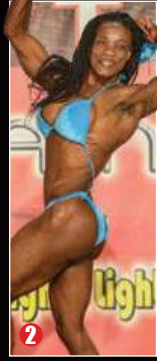
2



3

**LADIES PHYSIQUE U/1.63M**

1 Tiana Flex (Ladies Physique Overall Winner), 2 Lungi Plummer



**LADIES PHYSIQUE O/1.63M**

1 Tersia Benson  
2 Zelda Van Greuning



**WOMEN'S FITNESS**

1 Camillie du Plessis



**MEN'S FITNESS**

1 Peter Lekomo



**LADIES FITNESS BIKINI U/1.66M**

1. Zea Meyer  
2. Quenita Breet  
3. Angelique Viljoen



**LADIES FITNESS BIKINI U/1.72M**

1 Cindy Royle  
2 Wourine Brink  
3 Kirsten Allnutt



**LADIES FITNESS BIKINI U/1.69M**

1 Carmen Botha (Overall Ladies Fitness Bikini Winner), 2 Bronwen Fritz  
3 Herisha Ramdhin



**LADIES BODY FITNESS U/1.63M**

1 Michelle Guest  
2 Marelize Stander  
3 Michelle Alberts



**LADIES FITNESS BIKINI O/1.72M**

1 Cassandre de Jager, 2 Anja Retief  
3 Sonette Zeelie



**LADIES BODY FITNESS U/1.58M**

1 Karen de Beer (Overall Ladies Body Fitness Winner), 2 Leanne van Heerden  
3 Tanya du Preez



insiders for a long time to come.

Junior bodybuilder **Lendo Greyling** was, to my mind, one of the stars of the evening with a good overall package: symmetry, conditioning, muscle development and, most importantly, proportion. The accomplished **Japie van Wyk** came in looking amazing and it was no surprise when he took his class as well as the Masters Overall title. I liked top contender **Pat Patela's** elegance during his individual posing routine but he was edged out by fellow veteran **Jabulani Buthelezi**.

The physique of **Naadiya Rawat** had me mesmerised while she was doing the T-walk and I'm pretty sure I wasn't the only one who felt she was cheated when she ended up with bronze for her efforts in the Ladies Beach Bikini under 1.63m category. I was also genuinely disappointed that **Kirsten Allnutt** (3rd) could not place higher in the Ladies Fitness Bikini 1.72m class.

**Morne van den Berg** was visibly surprised when he was awarded gold in the Men Lightweight 70kg section. Van den Berg made notable improvements in his chest, arms and shoulders since the last time I saw him at the H&H Classic in Pretoria, where he placed third in the Senior Men under 80kg line-up.

I thoroughly enjoyed the battle between newcomer **Johnny Lucas** (1st), who is rapidly growing in popularity in bodybuilding circles, and **Awonke Ngoma** (2nd) in the Men Middleweight under 85kg category. Lucas had great shape, amazing lines and superb balance for someone who only recently started to train seriously.

Heavyweight veteran **Mario van Biljon** (3rd) needed to be absolutely shredded to make a stronger play for the top spot in his line-up. Super-heavyweight **Shanti Mitchell** (1st) was lucky to grab a win in my opinion, narrowly pushing his closest challenger, **Edmund Weyer**, into second.

Despite Lucas challenging hard, the evening belonged to the now legendary muscle man from Buffalo City, **Louis Bessinger**, who bagged the Overall title after taking the Men's Middle Heavyweight division.

This was, all in all, the best IFBB show of the year thanks to the meticulous planning by the organisers. Athletes and fans of the sport can now look forward to an action-packed calendar next year, with the Arnold Classic in May and the IFBB National Championships that will be held in the spiritual home of local bodybuilding, Durban in KwaZulu-Natal. **CKE**



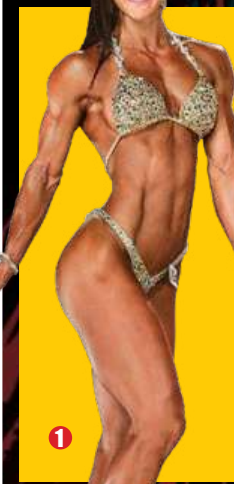
**LADIES BODY FITNESS U/1.68M**

- 1 Chantel Swart, 2 Lani Butler  
3 Lizee Gie



**JUNIOR U/23.0/75KG**

- 1 Lendo Greyling  
2 Jade Essendrup  
3 Gareth Scheepers



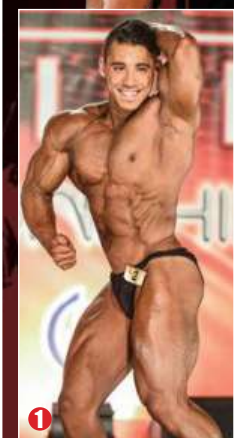
**LADIES BODY FITNESS O/1.68M**

- 1 Marcelle Collison, 2 Cindy Marshall  
3 Nomzobo Cuba



**JUNIORS U/23, U/75KG**

- 1 Cedric Samuels, 2 Devin Stewart  
3 Morgan Duda



**JUNIOR CLASSIC BODYBUILDING**

- 1 Siphumelele Ntshebe, 2 Henco Pieters  
3 Piet Segege



**CLASSIC BODYBUILDING U/1.80M**

- 1 Andre Fourie, 2 Lyle Singh  
3 Norman Brits





**CLASSIC BODYBUILDING U/1.68M**

1 Pieter Janse van Rensburg, 2 Malebo Rooi



1



2



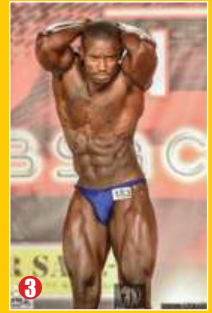
1

**CLASSIC BODYBUILDING U/1.71M**

1 Justin Thacker (Classic Bodybuilding Overall Winner), 2 Keshav Saikoolal  
3 Thanduxolo Mdazo



2



3

**CLASSIC BODYBUILDING O/1.80M**

1 Foster Mkhabele  
2 Ian Cornell  
3 Heinrich Visser



1



2



3

**CLASSIC BODYBUILDING U/1.75M**

1 Bantu Kato Mavela  
2 Stephan Du Toit



1



2



1

**MEN'S ATHLETIC PHYSIQUE O/1.78M**

1 Wiehan van Wyk (Men's Athletic Physique Overall Winner)  
2 Bertu Moolman, 3 Donovan Suddes



2



3



1



1

**MEN'S ATHLETIC PHYSIQUE U/1.74M**

1 Michael Carroll, 2 Peet Erasmus  
3 Aphiwe Kafi



2



3



2



1

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

1 Jaco Nieman, 2 Clive Brent  
3 Rynhardt van Wyk



2



3



3

# NABBA SOUTH AFRICAN NATIONALS

DATE: 10 October 2015  
VENUE: Sibaya Casino, KZN

**A**thletes converged on the Sibaya Casino and Entertainment World in Durban on Saturday, 10 October 2015 for the Nabba SA National Championships, which was also a WFF Worlds Qualifier and one of the most anticipated shows of the year.

Novices were keen to battle it out on stage, grabbing the opportunity to showcase their muscularity to friends and family who journeyed to support them. **Rusty Sayed** (2nd) made an impressive showing on the night but **Carlo Cantalupo's** conditioning was sharp enough to secure top spot in the category.

