

INSIDE: FULL SHOW CALENDAR FOR THE 2017 BUILDING SEASON

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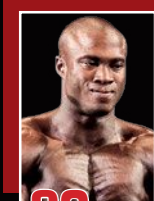
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THE TRAINING MINDSET

We all know we have to prepare ourselves physically and mentally before any lifting can be done in the gym. While taking the time to warm up sufficiently is crucial to prevent injuries to muscles, joints, ligaments and tendons, we also need to be in the right mood for lifting hard and heavy.

I'm talking about the ten minutes before a workout when you prepare yourself for the upcoming battle. Lifting weights is a trivial thing when compared to war, but we all know for that hour in the day it is the most important thing in the world. Stressors that usually consume our lives dissipate by the fourth or fifth set.

In order to stay motivated you have to set new goals each time you reach the previous one. When you're totally focused on your goals there is no feeling quite like achieving them.

By this stage many lifters are already talking about how the year is going to be 'the' year. I'm all for that, but one thing I know for sure is that if that's to be the case, then you have to take action, both physically and mentally!

The mind comes before the muscle.

The weights will never fail at testing both.

When squatting with more than what you weigh there is a roller coaster of emotions you go through during those last few reps. You go from inspired to exhausted to plain psycho! Squatting has never failed to make me sore and inevitably stronger.

In the gym you have to set your own barometer when it comes to failure or quitting. We all have that quit button. When you approach a failure point it is much more mental than it is physical. I recently read a brilliant

piece on six-time Mr. Olympia Phil 'The Gift' Heath, which featured in the New York Times. Although Heath was genetically bequeathed with great bodybuilding genes in the form of round muscle bellies and near-perfect symmetry, he still gets nervous every time he strips to his posing trunks in front of crowds. This is surprising, because of the 13 men who have held the Sandow since the Mr. Olympia's genesis back in 1965, The Gift is considered the most complete. Why then is Heath rarely satisfied with what he sees in the mirror? Most of the champ's year is zoned in, sniper-like, at a single target – the Mr. Olympia, the Super Bowl of bodybuilding. As he confesses in a recent interview: "All year long my focus is this contest, and everything I do for seventy days is about me winning it. Every meal, every workout, every rep, every supplement, every ounce of sleep, every massage therapy. Everything."

I think this all-or-nothing mindset is what drives him to train at odd hours in the morning at Armbrust Pro Gym in Denver, Colorado. On more than one occasion the police came shining with their flashlights through the glass doors of the gym, wondering who is inside at 3 a.m. It would be Heath training by himself, because he did not like the way he lifted earlier in the day. Call it obsessive, but I like Heath's training mindset.

Although he works harder and devotes more time to this sport than almost any other athlete, he still gets nervous about guest posing: "It can be 10 people or thousands of people, I want them to see something special," Heath said in the New York Times article. "I want them to say, 'I saw the best in the world at something,' and maybe that will inspire them to go do something in their life with the same vigor."

If you want to be a better version of yourself you have to set goals like Heath. It could be really small ones, but enough to keep you going even if every muscle in your body is screaming for you to quit. There is no doubt in my mind that you will see a measurable difference in your performance when you change your motivation and mental focus in the gym. Like Henry Ford said: "The man who thinks he can and the man who thinks he can't are both right. Which one are you?"

Werner
Editor

MY FAVOURITE THIS ISSUE:



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BE BELIEVABLE!

They say that change is inevitable, unless you're standing in front of a vending machine. I couldn't agree more, but to be honest it's hard to accept change and it isn't always easy to adapt to changes that you don't agree with.

Life is constantly evolving, though, and so is business. If you're an athlete, believe it or not, you're a self-sustainable business and brand within yourself and you must adapt or you'll simply fade away.

Lately I've been reminiscing about the bodybuilding era in which I first started publishing this magazine 14 years ago. Fitness was nowhere near as popular as it is now and camaraderie among competitive bodybuilders on the local circuit was much stronger than it is today. Respect was earned, work ethics were solid, and there was no shortage of conditioning in local shows.

Fast forward to 2017 and I'm struggling to find a top six line-up in any division where every athlete going for gold is completely shredded. So what's changed? Are athletes not working as hard as they once did? Are athletes not dieting as hard?

I posted this comment

"IF YOU INTEND ON BUILDING A CAREER AS A REPUTABLE, SOUGHT-AFTER INDIVIDUAL IN THIS INDUSTRY, IN THE HOPES OF RECEIVING SUPPORT FROM BIG BRANDS, THEN YOU NEED TO EVOLVE INTO AN INDIVIDUAL WHO IS BELIEVABLE AND RESPECTED. IF NOT, YOU MIGHT ACHIEVE SUCCESS AS AN ATHLETE, BUT YOU'LL NEVER REAP THE REWARDS AND BENEFITS OF BEING A TOP BRAND AMBASSADOR."

on social media a while back hoping that someone could answer these questions for me. One old-school athlete – a veteran of the sport – said that the physiques of today are definitely not as conditioned as they once were, but (and it's a big but) if you look to the Pro ranks and the top tiers of international bodybuilding, there aren't as many fatalities as there once were. I had to read his answer a few times, but it soon made perfect sense.