**David Joubert** (1st) was tough to beat in the Juniors category, while the crown in the Beach Bikini under 1.63m division belonged to **Truzaan Berowsky**.

# NATIONALS

### FITNESS BIKINI U/1.63M

1 Jaydee Ladell, 2 Elani Botha  
3 Alrietta de Wet



**1**  
**OVERALL MEN**  
Henk Smith



**1**  
**OVERALL FITNESS BIKINI**  
Jaydee Ladell



### MEN'S CLASS 10/1.79M

1 Henk Smith, 2 Nico Fourie  
3 Etienne Botha

**BEACH BIKINI  
U/1.63M**

- 1 Truzaan Berowsky
- 2 Zeldia van der Westhuizen
- 3 Elzarie Nortje



**NOVICE**

- 1 Carlo Cantalupo, 2 Rusty Sayed
- 3 Raymond Schuin



**LADIES  
AEROBIC  
FITNESS**

- 1 Amanda Janse van Vuuren

**MENS CLASS 4 U/1.65M**

- 1 Andile Skeyi, 2 Vicky Segone
- 3 Lucky Nkosi



**OVERALL  
BEACH BIKINI**

Roxanne Clark



**JUNIORS**

1 David Joubert, 2 Darren Tamboer  
3 Lee Morris



**Roxanne Clark** (Beach Bikini over 1.63m), **Herbert Tukagomo** (Male Model Fitness under 1.72m), **Thshibiso Mokhototso** (Male Model Fitness under 1.72m), **Jaydee Ladell** (Fitness Bikini under 1.63m) and **Natasha Marten** (Fitness Bikini over 1.63m) left nothing to chance and walked away with top honours in their respective categories.

**Herman du Plessis** took home gold in the Men's Masters Over 40 line-up, while **Mo Ronat** outclassed **Gavin Sher** (2nd) and **Pat Patela** (3rd) in the Men's Masters Over 50 category. The conditioning of **Shany Venn** was difficult to beat for rivals **Freek Jonk** (2nd) and **Manie Lemmer** (3rd) in the Men's Classic Bodybuilding division.

The ever-vibrant **Lee Chaldecott** bagged gold in the Ladies Performance Figure class while the dedication of **Johan Boshoff** paid off in the Men's Class 3 1.65-1.72m line-up. **Henk Smith** had the size and balance to edge out **Nico Fourie** (2nd) and **Etienne Botha** (3rd) in the Men's Class 1 over 1.79m division. **Roxanne Clark**, **Thshibiso Mokhototso**, **Jaydee Ladell**, **Lyn Hughes**, **Bronwyn Dean** and **Henk Smith** took the Overall titles in their respective categories in what was an evening to remember by not only the 179 athletes who competed but also by those in attendance. **M.E**

**MEN'S MASTERS 0/50**

1 Mo Ronat, 2 Gavin Sher, 3 Pat Patela



**OVERALL WWF LADIES**  
Lyn Hughes



**LADIES ATHLETIC FIGURE**

1 Lyn Hughes, 2 Chantel van Loggenberg  
3 Carol Visagie



**FITNESS BIKINI 0/1.63M**

1 Natasha Marten  
2 Monique Lopez  
3 Chrisanne Liebenberg



**MEN'S CLASS 2 1.72-1.79M**

1 Michael Appelgryn, 2 Gontse Sechelle  
3 Jared Reid



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



**LADIES PERFORMANCE FIGURE**

- 1 Lee Chaldecott, 2 Chantelle Labuschagne  
3 Carina Lourens

**MISS FIGURE CLASS 1  
0/1.63M**

- 1 Bronwyn Dean  
2 Philippa Lamont Wilke  
3 Elizabeth Moore



**MEN'S CLASSIC BODYBUILDING**

- 1 Shany Venn, 2 Freek Jonk  
3 Manie Lemmer

**MISS FIGURE CLASS 2  
U/1.63M**

- 1 Lieigh Purcell  
2 Arenea Becker  
3 Engela van Tonder



**MEN'S ATHLETIC BODYBUILDING**

- 1 Robbie Crafford, 2 Sheldon Watkins  
3 Christopher Krynauf

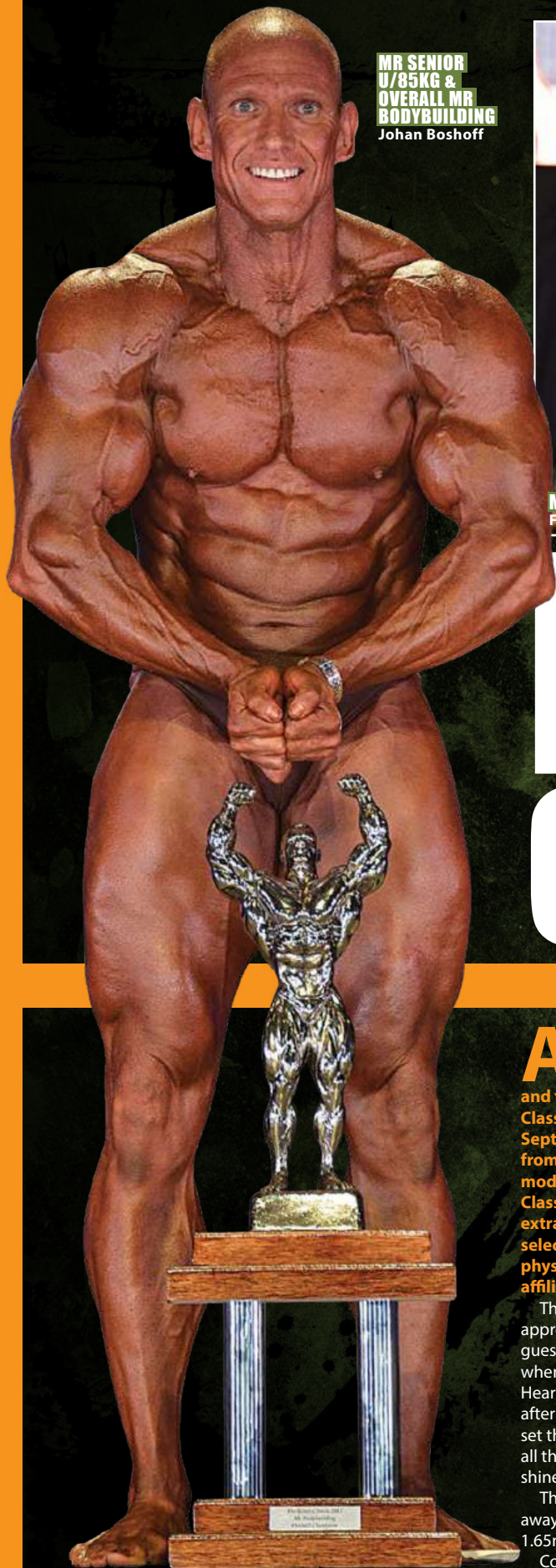


**MEN'S MASTERS OVER 40**

- 1 Herman du Plessis, 2 Andrew Parsons  
3 Gawie Nel



**MR SENIOR U/85KG & OVERALL MR BODYBUILDING**  
Johan Boshoff



**MR SENIOR O/95KG**  
Freddie Klopper



**MR JUNIOR U/23**  
Alexandre Moamba

# ROSSI CLASSIC

**WHEN:** 19 September 2015 **WHERE:** Heartfelt Arena, Pretoria

**A**thletes had the perfect opportunity to showcase their passion for bodybuilding and fitness at the fourth annual Rossi Classic, held in Pretoria on Saturday, 19 September. With 33 divisions, ranging from novices and the disabled to bikini, model, masters and physique, the Rossi Classic can only be described as a unique extravaganza that caters for the widest selection of athletes no matter their physique types or what federation or affiliation they belong to.