Years ago we became accustomed to seeing the most incredible conditioning on stage, which set the benchmark for bodybuilding. But at what cost to the athlete

does that kind of conditioning come?

If there was a universally understood law in bodybuilding that stated "superior conditioning is unhealthy and causes death" then I think many competitors would take heed of the warning. They'd reconsider blisteringly sharp conditioning and settle for a rather smoother but more shapely look (kind of like the physiques we see today).

But this universal law doesn't exist in bodybuilding. There is no textbook and there is no way of knowing how healthy the

most conditioned athlete is on any given stage. As such, we continue to look for the type of conditioning that blew our minds all those years ago, which seems to be a rarity these days.

Another point of contention I would like to ruminate on a little – something that I feel has no reason to change with the times or to evolve as much as the sport or supplements or ideals do – is our humility.

Social media allows us to promote ourselves to potentially millions of people across the globe. This basically puts a microphone in front of us

and allows everyone to be heard, good or bad. But social media doesn't make you a better person. It merely amplifies your character traits. We've evolved from a humble sport to a massively self-righteous, self-absorbed and entitled industry, and it's not the direction in which we should be moving.

Athletes jump from brand to brand, coach to coach, and clothing sponsor to clothing sponsor – it's unacceptable. Those who own the big brands in this country watch social media and see this behaviour. Jumping brands also earns you a label of "unbelievable" in the minds of consumers. And once you become unbelievable you're no good to a brand or sponsor because consumers merely brush you off as a brand hopper who lacks any credibility when you promote a brand or product.

If you intend on building a career as a reputable, sought-after individual in this industry, in the hopes of receiving support from big brands, then you need to evolve into an individual who is believable and respected. If not, you might achieve success as an athlete, but you'll never reap the rewards and benefits of being a top brand ambassador, with a support team behind you that will take you places you never could have gone on your own.

The choice, inevitably, lies with you. In my mind it all boils down to one simple goal in life – be a good person. You can't buy character, and becoming a sought-after and influential individual comes from hours and hours of honing your personal craft and constantly seeking to inspire and give back to those around you. Those who just take and remain self-serving are forever doomed to fail. So give more, do more and be more!

Enjoy issue 82

Andrew
Editor-In-Chief

MY FAVOURITE THIS ISSUE:





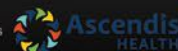
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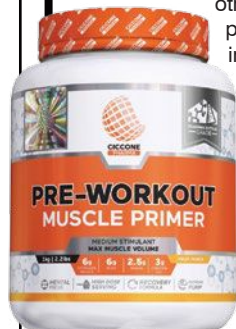


EVOX BRAND RE-LAUNCHED

Evox, a well-recognised South African sports nutrition brand, has embarked on its brand revamp and re-launch. With an increased interest in international distribution and a growing footprint of clientele, Evox has begun an evolution to become a viable international competitor and major player in off-shore supplement markets. And it's not just about a new logo and new packaging, says Katherine Mouton, Marketing Manager for Ascendis Sports Nutrition. "We've taken the opportunity to better define our product categories, and the science team has reformulated and improved on many of the existing products we offer. We also have an exciting innovation pipeline of new products launching soon." **For more info, visit www.evov.co.za or follow EvoxAdvancedNutrition on Facebook and @evoxnutrition on Instagram.**

CICCONE PRE-WORKOUT

Ciccone is proud to announce the latest addition to their range. After the amazing response from the market to its whey isolate, an additional five flavours have been added to the range. In addition, the company has formulated a world leading pre-workout product that is unparalleled in its nitric oxide-boosting properties. Proudly manufactured under licence by TNT, this product boasts a high dose of nitric oxide boosters, vasodilators, mental focus compounds and insulin mimickers. Equipped with highly branched cyclic dextrin and several other trial-tested muscle performance compounds, including high-dose BCAAs, Betaine, Citrulline Malate, Beta Alanine, and Creatine HCL, Ciccone Pre-workout guarantees to deliver pre-workout performance to rival any other on the international market. Expect massive pumps, rapid recovery and amplified mental focus!



TITAN NUTRITION ON EXPANSION DRIVE

The philosophy of Titan Nutrition, founded by George Wilhelm in 2007, is to offer the fitness market protein supplements of unmatched quality by manufacturing products that cut no corners in terms of purity and potency. The most modern suppliers were identified as the only source of quality ingredients and as a basis for guaranteeing a technological advantage and premium taste. After a decade, what began as a small-scale, self-funded start-up remains an independent and fiercely competitive player that continues to operate according to its founding philosophies. Titan still adheres strictly to its artisan heritage, which the owner and founder personally

leads, supervises and controls – one of the crucial measures of a true artisanal product. The company has since expanded, gradually gaining a greater share of the local whey protein market, with additional products introduced to the range, all produced using top quality, modern ingredients. Titan True Whey, a 100% pure, top quality micro-filtered whey protein, is the brand's flagship product. Offering an exceptional taste, with no intestinal discomfort, bloating or gas, it's the enduring favourite of everyone who tries it. Titan Nutrition will now be increasing their presence in all major centres throughout South Africa in 2017. **For more info, visit www.titanworld.co.za**



3D NUTRITION LAUNCHED IN SA

3D Nutrition is a new local supplement brand that launched in late January 2017 offering a comprehensive range of products and flavours, and a complete range of accessories. The 3D Nutrition brand has been developed to tackle the 3 dimensions of supplementation, which its creators deem to be the pillars of a solid fitness brand. These include superior quality, revolutionary innovation and cutting-edge science. The creators of the brand have signed a 5 year sole distribution agreement with Chrome Supplements & Accessories, which comprises 20 retail stores, an online store in South Africa and the UK, as well as a wholesale division which supplies over 400 independently-owned supplement stores, pharmacies and gyms across Africa.

PROS LINE UP AT ARNOLD CLASSIC SHOWS

IFBB Pro Cedric McMillan, who finished second in the 2016 Arnold Classic in Columbus, will return to the stage along with other rising superstars such as Dallas McCarver and Justin Compton in this year's Arnold Classic Pro League clash. Defending champion Hidetada Yamagishi will battle it out with Jose Raymond, David Henry and Guy Cisternino in the 212 division. On the heels of the Arnold Classic in Columbus, South African Pro bodybuilder Earl "The Beast" Abrahams will be making his competitive debut on the IFBB stage at the Australian edition of the world's largest multi-sport festival, the Arnold Classic Australia in Melbourne, scheduled for 17 to 19 March.



ARNOLD CLASSIC MAKES HISTORY

For the first time ever there will be a sanctioned strongman competition for disabled athletes at the Arnold Classic, which takes place from 2 to 5 March 2017 in Columbus, Ohio. The disabled competition will be split into two classes, namely seated and standing. It will follow the same format as a normal strongman competition, but with modified events which will include an arm-over-arm sled pull, dumbbell press medley, atlas stones and the crucifix hold. According to Michael Gill of the Strongman Corporation, the event is the ultimate test of will and physical strength. "It's amazing to be able to offer athletes

of different backgrounds the stage to prove themselves to be the best in the world. I attended the contest in 2015 in Ohio on a smaller scale. It is appropriate that it is showcased in Columbus at the world's largest gathering of strength athletes," Gill stated. The Strongman Corporation was founded in 2014 and serves as an umbrella to promote and support smaller strongman organisations. The 2016 Arnold Classic saw some of the biggest names in the sport of strongman. Some notable names were four-time World's Strongest Man, Brian Shaw, Hafthor Bjornsson from Iceland, and four-time World's Strongest Man, Zydrunas Savickas.

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MUSCLE NEWS

SIFISO DOMINATES WORLD JUNIORS

South Africa's Sifiso Thabete came to the IFBB World Juniors and Masters Championships in peak condition and won his category – the Junior Men's Bodybuilding 16 to 23 years, up to 75kg. He not only won his category, but also placed 2nd in the Overalls for the category – a fantastic achievement! Other local athletes who battled it out against the best of the best in Santo Domingo in the Dominican Republic were **Aristidis Nikopoulos**, who placed 2nd in the Master Men's Classic Bodybuilding 40-49 yrs, Open; **Amore Coetzee**, who claimed a 4th spot in the Junior Women's Bikini Fitness 16-23 yrs over 1.66m; and **Chris Pillay** who took 6th place in the Master Men's Bodybuilding 40-49 yrs, up to 80kg category. **Larnelle Fredericks** finished 6th in the Junior Men's Bodybuilding 16-23 yrs over 75kg section. Both **Cinthia Marshall** (Master Women's Body Fitness over 54 yrs, Open) and **Machael Diedericks** (Master Men's Bodybuilding 40-49 yrs, over 90kg) came 11th in their respective categories. South Africa achieved 16th position out of 45 countries in the Team Championships in terms of points acquired. Spain was the highest ranking country, followed by Poland and France. The IFBB organise over 2,000 bodybuilding events worldwide, ranging from the World Classic Bodybuilding Championship and World Junior and Master Championships to Mr. Olympia and the Arnold Classic weekends.



Sifiso Thabete at the IFBB SA's 2016

NEW DIVISIONS ON THE HORIZON

BBSA/IFBB OFFICIALS WILL INTRODUCE THE WELLNESS FITNESS DIVISION TO COMPETITIONS LOCALLY AS SOON AS POSSIBLE.

The new division was initially created for female competitors in Brazil, South America who were carrying a more voluptuous look with regard to lower body musculature. The Wellness Fitness division follows the inclusion of both the Fit Model Women and Fit Model Men categories at IFBB contests, with the criteria stating that less attention is paid to body parts and muscles and more focus is given to overall lines and the shape of the physique, elegance of moving on the stage as well as the style and attractiveness of presentation.

Other new categories include Men's Muscular Physique and Mixed Pairs. The IFBB brought back the Mixed Pairs division composed of a male

classic bodybuilder together with a female physique, female fitness or female body fitness athlete. There is also a category called Muscular Men's Physique which is intended for athletes who want to develop a fuller physique but not along the lines of the Men's Bodybuilding division. The main difference between Muscular Men's Physique and Athletic Physique is that the Muscular Physique competitors carry slightly more muscle but not as much as bodybuilders.

Bodybuilding has been in transition in the past few years with the IFBB striving to add more mainstream and attainable physiques to its competitive ranks.