There was overwhelming vocal appreciation for veteran bodybuilder and guest poser for the evening **Conrad Nagel** when he flexed his muscles on stage at the Heartfelt Arena, who is still in superb shape after retiring more than six years ago. Nagel set the perfect tone for the evening before all the athletes were given their chance to shine in front of family, friends and fans.

The shapely **Nadine Yates** walked away with gold in the Figure under 1.65m category.

Competitors in the Senior Men under

75kg line-up, **Shayne Bain Venn** (2nd) and **Lehlo Seleke** (3rd) looked rock solid but it was an ultra-ripped **Roger Frade** (1st) who brought the complete package to the stage to secure the title on the night.

Winner **Johan Boshoff's** structure was difficult to match in the Senior Men under 85kg division, while **Grant Viviers** fought his way to the top in the Senior Men under 95kg class.

The hands-down favourite in the Toned Bikini under 1.65m section, for both the judges and the crowd, was **Natascha Oosthuizen**. **Jenine van der Merwe** and **Lee Chaldecott** challenged hard for the coveted title in a line-up that is only getting tougher and tougher each year.

**Leigh Cabral** took top honours in the Toned Bikini over 1.65m division, while **Susan Keil** and **Monique Lopes** had to settle for silver and bronze medals.

**Lance Jacobson** brought a conditioned physique that was hard to beat in the Masters 45 plus over 80kg class. **Vivian Goosen** scooped gold in the Toned Bikini 40 plus division with her pristine



**MISS TONED BIKINI U/1.65M & OVERALL MISS TONED BIKINI**  
Natascha Oosthuizen



**MISS BIKINI MODEL U/23, MISS BIKINI OPEN U/1.65M & OVERALL MISS BIKINI**  
Arieta de Wet



**MISS NATURAL BEACH BIKINI & MISS BIKINI OPEN O/1.65M**  
Caylene Marais



**MR NOVICE U/85KG**  
Thabo Mbangata



**TONED BIKINI O/1.65M & MISS BIKINI 35+**  
Leigh Cabral

**GET YOUR FAVOURITE MAG ONLINE**

**SAVE 25%**



**READ IT ANYWHERE, ANYTIME...**





**MR NOVICE**  
**0/85KG**  
Ryno Saaiman



**MR JUNIOR U/20**  
Franco Jacobs



**MR SENIOR U/65KG**  
Tomson Dlamini



**MISS FIGURE**  
**U/1.65M**  
**& OVERALL**  
**MISS FIGURE**  
Nadine Yates



**MR MASTERS**  
**45+ U/80KG**  
Pat Petela



**MR DISABLED & WHEELCHAIR**  
Will Smit



**MR MASTERS**  
**45+ U/80KG**  
Lance  
Jacobson



**MISS FIGURE 40+**  
Sophia Potgieter



**MR SENIOR**  
**U/95KG &**  
**MR PHYSIQUE**  
Grant Viviers



**MR SENIOR U/75KG**  
Roger Frade



**MISS FIGURE O/1.65M**  
Amanda Strydom





**TONED BIKINI 40+**  
Vivian Goosen



**MR FRONT COVER MODEL & OVERALL MR MODEL**  
Damian du Plessis



**MR MODEL PLUS**  
Jacques Greeff



**MR NATURAL BEACH BODY**  
Jeandre Visagie



**MR MODEL 35+**  
Stein Luther

conditioning and her ability to present one complete package of separation and symmetry on stage.

**Alrieta de Wet** (Bikini), **Natascha Oosthuizen** (Toned Bikini), **Nadine Yates** (Figure), **Damian du Plessis** (Model) and **Johan Boshoff** (Bodybuilding) had the dominant physiques on the night, according to the judges, earning them the right to be crowned Overall champions in

their respective categories.

It was also inspiring to see a division for disabled athletes who graced the stage. They all shone in front of an audience of enthusiastic spectators who opted to support local bodybuilding and fitness instead of South Africa's favourite sporting pastime, rugby and the World Cup.