EVOX LAUNCHES NEW ALPHA SERIES

Evov, a leading South African brand with a reach that now extends across Africa and Australia, is leading their innovation drive with the launch of a new product category. The Alpha Series is dedicated to bodybuilders, fitness enthusiasts, strength and power athletes. This highly innovative, maximum-strength offering draws on the most up-to-date science, leveraging on industry relationships with the most prestigious global partners, and uses the most advanced manufacturing technology available. The initial launch offering covers all the vital elements of the peri-workout phase, with:

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MUSCLE JUNKIE LAUNCHES REDEVELOPED RANGE

Hardcore bodybuilding brand Muscle Junkie has gone back to its roots and redeveloped its offering to suit its local and international clientele. Surprisingly, this brand is only around 24 months old, and it has already captured an underground audience of new-generation bodybuilders and locally-grown heroes alike. As of February, regular consumers of this brand's offering will see at least six brand new innovative products hitting the shelves, along with new-look packaging. Meagan Smith, Brand Manager for Muscle Junkie says: "It's been a long project as we embarked on better understanding our consumers in order to better develop new innovation. We opted to develop a range of high-efficacy, solutions-based supplements for this category and our science team has shown their worth by delivering outstanding new innovation in both efficacy and flavour profiles. We are excited to see the new look and new products reach new heights in 2017 and beyond."

Follow the Muscle Junkie story on Facebook at HardcoreMuscleJunkie and on Instagram @hardcoremusclejunkie.

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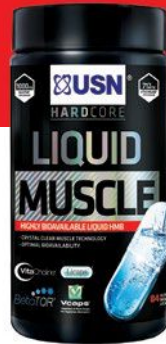
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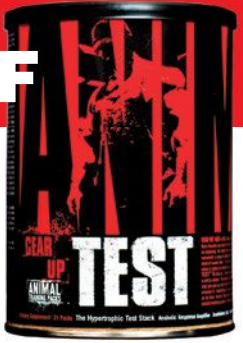


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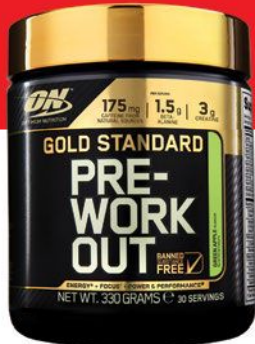


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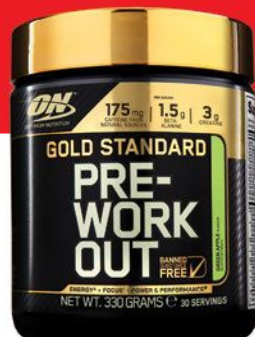
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[ask M.E]

LOOKING FOR ASSISTANCE WITH YOUR TRAINING, MEAL PLANNING OR NUTRITIONAL SUPPLEMENTATION? ASK OUR PROS.

Questions answered by Muscle Evolution's team of experts.

Q POST-WORKOUT INSOMNIA

I find that I have trouble sleeping after my gym session since I have to train at night due to work obligations. I find it tough to wind down and get a deep, restful night's sleep. Can you help me with a few tips for improving my sleep after gym? *Steve from Port Elizabeth*

A Adequate shut-eye is beneficial for both your brain and your body. If your lifestyle is such that you can only train at night, then there are a few tips you can try out to improve your chances of sleeping well. In the end, training closer to bed is better than not training at all.

Let's first discuss the importance of sleep in general. The quality of sleep is an absolute necessity in today's frenetic world. A multitude of studies have looked at insomnia and how it affects decision-making, reaction time and cognitive ability. Being sleep-deprived means you are tired for much of the day, which

could negatively influence your performance at work and in the gym. It can also affect your mood, relationships, health, ability to recover and grow and even your longevity.

The medical consequences of chronic sleep deprivation can be dangerous, with the latest research indicating that there is a significant link between insomnia and a person's level of stress, depression, the ability to think and perform, hypertension, strokes, heart attacks, obesity, cancer and Type II diabetes.

In a well-known study by Karine Spiegel and colleagues (1999) eleven young men were restricted to four hours

of sleep for six nights in a row. Spiegel measured a range of hormonal and metabolic markers throughout this period of acute sleep-deprivation and found that all the men, aged between 18 and 27 years old, showed undesirable metabolic and hormonal changes. Their levels of cortisol increased dramatically and their glucose tolerance dropped – signs commonly associated with the process of ageing. The participants in the study actually showed hormonal levels that could have been mistaken for those of 50 or 60-year-olds! These changes were reversible after several days of additional sleep.

Don't worry, there are solutions that will enable you to sleep better. Firstly, though, let's determine if you really have a problem. Although there are various elaborate laboratory tests that objectively measure sleepiness, you can make an accurate assessment based on some simple questions:

- Do you need an alarm clock to wake you up in the morning?
- Do you lose focus and concentration at work?
- Do you sleep extra hours on weekends?
- Are you wide awake the moment your head hits the pillow?

If you answered yes to any of these questions (and I am sure you did!) you are definitely suffering from a case of post-workout insomnia. You'll need to start meeting your personal sleep quota, which is between 7 and 9 hours per night. Insomnia means you have a difficulty falling asleep and remaining asleep, waking up too early and/or you have poor sleep quality.