## ROSSI CLASSIC

## 2015'S QUALITY SPONSORS & EXHIBITORS



## RESULTS

### MR SENIOR U/65KG

- 1 Tomson Dlamini
- 2 Andrew Vermaak

### MISS FIGURE U/1.65M

- 1 Nadine Yates
- 2 Leonie van Jaarsveld
- 3 Mia Raad

### MR SENIOR U/75KG

- 1 Roger Frade
- 2 Shayne Bain Venn
- 3 Lehlohonolo Peter Seleke

### MISS FIGURE O/1.65M

- 1 Amanda Strydom
- 2 Bianca Lyon

### MR SENIOR U/85KG

- 1 Johan Boshoff
- 2 Markus Landman
- 3 Reuben Herbert

### MISS FIGURE 40+

- 1 Sophia Potgieter
- 2 Amanda Strydom
- 3 Christeline Harmse

### MR SENIOR U/95KG

- 1 Grant Viviers
- 2 Andrew Parsons
- 3 David Martin

### MISS TONED BIKINI U/1.65M

- 1 Natascha Oosthuizen
- 2 Jenine van der Merve
- 3 Lee Chaldecott

### MR SENIOR O/95KG

- 1 Freddie Klopper
- 2 Willem Smit

### TONED BIKINI O/1.65M

- 1 Leigh Cabral
- 2 Susan Keil
- 3 Monique Lopes

### MR MASTERS 45+ U/80KG

- 1 Pat Petela
- 2 Yaseen Valli

### MR MASTERS 45+ O/80KG

- 1 Lance Jacobson
- 2 Andre Gerber
- 3 Andre Slabbert

### TONED BIKINI 40+

- 1 Vivian Goosen
- 2 Susan Keil
- 3 Leigh Cabral

### MR NOVICE U/85KG

- 1 Thabo Mbangata
- 2 Xolani Sibanyoni
- 3 Hanno Wiese

### MR NOVICE O/85KG

- 1 Ryno Saaman
- 2 Fritz Wolmarans
- 3 Juan Coetzee

### MR JUNIOR U/20

- 1 Franco Jacobs
- 2 Christopher de Klerk
- 3 Xolani Sibanyoni

### MR JUNIOR U/23

- 1 Alexandre Moamba
- 2 Hannes Alberts
- 3 Donovan van Rooyen

### MR DISABLED AND WHEELCHAIR

- 1 Will Smit
- 2 Andre Slabbert

### MISS NATURAL BEACH BIKINI

- 1 Caylene Marais
- 2 Courtney Renniers
- 3 Logan Coleman

### MR NATURAL BEACH BODY

- 1 Jeandre Visagie
- 2 Mpumelelo Mondhlana
- 3 Mighael Basson

### MISS BIKINI MODEL U/23

- 1 Alrieta de Wet
- 2 Monique Lopes
- 3 Courtney Renniers

### MR FRONT COVER MODEL

- 1 Damian du Plessis
- 2 Nicolas White
- 3 Junior Khoza

### MISS BIKINI OPEN U/1.65M

- 1 Alrieta de Wet
- 2 Kim Dowden
- 3 Nastassja Welgemoed

### MR MODEL PLUS

- 1 Jacques Greeff
- 2 Markus Landman
- 3 Garreth van Vuuren

### MISS BIKINI OPEN O/1.65M

- 1 Caylene Marais
- 2 Monique Lopes
- 3 Logan Coleman

### MR PHYSIQUE

- 1 Grant Viviers
- 2 Jacques Greeff
- 3 Garreth van Vuuren

### MISS BIKINI 35+

- 1 Leigh Cabral
- 2 Hilary de Beer
- 3 Delene dos Santos

### MR MODEL 35+

- 1 Stein Luther
- 2 Kjell Magnussen

### OVERALL MISS BIKINI

Alrieta de Wet

### OVERALL MISS TONED BIKINI

Natascha Oosthuizen

### OVERALL MISS FIGURE

Nadine Yates

### OVERALL MR MODEL

Damian du Plessis

### OVERALL MR BODYBUILDING

Johan Boshoff

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

# IBFF NATIONAL BODYBUILDING CHAMPIONSHIPS

**VENUE:** University of the Witwatersrand, Johannesburg **DATE:** 5 September 2015



**MR. BODYBUILDING  
MEDIUM 1.73M-1.79M**  
Ndimiso Dlodlo



**MISS FITNESS  
MODEL U/1.68M**  
Lee Chaldecott



**MR. BODYBUILDING  
TALL 0/1.79M**  
Yusuf Phiri



**MASTERS  
0/40**  
JP Nel



**MISTER ATHLETIC  
U/1.77M**  
Adriaan Job



**MR. BODYBUILDING  
SMALL UP TO 1.72M**  
Wesley Saunders



**MISS FIGURE**  
Nadine David



**MISS FITNESS MODEL TEEN**  
Chandre Jeppe

**N**ewly established International Bodybuilding and Fitness Federation (IBFF) Africa hosted their inaugural National Bodybuilding Championships at the University of Witwatersrand in Johannesburg on Saturday, 5 September.

Touted as the federation for a new generation of athletes, IBFF organisers have been putting on shows around the country since hosting their first competition in April, at Vodaworld in Midrand, in an effort to put the latest addition to the local competitive bodybuilding and fitness industry squarely on the map.

Based on the turnout on the night it seems that athletes and bodybuilding fans support the IBFF whole-heartedly. They also had only good things to say on social media platforms about their experiences at the recent championship event, describing it as an "epic event", "fantastic" and "an incredibly well run show".

At the show the in-shape **Yusuf Phiri** made the Men Tall category his own, while **Ndumiso Dlodlo** edged out his rivals in the Medium division. **Wesley Saunders** showed that dynamite still comes in small packages when he bagged gold in the Men Short class.

The event also featured great showings from **Hennie Human**, **Adriaan Job** and **Brent Hassal** in the Athletic and Fitness divisions, which catered for those with a more mainstream aesthetic-type physique.

The many athletes in the female categories also stood out on the evening, especially **Lee Chaldecott**, who won the Miss Fitness Under 1.68m class and also took second in the Miss Figure category. Other notable performances included **Chandre Jeppe** (1st) in the Miss Fitness Model Teen category and **Charmaine Rademeyer** (1st) in the Miss Fitness Over 40 division.

A special word of thanks and congratulations to organiser **Arnie Williams** and the IBFF Africa team. Hopefully the federation will continue to go from strength to strength following their hard work and dedicated efforts to showcase the very best athletes to all the fans and supporters of the sport of bodybuilding.



**MISS FITNESS O/40**  
Charmaine Rademeyer



**JUNIORS U/23**  
Jason Wood



**MISS FITNESS MODEL O/1.68M**  
Ida Janse van Rensburg



**MISTER ATHLETIC O/1.77 M & MR FITNESS MODEL**  
Hennie Human



**MASTERS OVER 50**  
Jacques du Preez



**MR FITNESS**  
Brent Hassal

## RESULTS

### MASTERS O/40

- 1 JP Nel
- 2 Johan Botha
- 3 Musa Mkhaliphi

### MASTERS O/50

- 1 Jacques du Preez
- 2 Peter Klein
- 3 Werner Kruger

### JUNIORS U/23

- 1 Jason Wood
- 2 Keanan Faltein
- 3 Kyle Kleinhans

### MISS FIGURE

- 1 Nadine David
- 2 Lee Chaldecott
- 3 Jacqueline Groenewald

### COUPLES

- 1 Peter and Ronel Klein

### MISS FITNESS O/40

- 1 Charmaine Rademeyer
- 2 Ronel Klein
- 3 Cornelia Greeff

### MISS FITNESS MODEL TEEN

- 1 Chandre Jeppe
- 2 Marijke Maritz
- 3 Amber Hall

### MISS FITNESS MODEL U/1.68M

- 1 Lee Chaldecott
- 2 Semone Jardim
- 3 Anel Dreyer

### MISS FITNESS MODEL O/1.68M

- 1 Ida Janse van Rensburg
- 2 Lize van der Walt
- 3 Lelanie Steenkamp

### MR FITNESS MODEL

- 1 Hennie Human
- 2 Adrian Labuschagne
- 3 Bonginkosi Zulu

### MR FITNESS

- 1 Brent Hassal
- 2 Johannes de Lange
- 3 Ricardo Vera

### MISTER ATHLETIC U/1.77

- 1 Adriaan Job
- 2 Brad Swart

### MISTER ATHLETIC O/1.77

- 1 Hennie Human
- 2 Justin Sweetnam
- 3 Kyle Kleinhans

### MR. BODYBUILDING SMALL UP TO 1.72M

- 1 Wesley Saunders
- 2 Frans Hloi
- 3 Given Nduma

### MR. BODYBUILDING MEDIUM 1.73M-1.79M

- 1 Ndumiso Dlodlo
- 2 Absolom Mfumadi
- 3 Siya Yusani

### MR. BODYBUILDING TALL O/1.79

- 1 Yusuf Phiri
- 2 Thulani Mayinje
- 3 Vincent Xaba

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



## DYLAN RIDLEY

### HOW TO RESCUE A BAD WORKOUT

**T**here is no better feeling, when you know it's time to smash the weights at the gym, you feel stronger than usual, you feel your pre-workout

kicking in and the only thing you need to do is to hook up with your training buddy to totally obliterate the weights. This is how every training session should be but unfortunately you will encounter those days when you just don't feel like it. It could be work stress or time constraints... the list is endless. How do you rescue a bad workout? Do you throw in the towel and go home or follow through with

the original plan? I am sure there are countless tricks and methods you can use to get yourself motivated. My biggest motivator when I need to push through a difficult session and make it count is music. It gives me energy and blocks out all the unnecessary distractions. I find music to be a great way to get into the right frame of mind when I struggle to find the passion to train hard. Another motivator for me is a reliable pre-workout drink which will more often than not

lead to insane energy, great focus and unbelievable pumps. A pre-workout drink is one of the most important weapons in my supplement arsenal. A training partner who has your

**"A TRAINING PARTNER WHO HAS YOUR BEST INTERESTS AT HEART IS ANOTHER VITAL COMPONENT TO THE SUCCESS OF A WORKOUT. SOMEONE AT YOUR SIDE WHO CAN INSPIRE YOU TO TRAIN HARDER AND GET THE JOB DONE."**

best interests at heart is another vital component to the success of a workout. Someone at your side who can inspire you to train harder and get the job done.

When you feel low you can always decrease the weight and do supersets or even giant sets to get the blood flowing. If you try to lift heavy weights with sloppy form while feeling weak you are only going to injure yourself. It is far better to achieve good

pumps with lighter weights than not to train at all. At the end of the day it all boils down to how bad you want to achieve your goals. With the right mindset you can rescue a bad workout no matter what.

For me the greatest motivation to hit the weights is the gift of good health and the opportunity to train at a gym. If you have those two things you are more fortunate than most people and then there is absolutely no excuse to skip a session.

## COBUS VAN DER MERWE

### MY TAKE ON THE OLYMPIA

**T**he 2015 edition of Mr. Olympia came to an end with Phil Heath being crowned as king of the bodybuilding world for the fifth consecutive year. In the absence of his arch rival Kai Greene he still had some fierce competition snapping at his heels for the title in the form of Dexter Jackson and Shawn Rhoden. In my opinion Phil is still worthy of the Sandow. His overall condition was just mind-blowing and I don't see anyone taking the title away from him in the next few years! The battle was for runner up spot and Dexter squeezed passed Rhoden with an eye-popping physique that keeps defying his age.

I think Dexter had an absolutely unbelievable back

and that is why he was awarded second place at the Olympia. Rhoden had the best front double biceps when he was posing on stage and if he can continue to assemble a fantastic and balanced physique he can become a major contender for the crown. Dennis Wolf had the widest structure on stage but had to settle for fourth place, while Big Ramy placed a credible

fifth. Big Ramy is, without a doubt, a mass monster! His condition however was not much better than last year. I would have loved to see Cedric McMillan on stage but he had to pull out due to health reasons. Cedric would have easily cracked the top six if he competed as far as I'm concerned. Branch Warren ended up in sixth place, showing great conditioning and vascularity. I feel sorry for Branch because he is getting on in age and I don't see him placing any higher in future. Branch lacks the aesthetic symmetrical appearance the judges are looking for at the moment.

With that the 12-month wait for the next highlight of the international

**"IN MY OPINION PHIL IS STILL WORTHY OF THE SANDOW. HIS OVERALL CONDITION WAS JUST MIND-BLOWING AND I DON'T SEE ANYONE TAKING THE TITLE AWAY FROM HIM IN THE NEXT FEW YEARS! THE BATTLE WAS FOR RUNNER UP SPOT AND DEXTER SQUEEZED PASSED RHODEN WITH AN EYE-POPPING PHYSIQUE THAT KEEPS DEFYING HIS AGE."**

bodybuilding calendar begins. I wonder if the current rift in the bodybuilding world is permanent and if Kai will bounce back and go head-to-head against Phil in 2016? Based on these performances, Kai remains the only real threat to snatching the title from Phil in the foreseeable future. Only time will tell.



## JOHN 'THE TERMINATOR' LESLIE LEANER AND HARDER

**A**t the time of writing I was preparing for my second WBBF pro show which took place in Lithuania in October. I had a few challenges to overcome, like the contest date changing out of the blue, and difficulty of doing cardio to tighten up because of an unexpected bout of flu. For a few weeks while I was battling the flu I could only rely on my diet and weight training to get leaner and harder for the show. Despite this temporary setback I started my prep at a body fat level of about 6-7%. When I train for a show I don't change my routine drastically, apart from adding some giant sets for each body part I work on. I also typically shorten the rest periods between my sets to push up the intensity in the gym so that I'm able to burn fat at a faster rate. Cardio training for a show needs to



### JOHN SAYS

**"The main objective for any serious bodybuilder ahead of a contest is to become leaner and harder and that is why I've been training my abs every day to get my midsection as tight as possible."**

be as important as your diet and strength training plans if you want to achieve that crisp and shredded look the judges want when you step on stage. I usually increase my cardio sessions to about four per week for better blood-flow, nutrient uptake and to accelerate my metabolism. The main objective for any serious bodybuilder ahead of a contest is to become leaner and harder and that is why I've been training my abs every day to get my midsection as tight as possible. When I prep for a show I don't use the time to gain more muscle but to refine, shape and condition my physique for the stage. My goal is always to present the best overall package when I hit the stage. If I have lacking body parts I will always prioritise them in my routine to get them as conditioned as possible.

I have to rely on a very low carb, high protein and medium fat ratio to get into top shape. The last four weeks before a show I would follow a zero carb diet to shed maximum body fat. This will normally consist of eating 20 egg whites and 2kg of chicken breasts along with some healthy fats all divided up into 5-6 meals I consume throughout the day.

I'm still working with my coach Federico Focherini, who has helped me win three IFBB SA super-heavyweight titles, two Muscle Evolution Grand Prix Overall titles, top six and top 10 IFBB World placings, as well as Nabba SA and WPF SA Overall titles. A big thanks for the loyal support of all my fans, Supplements SA and my best friend for making it possible for me to compete. Let's do this!

## EARL ABRAHAMS FIX WHATEVER NEEDS FIXING

**B**odybuilding is all about building balance and symmetry. Balance in a physique is something we all need – whether you are a physique model or super-heavyweight bodybuilder. I know we love to train for size but we cannot add muscle to our frames without thinking about symmetry. If we do that we will only end up as muscular blobs with no distinct shape or definition! Each side of your body needs to be developed relative to the other – front, back, right, left, upper and lower. This is what judges call 'the total package'.

Many athletes lack balance because they are only focussed on putting on additional size without creating perfect symmetry. It is a common mistake to only train the muscles you can easily see in the mirror without thinking about those muscles such as the hamstrings, back and calves that you don't normally pay attention to. When you train for symmetry you need to hit all your body parts equally hard, identify muscles that don't respond to your training and take the necessary steps to correct that. In short, fix whatever needs fixing.

You can also ask a reliable coach or judge to identify weak areas you need to bring up so you can start rectifying imbalances in your physique. Muscle imbalances should be taken seriously because they can

lead to bigger problems such as spinal and posture problems later in life. More often than not we tend to focus exclusively on heavy compound movements when we train. Don't get me wrong, compound exercises are fantastic for adding mass to the frame of a bodybuilder but the stronger side usually takes over. Have you ever wondered why you can bench press 200kg but only press a 50kg dumbbell? With dumbbells your

stronger arm cannot help the weaker one and that is why I'm a big believer in dumbbell work for different muscle groups when you train for symmetry.

Dumbbell work will guarantee that each side will do an equal amount of work and it will eliminate the possibility of the stronger side taking on extra work from the weaker side.

Put another way, a specific muscle group will be less likely to

compensate for a weaker muscle group. You will also have a better chance to develop a balanced physique if you change your exercises on a regular basis and do some unilateral work. This is when you perform a movement with one body part such as single leg hamstring curls when you train hammies or single arm dumbbell presses for chest. When you perform unilateral exercises you isolate one side of your body from the other. You can do this by using machines, cables, resistance bands and dumbbells. Over time this will help you improve imbalances. Good luck and train smart!