The reason why vigorous exercise can keep you awake is because it triggers your stress response, elevating your stress hormones – cortisol, adrenaline and norepinephrine. If these hormones remain elevated for too long, it can have a negative impact on your heart, fitness and overall well-being. Over time this can weaken your immune system significantly and raise the risk of chronic heart disease. Stress hormones also increase the blood flow throughout your body while also raising your heart rate



YOU'LL NEED TO START MEETING YOUR PERSONAL SLEEP QUOTA, WHICH IS BETWEEN 7 AND 9 HOURS PER NIGHT. INSOMNIA MEANS YOU HAVE A DIFFICULTY FALLING ASLEEP AND REMAINING ASLEEP, WAKING UP TOO EARLY AND/OR YOU HAVE POOR SLEEP QUALITY.

and level of alertness. While this is great for exercise, it can actually prevent you from getting much-needed sleep – something that is crucial to recovery for a bodybuilder. Cortisol levels typically peak 30 minutes after you wake up in the morning, before gradually declining throughout the day. They should be at their lowest at bedtime when you fall asleep, but training at night can actually kick your cortisol levels back up again.

Follow these tips to slip into slumberland with ease after your evening workout:

- **Perform your workout, if possible, at least three to four hours prior to bedtime.**
- **Follow a sleep routine about 60 minutes before you go to bed** by dimming all the lights and shutting off electronic devices (television, iPad etc.). Researchers at Harvard University found that people who read from a screen before bedtime found it hard to wake up in the morning feeling alert, even though they slept an adequate amount. This happens because the blue light from a screen suppresses melatonin, a sleep-promoting hormone.
- **Cool your bedroom** because most people sleep better when the room temperature is lower.
- **Don't use caffeine as a pre-workout formula** when you are training late in the afternoon or evening.
- **Drink fluids when you hit the weights.** It can help blunt the cortisol response.
- **Take a hot bath or shower just before you go to bed.** The drop in temperature when you get out of the bath or shower can help your body shut itself down, facilitating sleep.

“VIGOROUS EXERCISE CAN KEEP YOU AWAKE BECAUSE IT TRIGGERS YOUR STRESS RESPONSE, ELEVATING YOUR STRESS HORMONES – CORTISOL, ADRENALINE AND NOREPINEPHRINE.

CORTISOL LEVELS TYPICALLY PEAK 30 MINUTES AFTER YOU WAKE UP IN THE MORNING, BEFORE GRADUALLY DECLINING THROUGHOUT THE DAY. THEY SHOULD BE AT THEIR LOWEST AT BEDTIME WHEN YOU FALL ASLEEP.”

People who suffer from insomnia are inundated with adverts for various kinds of sleep remedies. Although these may be useful in the short term, under certain circumstances there are risks of dependency associated with long-term usage.

Relaxation techniques and other stress management methods are also often recommended to address stressors that contribute to sleeping difficulties.

A common misconception is that you can “catch up” on sleep, but it is typically accumulated across a 24-hour period and not just at night. If you are able to take a 30-minute nap during the day, it will actually reduce the amount you need. Falling asleep can also be affected by social cues and your circadian rhythm (a roughly 24-hour cycle of physiological, biochemical and behavioural processes that are internally generated but can be influenced by external factors). Spending more time in bed to give you a better chance of falling asleep is another common misconception. The longer you stay awake while in bed, the more you are actually conditioning yourself to think of the bed as a place where you don't get any sleep, which will only lead to more frustration.



“REMEMBER THAT BREAKFAST AND YOUR PRE- AND POST-TRAINING MEALS ARE YOUR MOST IMPORTANT MEALS OF THE DAY, WHICH MEANS THEY NEED TO CONSIST OF QUALITY SOURCES OF PROTEIN.”

Q BULK WITHOUT THE BULGE

I'm naturally a big eater and despite training hard in the gym I only seem to gain fat. Am I doing something wrong? Johan from Brits

A “Eat big to get big” is a common adage bodybuilders have followed for many years. Eating a lot at one time will not make you bigger, though, only fatter. Excessive calories are stored as body fat, not muscle. You have to find the right balance of food to add muscle mass to your frame. When your goal is more muscle you have to adhere to a meal plan that will allow you to reach your goal. Start by eating more frequently, using smaller portions of food. For most bodybuilders, building mass requires around 17 to 20 calories per kilogram of body weight. If your metabolism is not on par with that of a top bodybuilder you should definitely eat less. A good recommendation is starting with 16 to 17 calories per kilogram of body weight and monitor your body after two weeks. If you are gaining in the midsection, decrease

your calorie intake and/or manipulate your carb intake to sharpen your insulin response.

Remember that breakfast and your pre- and post-training meals are your most important meals of the day, which means they need to consist of quality sources of protein. When you eat a solid breakfast you boost the release of important anabolic hormones, which will suppress catabolism (the breaking down of muscle tissue). When you skip breakfast and you forget to eat after training you compromise your ability to recover from your workout. An energy-packed pre-training meal will allow you to push harder in the gym. Make an appointment with a dietician or a professional trainer familiar with the sport of bodybuilding to find the right meal plan for you. But whatever you do, don't grow sideways!