**"IT IS A COMMON MISTAKE TO ONLY TRAIN THE MUSCLES YOU CAN EASILY SEE IN THE MIRROR WITHOUT THINKING ABOUT THOSE MUSCLES SUCH AS THE HAMSTRINGS, BACK AND CALVES THAT YOU DON'T NORMALLY PAY ATTENTION TO."**



## HENNIE KOTZE MANAGING DOMS

**M**any bodybuilders carry their next-day soreness around like a badge of honour. Many view it as the benchmark for the effectiveness of their last training session and therefore actively pursue the stiffness and discomfort we commonly associate with delayed onset muscle soreness (DOMS).

DOMS results from micro-trauma to muscle fibres and connective tissues, not the build-up of lactic acid as was previously thought. It is therefore a logical assumption to make that some degree of micro-trauma is required to build muscle fibres, and therefore it is understandable that DOMS is a likely consequence.

The problem with this way of thinking is that we often fail to distinguish between 'good' or 'bad' DOMS, and there are important differences between the two. You see, only some of the structural damage occurs to muscle tissue. The more intense feelings of next-day soreness are more commonly associated with damage to connective tissue, which makes training again in the presence of even mild DOMS risky and counterproductive.

Firstly, when training with residual discomfort you can't use the same intensity you did previously and you may lack strength. Furthermore, by simply imposing more damage to tissue without giving it adequate time to heal you're potentially accelerating catabolism, not inducing greater anabolism. The pain, after all, is an inflammatory response that is linked with the increased recovery requirements imposed on your body.

This not only affects your muscle and connective tissues, but also impacts your central nervous and hormonal systems. I therefore think of DOMS as your body's way of telling you that it

has worked hard and needs time to repair.

The other important factor to consider is the location, severity, and intensity of the discomfort or pain. A dull ache in the belly of the muscle is what I would consider 'good' next-day soreness. This shouldn't last more than 24-48 hours. Any longer and you've gone beyond the point of beneficial damage in my opinion.

Any pain or discomfort experienced in joint structures, and in ligaments and tendons is highly undesirable. This tissue damage takes longer to heal as there is limited blood flow to these regions and any subsequent training done before the process is complete can result in serious damage or even injury.

To ensure I limit or manage DOMS and keep it confined to my muscle tissue I always warm up properly before training, either with some light cardio or a few warm up sets, and I cool down after an intense workout. I also use strict form, always. Some guys like to use non-steroidal anti-inflammatory drugs (NSAIDS), such as ibuprofen, but I prefer to stay away from medication as this slows down the recovery process and masks the symptoms of pain and discomfort. They are there for a reason so rather let your body deal with the process naturally. I also supplement with BCAAs and glutamine, and add in some plant sterols for their natural anti-inflammatory effects to help speed up the muscle tissue repair and recovery processes.

I may also do some light massage, or jump into a warm bath or contrast shower to increase blood flow to aid the repair process. Depending on the severity I may only train again when it has subsided. I will train with DOMS only if it isn't too pronounced, but I go a bit lighter; this can actually help to alleviate the symptoms somewhat.

## JOHAN 'BOSSIE' BOSHOFF BURNOUT IS REAL

**C**ompeting year after year can really take its toll on the mind and the body of a bodybuilder, especially when you have competition dates close to each other. This year was an extremely hard one for me as I strived to achieve my best condition every time I stepped on stage. Bodybuilders who peak for a show and who are competing too often will eventually end up struggling because the human body can only take so much for extended periods of time before breaking down.

When you compete as often as I have been doing you need to constantly monitor your supplement and training protocols. Burnout becomes a real threat. You need to know when to go hard and when to lift your foot from the pedal and recuperate. Don't be afraid to take time off from your training and diet. This should obviously form part of your prep plan,

**"BURNOUT BECOMES A REAL THREAT. YOU NEED TO KNOW WHEN TO GO HARD AND WHEN TO LIFT YOUR FOOT FROM THE PEDAL AND RECUPERATE. DON'T BE AFRAID TO TAKE TIME OFF FROM YOUR TRAINING AND DIET."**

even if you are doing shows back to back. We are all biochemically and genetically different and will need different breaks at different times while we are prepping for a show. I try to consume the right amounts of protein, fats and carbohydrates so that I can reach my goal of burning fat and leaning out before I appear on stage again. I also believe in re-feeding my body to keep my metabolism high between shows.

By taking time off to relax I maintain focus despite the normal stress while I prepare for a show. It is crucial to recover from pre-contest prep and the rigors of competition by replenishing and rewarding yourself for all the hard work you have put in to look your best. The importance of rewarding yourself however is not to binge excessively but to remind yourself why you are competing and what you are trying to accomplish. A wise thing to do after a show is to drink plenty of water because the more hydrated you are the less likely you will crave junk food. Drinking water will help you to retain less water and reduce bloating. In addition, if you fail to catch up on much-needed rest between training sessions and shows you heighten your risk of suffering burnout. If this happens you will end up losing all your enthusiasm and motivation to compete in your next show. By taking a break, even if it is a short one, you will have the mental and physical strength to keep going and you will be that much closer to the realisation of your dreams.



**new!**  
**WEBSITE**  
**MOBILE FRIENDLY!**



**IFBB SAs  
VIDEO COVERAGE**



**FEATURING EXPERT  
INTERVIEWS,  
BODYBUILDING  
NEWS AND SHOW  
COVERAGE**

**WWW.MUSCLEEVOLUTION.CO.ZA**

**STAY INFORMED.** NEVER MISS AN ISSUE, NEVER MISS A THING...

**ONLINE MAGAZINE**

Never miss an issue of your favourite magazine! Now available digitally anytime, anywhere, on iTunes, Google Play, Zinio & Magzter.

**WEBSITE RESOURCE**

Read selected back-issue articles, get exclusive online content, and connect with the bodybuilding community.

**WEEKLY NEWSLETTERS**

Subscribe now! Stay informed about relevant industry news, latest research, events, and exclusive newsletter subscriber benefits.

**WEEKLY FITNESS MAG PODCAST**

Listen and learn via our website or iTunes, for free! Our weekly podcast entertains and informs with interviews, discussions, and expert advice.



FOLLOW US: TWITTER @MUSCLEEVOMAG OR INSTAGRAM @MUSCLEEVOMAG  
WWW.FACEBOOK.COM/MUSCLEEVOMAG

**NELSON MTHEMBU****FACING UP TO INDUSTRY CHALLENGES**

**R**ecently I took the time to chat to various athletes to find out how they perceive the future of our industry. I've found that most athletes are unclear about where the sport is headed. Their doubts seem to be based on three major challenges facing the industry – management issues within federation structures, politics and the financial challenges we all face.

I have discovered that many athletes aren't happy with the return they get for the effort they put in. Many feel that they put in a lot of work but get little or no respect or recognition. A major issue is the fact that complaints, suggestions or ideas often don't get acknowledged, addressed or attended to. Also, sometimes there seems to be a lack of respect between federation officials and athletes back stage as some athletes feel they are ill-treated in the manner in which they are spoken to or directed. These factors may seem trivial to some, and local bodybuilding has certainly made great strides over the years, but we need to tighten up these management issues to bring our sport on par with the global standard. It will also ensure an environment where every athlete, regardless of division or their placing in a line-up feels like their hard work is appreciated and recognised.