TECH GEAR

CANON POWERSHOT G9 X MARK II

Canon's refreshed PowerShot G9 X Mark II is a super-slim, pocketable camera offering super-fast continuous shooting speeds of up to 8.2 fps, a large 1.0 type 20.1-megapixel sensor and Canon's DIGIC 7 processor. The G9 X Mark II has a 3x optical zoom and 28mm wide angle lens. The sensor significantly reduces noise and improves dynamic range for consistent performance day or night, while the f/2.0 lens lets in more light, giving users

the freedom to use lower ISO or higher shutter speeds, and create background blur. Users can also capture Full HD video. The DIGIC 7's improved subject tracking ensure you capture everything, from big, sudden movements to changes as small as a change in facial expression. With both Wi-Fi and Dynamic NFC, users can quickly connect and transfer images to compatible smart devices. Weighs just 206g.



With both Wi-Fi and Dynamic NFC, users can quickly connect and transfer images to compatible smart devices.

GOPRO HERO 5 BLACK ACTION CAMERA

The GoPro Hero 5 Black Action Camera is the most powerful and versatile action camera yet thanks to its 4K video, voice control, one-button simplicity, touch display and waterproof design. The stabilised video, crystal-clear audio and pro-quality photo capture allows everyone to take the perfect picture, no matter the conditions. Editing and sharing is now easier with the ability to automatically upload footage to GoPro Plus Cloud. The Quik and Capture app can also be paired to the GoPro via wifi. Available at Cape Union Mart stores and online at www.capeunionmart.co.za. **R7,999**



QUADRONES RANGE

Branded tech and accessories distributor Gammatek has launched an expanded range of AWW Industries Quadrones in South Africa. Quadrones are designed to perform aerial acrobatics, with premium models boasting a built-in camera to deliver colour videos and stills. Infrared-enabled Battle Drones offer a real-life gaming experience. The range includes:

- **THE QUADRONE** – features a four-axis structure for faster flying. It is wind resistant and can be flown both outdoors and indoors. It boasts a six-axis gyroscope for precise hovering in the sky. **R999**
- **THE QUADRONE XLC** – Includes a digital camera capable of shooting stills and videos. **R1,999**
- **THE QUADRONE BLADE** – Ideal for beginners with a 2.4 GHZ, 4 Channel range of up to 300 feet. **R1,499**
- **THE QUADRONE SNAP** – The 3-in-1 drone with a six axis-gyro and headless mode for greater maneuverability. **R2,999**
- **QUADRONE BATTLE DRONES** – Equipped with interactive Infra Red recognition. **R2,999**

Available at leading outlets across the country including Incredible Connection, iStore and Musica.

International pricing is \$18,198.



NEW MV AGUSTA BRUTALE 800 RR

The revolutionary MV Agusta Brutale 800 RR naked bike offers a three-cylinder power plant which now makes 140hp and 85Nm of torque from launch. Refinements in the latest model deliver less vibration, lower emissions, more power, and a less demanding set-up. Noise has also been reduced by 50% compared to the previous model as the cylinder head has been developed

to suppress combustion noise and the side covers, which also act as engine protectors, aid in lowering the volume. The ride-by-wire throttle system has been updated and now features an eight-level traction control system accessible through the on-board diagnostics. New styling incorporates a split seat, retractable passenger grab handles, and LED tail and indicator lights.



Dylan Ridley

DYLAN RIDLEY

Arnold Classic South Africa 2016
LIGHT HEAVYWEIGHT
CHAMPION

1-ON-1 WITH SSN ATHLETE **DYLAN RIDLEY**

INTERVIEW BY ANDREW CARRUTHERS

1. What first sparked the idea of going to the gym and doing weight training?

I have always been an avid sportsman from an early age. My first encounter of going to a gym was during my many years of playing rugby. During the off season I would use weight training to increase mass and strength for the following season. We all strive to be bigger, stronger and faster.

2. What are some of the most valuable lessons you have learned through training?

The most valuable lesson I have learned through training is that there are no shortcuts. Do it properly the first time, all the time. What you put in, you will get out. Stay humble, just because you train and lift weights, doesn't make you better than anyone else.

3. What are the key character traits required by individuals to become successful bodybuilders?

The key character traits required is to have a die-hard attitude. Being mentally strong refusing to quit at any cost. Being able to set a goal and work relentlessly towards it. You have to be extremely disciplined. There are times when you will have to make extreme sacrifices to achieve your goal. Dedication, making sure you eat your meals, do you cardio, train as hard as you possibly can, refusing to cut corners. Consistency and patience is key. There are no shortcuts, so make sure you put the hours in and out of the gym consistently. People are too impatient and give up before they have even started. Be patient with yourself. If you are putting in 100% effort in every aspect of your training, I promise you the results will come. Last, but by no means least, you are always a student of the sport. Do not for one second think or believe you know everything there is to know about bodybuilding. Keep an open mind, absorb as much information as possible. In this crazy sport, there is no 'one size fits all'. Everyone reacts differently be it foods, training techniques, recovery times etc.

4. The sport and the industry has changed so much since you began and not many people are chasing the bodybuilding look and size anymore. Tell us how you think peoples' work ethic has changed, be it for the better or worse.