And, as is often the case in any organisation, there will always be issues of politics. Some athletes will always be unhappy about judging decisions, or will have a gripe about how athletes are rewarded and acknowledged, particularly in comparison to how judges are recognised. These issues are made worse when athletes feel they are being exploited by federations for financial gain, yet little or no reward is passed down to deserving and dedicated athletes. When federations ask exorbitant

entry fees but can't even provide trophies for those in second and third place, then those who support the industry are often left asking why? Issues of favouritism and even racism also continue to rear their ugly heads on occasion, but that is a legacy issue that still plagues so many sporting codes in this country.

And in terms of the financial challenges that athletes face, the fact remains that bodybuilding is not a professional sport and will remain a labour of love and passion for most athletes. There just isn't the mass appeal to attract big corporate sponsorships. This means that we will continue to pay money to win, while in other sports athletes win and get paid. It's a major reason why we lose so much potential talent as athletes can't sustain the lifestyle. The supplement companies certainly do a great deal to support deserving athletes, and some athletes are lucky enough to get support from outside the industry. However, they are few and far between. This is an issue with no easy solution. I have met many athletes with loads of potential but due to this problem the growth of the sport is affected. It is, however, an economic problem that affects all people at all levels. All I can do is urge those who are lucky enough to have sponsors to ensure they continually give back and deliver value. Nobody gives money to someone and expects nothing in return – there ain't no such thing as a free lunch. Don't blow this rare opportunity.

We certainly have the potential to grow this sport to the benefit of all involved, we just need a few small tweaks and positive moves. When that happens I have no doubt that South Africa will continue to produce world-class pros from every sphere of the population.

**JACO VENTER****LEANER IS BETTER**

**A**s athletes who frequently push the boundaries we're always looking for ways to achieve superior condition and beat the opposition on competition day. I believe there is no secret to effective dieting. As a bodybuilder you need to learn from experience with regard to what to do and not to do. I don't care how talented you think you might be – to diet for eight weeks for a show is not good enough in my opinion. To diet for 12 weeks is better but I'm still not convinced that you would reach your full potential within such a limited time frame. As someone who is absolutely passionate about the sport of

bodybuilding, I've been on a strict diet for the best part of six months. I can do this due to my dietary rationale. For instance, cheat meals for me are not about eating chocolates and ice-cream. It means to either have a high-calorie day where you either increase your carbohydrate or fat intake considerably, or have a take-away meal that will still offer some nutritional value. Increasing your fat intake to 20% of your daily macronutrient ratio is a good option. Should you increase your carb portion on a cheat day, lower your protein intake from approximately 200 to 150 grams. This will give your body the ability to address the increase of carbs

and give it a chance to digest by the time you eat your next meal. I consumed more calories two years ago than what I do at the moment, yet I only weigh 7kg more with the same body fat. Another interesting notion among many bodybuilders is the need to eat huge quantities of protein, but many forget about carbohydrates. Our body's main priority is to generate energy through glycogen, not to build

muscle. When there is a lack of this energy your body will break down muscle to fulfil its needs. In addition, without adequate glycogen your body will not utilise ingested proteins to build muscle. The need for glycogen is highest before, during and after workouts. Carb intake

can be moderated at other times of the day to help manage body fat levels and maintain them throughout the year. Just remember to keep them at a level where you feel healthy and still are able to bang out killer seasons in the gym. This level will vary from athlete to athlete. I can manage mine at between 6-8%. This gives me less work to do when I really need to dial in and get those striated glutes to pop and that lower back to look like a Christmas tree on stage. I think it was Henry Ford who said "If you always do what you have always done you will always get what you have always got". So if you're not achieving your goals it may be time to re-look your dietary approach.

**"CHEAT MEALS FOR ME ARE NOT ABOUT EATING CHOCOLATES AND ICE-CREAM. IT MEANS TO EITHER INCREASE YOUR CARBOHYDRATE OR FAT INTAKE CONSIDERABLY, OR HAVE A TAKE-AWAY MEAL THAT WILL STILL OFFER SOME NUTRITIONAL VALUE."**





## MARLENE KOEKEMOER

# CONDITIONING FOR THE FEMALE ATHLETE

**C**onditioning is a top priority in the sport of bodybuilding and fitness, yet female athletes can often struggle to get their conditioning spot on for a show due to a lack of understanding with regard to the many factors that affect the process.

The most important factor is undoubtedly hormones, which are regulated by the endocrine system. If just one element of the endocrine system is not functioning correctly then women may struggle with a whole host of problems that will affect our training, weight management, muscle growth and energy levels, which may lead to poor conditioning come show day. The most important endocrine organ in this regard is the thyroid which plays a pivotal role in regulating our metabolism.

**When an imbalance occurs this may lead to:**

1. an overactive thyroid that may cause anxiety, weight loss, heat intolerance and muscle weakness, or
2. an under-active thyroid that may cause weight gain, fatigue, hair loss, muscle aches and depression, to name a few.

What, then, is the solution? As with everything in life, restoring balance through a healthy lifestyle is the best course of action. If you detect a problem it is best to undergo a full battery of medical tests

and then get expert advice from a bioidentical hormone doctor or endocrinologist based on the results of your blood tests.

Some athletes also choose to take thyroid medication to increase their metabolic rate to get lean, which may lead to serious health problems due to the hormonal imbalances this creates. Rather take the healthy option and stick to a healthy diet and lifestyle.

Another important endocrine organ is the adrenal gland which produces the stress hormone cortisol.

With every training session we place stress on our bodies and this stressed state raises cortisol, DHEA and testosterone levels, which is good for us when they remain within the beneficial ranges. However, when we place too much stress on our bodies by overtraining and leading an unbalanced lifestyle we overproduce cortisol which affects our entire endocrine system. This may contribute to low progesterone levels which lead to irregular menstrual cycles, poor sleep, anxiety, less muscle development and, eventually, burnout.

To improve this condition adjust your training programme – keep your training sessions short but intense; not longer than 45 minutes. Also, get at least eight hours of sleep, listen to your body, learn to calm your central nervous system and find ways to manage the stress of your busy life, like the use of

meditation. This will also teach you how to focus.

Competition prep phases must also be planned carefully so that your body has time to adjust – it is never good to push yourself to the point of total burnout just because

you didn't plan your prep time perfectly. Always consider that you'll have setbacks and will therefore need extra time to get stage ready.

Our kidneys and antidiuretic hormones also affect our condition as they regulate fluid volume and control sodium and potassium concentrations in the body.

These antidiuretic hormones and aldosterone act as messengers for the kidneys, signalling when to conserve salt and water and when to excrete it. They rid our body of excess water by creating more urine or conserve water through re-absorption. Regulating sodium is crucial since it serves as a major component of extracellular fluid. Water follows salt, so when you lose salt, you lose water. While our bodies work hard to keep this balance, medication, the female menstrual cycle, injury,

overtraining, and stress can result in electrolyte imbalances and a disruption of water balance in the body. This is when we can end up with water retention which often presents as puffiness under the skin, swollen ankles and

bloating, all of which are detrimental to perfect stage conditioning.

To prevent this from happening a healthy diet and a balanced lifestyle is key. Don't take unnecessary medications, read up and learn how to manage your menstrual cycle, drink sufficient water and don't stop drinking water if you

experience water retention – it will only make it worse. And don't cut sodium for more than 48 hours as it has the same effect. Incorporate sodium-rich foods slowly after a show and keep sodium sources healthy. Going suddenly from a low sodium intake to a high intake can have dramatic visual effects on your appearance and your health. It is also very unhealthy to use medication to reduce water in our bodies before a show. I strongly believe that with the right diet you can be stage ready without going to extremes.