The industry has changed a lot since I started out in competitive bodybuilding. Now days it's all about bodybuilding vs aesthetics. My personal opinion... I feel it has diluted the true essence of bodybuilding as a sport. I am aware that most people cannot or do not want to look like a bodybuilder, so they opt for the more aesthetic sports model look. There will always be this feud between bodybuilders and fitness athletes as bodybuilders feel their work ethic, sacrifices and overall time spent on our craft is far greater than that of a fitness athlete. You cannot weigh the two up against each other as they are two different entities completely. I feel a bodybuilder's approach to their craft and training is far less vocal and extravagant compared to that of a fitness athlete. Far too many so called fitness athletes, who have never stepped on stage, run around in compression pants that are two sizes too big for them as they never train legs, post selfies and hashtag #Beastmode all the time. I am a bodybuilder, so obviously my opinion is a biased one.

5. Tell us why you choose to use SSN sports supplements and how important is it to you to be aligned with the best brand on the market.

I chose SSN sports supplements because of their professionalism, work ethic and quality of products. I have been sponsored by SSN going on 3 years now and I trust the brand completely. It is extremely important to align yourself with a brand that has the same drive, focus and determination to succeed that you do. Surrounding yourself with like-minded dynamic people will only elevate your training and career to the next level. It is vital to align yourself with the best brand, as they will always have your best interest at heart.

6. What are your favourite supplement stacks?

My favourite supplement stacks are:

Pre-workout : SSN MagniPump, SSN N.O Crea-Pump Concentrate, SSN BCAA Caps.

Intra-workout : SSN CytoGuard.

Post-workout : SSN Crea-Mass and SSN 100% Whey Protein.

7. Tell us how you use your supplements and the timing thereof to best benefit your physique.

30 minutes before training: 1 x capsule of SSN MagniPump (great blood flow and pumps).

2 x scoops of SSN N.O Crea-Pump Concentrate (great focus, energy and pumps).

5 x capsules of SSN BCAA Caps (to prevent going catabolic).

I take this pre-workout stack for energy and focus and extreme pumps making sure every workout counts. 100% effort.

Intra-workout: 2 x scoops of SSN CytoGuard.

SSN CytoGuard is stacked full of amino acids to refuel depleted muscles with the nutrients they need for optimal recovery and enhanced post-workout muscle hypertrophy.

8. What are some of the best and most useful supplement tips and nutritional tips you could offer up and coming bodybuilders?

The best advice I can offer any up and coming bodybuilder is, do not conform to the norm. Be willing to experiment with different foods and training techniques. There is no 'one size fits all' as I said before. Everyone is different. Try new things, different sources of carbohydrates, proteins, fats. Work out what works best for you. When it comes to protein, try normal whey, whey isolate or hydrolysate. Small changes like these can make huge improvements to your gains.

**DYLAN'S GYM PROVEN
PRE-WORKOUT
STACK**



**WHAT'S
LEGIT
& WHAT'S
A TOTAL
WASTE OF
TIME?**

TRAINING MYTHS CRUSHED

We all want to add lean muscle mass to our frames and improve our strength as much as humanly possible. In this regard it is sometimes good to go back to the basics, especially when you have developed a filter of what works and what does not, despite it being neither scientifically nor anecdotally valid. Call it predetermined bias or odd habits

that you feel you need in order to achieve your best look and performance.

If you are new to lifting it will come as no surprise that misinformation is rife in the bodybuilding world. Maybe it is time for newbies and veterans to look for some sound foundation and decipher fact from fiction and what makes sense in the grand scheme of things.

Claiming to know it all is a recipe for stagnation, and the word complacency has a negative ring to it in a world that is

constantly evolving. When we started lifting we simply wanted to test everything and it is important that we don't lose that mindset along the way.

While we are fortunate enough to have accumulated an abundance of data from studies about different training regimens, sound nutrition and recovery rates, we can easily get bogged down with meaningless statistics without noticing how it works in practice. Busting common gym myths is therefore a good way to separate truth from fiction, remind ourselves what we know and also learn new things – so here we go!

» MYTH GO HEAVY OR GO HOME

» TRUTH

Everyone who has spent time under the bar will know that you cannot go all-out all the time. If your mantra is "go heavy or go home" you can be certain that tendonitis will develop along with other injuries. Life is about balance, which means you must have periods where you focus on concentric, eccentric and isometric strength in the gym.

Concentric strength is about contracting as much musculature as possible, while eccentric strength emphasises the extension phase of a movement which strengthens the tendons and increase the capacity to recruit more muscle fibres. Isometric strength tests holding, stabilising and pausing at specific points in a lift to not only build strength at your weakest point but also through a complete range of motion.

Strength is important while chasing hypertrophy for bodybuilding purposes, but you should not ignore high reps with light to moderate loads to flush the muscle with blood as this also aids in the recovery process. Lighter loads help improve your overall muscle quality by increasing the muscle's endurance and its resistance to injury. For that reason bodybuilders should vary their workouts using both heavy and light protocols to enhance muscle growth. Of course, strength and hypertrophy will diminish if loading is not imposed on a regular basis and at specific intervals.

"LIGHTER LOADS HELP IMPROVE YOUR OVERALL MUSCLE QUALITY BY INCREASING THE MUSCLE'S ENDURANCE AND ITS RESISTANCE TO INJURY."