**"WHEN WE PLACE TOO MUCH STRESS ON OUR BODIES BY OVERTRAINING AND AN UNBALANCED LIFESTYLE WE OVERPRODUCE CORTISOL WHICH AFFECTS OUR ENTIRE ENDOCRINE SYSTEM. THIS MAY CONTRIBUTE TO LOW PROGESTERONE LEVELS WHICH LEAD TO IRREGULAR MENSTRUAL CYCLES, POOR SLEEP, ANXIETY, LESS MUSCLE DEVELOPMENT AND, EVENTUALLY, BURNOUT."**

**HFPA** Health & Fitness Professionals Academy

**2016 Registrations NOW OPEN**

f t g+ y in p | 011 807 9673 info@hfpa.co.za www.hfpa.co.za

**4 NEW T-SHIRT DESIGNS TO CHOOSE FROM**

**AVAILABLE NOW!**

**ORDER YOURS TODAY!**

**R195 each**

**ONLINE: WWW.MUSCLEEVOLUTION.CO.ZA**  
**E-MAIL: INFO@MUSCLEEVOLUTION.CO.ZA**



# SUBSCRIBE



**R216 PER SUBSCRIPTION FOR 6 ISSUES**

**SAVE 20% OFF THE COVER PRICE**

**CALL 086 010 0456 with your details handy or FAX the completed form to 086 670 4101 or email us at subs@RNAD.co.za SMS SUBS ME to 40573**

**PLEASE SEND A SUBSCRIPTION TO:**

First Name: \_\_\_\_\_  
 Surname: \_\_\_\_\_  
 Postal Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Postal code: \_\_\_\_\_  
 Birthday: \_\_\_\_\_  
 E-mail Address: \_\_\_\_\_  
 Cell number: \_\_\_\_\_

**Credit card:**

Account holder: \_\_\_\_\_  
 Credit Card number: \_\_\_\_\_ Expiry date: \_\_\_\_\_  
 CVC code (last 3 digits on back of card): \_\_\_\_\_

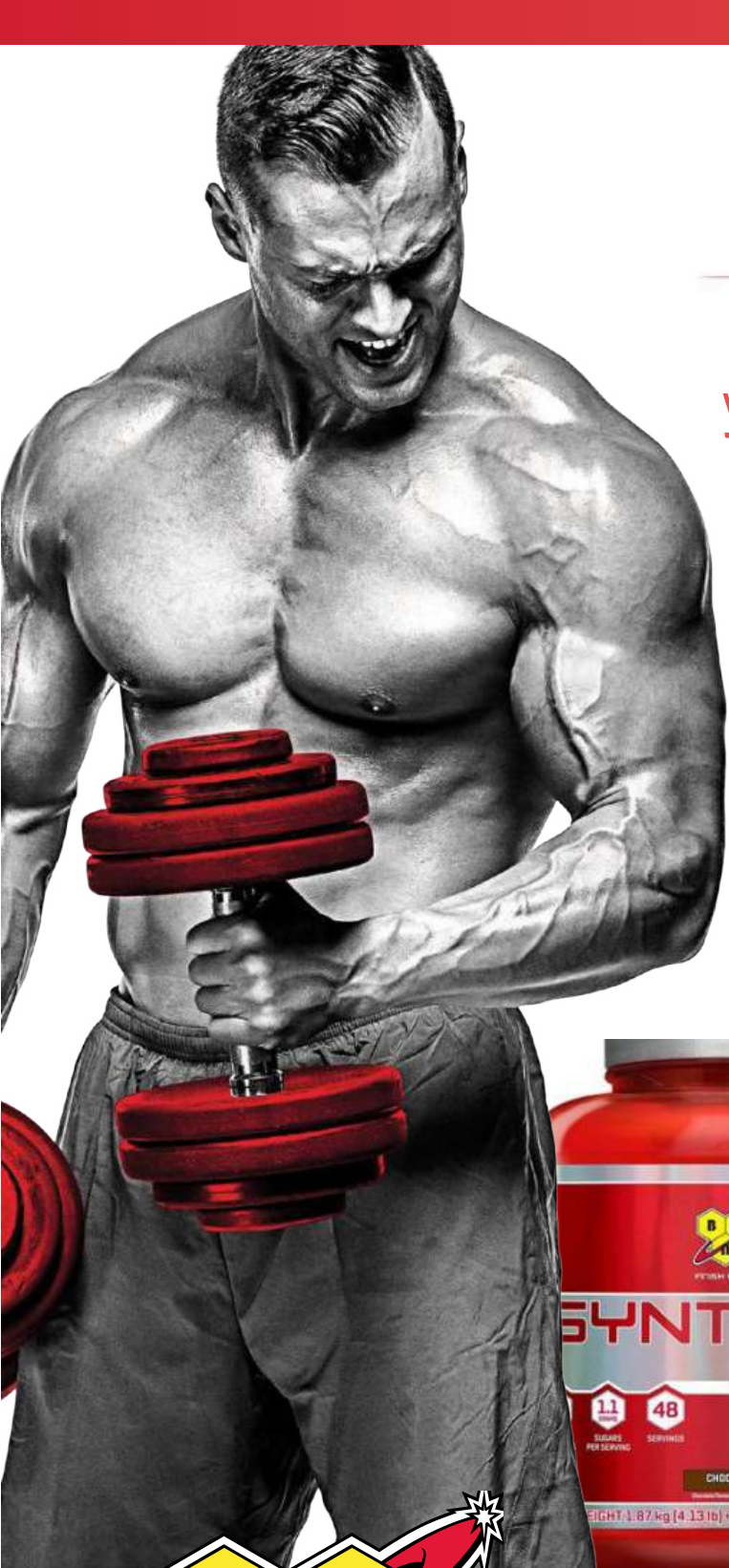
**Electronic Transfer**

Please indicate your name and cell no. as reference.  
 Payable to RNA Subs, FNB Trade Services 657, Acc no: 62104927259  
 Branch code: 254655

(Fax the completed form to us, or give RNA a call on 086 010 0456 Allow 2-3 weeks for processing.)

*Offer closes 31 December 2015*

**NOW YOU CAN SUBSCRIBE FROM YOUR CELL PHONE. SEND THE SHORTCODE 'SUBS ME' TO 40573, AND WE WILL GET BACK TO YOU.**



# PUSH™

your limits.then push further.

**NEW**



**FINISH FIRST.®**

Tel: +27 11 234 9890 | [sales@optimumnutrition.co.za](mailto:sales@optimumnutrition.co.za)

RANGE ROVER SPORT

**CONQUER EVERYTHING.  
FASTER. FASTEST SUV  
IN SOUTH AFRICA.**



ABOVE & BEYOND



Call us today to book a test drive.

The Range Rover Sport's 5.0-litre V8 Supercharged petrol engine delivers a staggering 625Nm of torque and accelerates from 0-100 in 5.3 seconds. It's no wonder it holds the title of South Africa's fastest SUV.

**LAND ROVER CONSTANTIA KLOOF**

243 JG Strydom Road, Constantia Kloof, Roodepoort

Tel. 011 671 8000