» MYTH MUSCLES IN 3 WEEKS, GUARANTEED!

» TRUTH

This is a total lie. The gym has never produced overnight success stories. Even Arnold had to work damn hard for every muscle on his body. You cannot pack a ridiculous amount of muscle on your frame overnight despite what some might tell you.

If getting jacked were as simplistic as eating protein and lifting heavy weights, every man on this planet would look like a Pro bodybuilder. As you get stronger you will start to see changes,

but probably not at the rate you'd like. You have to be smart about your training, nutrition and recovery. Lifting weights is not a short-term hobby but a lifetime commitment, but this will only be possible if you love what you do in the gym. There is no muscle in 3 weeks formula and that is why you'll continue to see guys in the gym who look like they don't lift despite training for years. Be consistent, patient and keep moving the needle forward.

"FOLLOW A HIGH-VOLUME APPROACH AND YOU HAVE A RECIPE FOR OVERTRAINING AS FATIGUE BUILDS UP OVER TIME. EVERYTHING WORKS BUT NOTHING WORKS FOREVER."

» MYTH MORE IS BETTER

» TRUTH

In bodybuilding you have experts who promote a certain philosophy as the best for muscle growth and swear by it. However, what works for you individually largely depends on your genetics, recovery ability, stress levels and nutrition. More is not always better, especially in the gym. Better is better. Just because you think you need a ton of sets to build muscle does not mean you cannot overdo it!

Destroying yourself week in and week out is counterproductive. If you follow this high-volume approach you have a recipe for overtraining as fatigue builds up over time. Everything works but nothing works forever. Make sure you are in and out of the gym within an hour because that is all that is required to make progress. By doing this, you'll limit fatigue and your central nervous system will recover better, making it possible to train again sooner than you would if you followed a high-volume programme. Fatigue is multi-faceted involving phenomena such as central and peripheral fatigue, slow and fast fatigue, as well as short-term and long-term fatigue.

» MYTH A ZILLION SIT-UPS

» TRUTH

Performing lots and lots of ab work will not get you the defined midsection you are so desperately looking for.

Spot reduction refers to using exercises that target specific areas of the body, but we know that exercising one area does not get rid of more fat over that muscle in comparison to the rest of the body. Despite this, we still see a zillion sit-ups and leg raises performed by a multitude of people who set foot in the gym on a daily basis.

To get a muscle to show is based more on your nutrition. When we do sit-ups to reduce belly fat all we do is to train the muscles that lie beneath the body's adipose tissue. When you eat more than your body can burn you will store extra calories as fat. More than half of the fat in your body is stored underneath the skin and over your muscles. Although your stomach muscles will look better when they are strong, sit-ups and crunches will not remove extra fat from your belly. The only way to lose fat from a specific part of your body is to lose weight overall.

With proper nutrition you will be able to shed the fat that is covering these muscles and reveal what is underneath. Ask any competitive bodybuilder and the answer will be that you have to maintain a consistent energy deficit day in and day out where you burn more calories than you consume. The burning of fat to show abs must be considered over the course of days and not on an hour-to-hour basis to get any meaningful perspective on its impact on body composition. The latest research has shown that training in a fasted state results in elevated cortisol levels which enhances fat loss but also leads to enhanced muscle tissue breakdown – a constant headache for any bodybuilder!

“CURRENT RESEARCH SHOWS THAT STRETCHING BEFORE EXERCISING CAN CAUSE A DROP IN THE SUBSEQUENT FORCE DEVELOPMENT THAT YOU ARE ABLE TO PRODUCE IN THE GYM.”

More than half of the fat in your body is stored underneath the skin and over your muscles. Sit-ups and crunches will not remove extra fat from your belly. The only way to lose fat from a specific part of your body is to lose weight overall.

» MYTH STRETCH BEFORE YOU SWEAT

» TRUTH

Not so long ago stretching was to exercise what proposing is to marriage – a necessity. Researchers are now saying that you must not stretch before workouts, suggesting that it can actually impede performance. Scientists discovered that runners run more slowly, jumpers jump less high and bodybuilders lift less after stretching before exercise.

Performing static stretching prior to any multi-joint movements in the gym will therefore not improve your range of motion or boost your performance. For decades stretching was advocated to not only improve flexibility but also to ensure you don't become too 'tight'.

Current research shows that stretching before exercising can cause a drop in the subsequent force development that you are able to produce in the gym. Perform your static stretches as part of a cool down after your workout.

Many athletes now stretch in the middle of the day at non-exercise times, rather than the typical stretch-before-a-workout protocol.

A warm-up for weights should rather include anything that is of moderate intensity and uses major muscle groups. This involves dynamic or mobility work which will warm up the body by getting the heart rate elevated and moving the body through a complete range of motion, doing so actively. Examples of dynamic stretching include anything from cardio machines (elliptical, stationary bike or treadmill) to jogging, jumping rope or jumping jacks.

THE DEVIL IS IN THE DETAILS

The devil is almost always in the details and specific details are not frequently divulged. In a rare study conducted (Hackett et al. 2013: Training practices and ergogenic aids used by male bodybuilders) on 127 competitive male bodybuilders, a picture was painted about their specific training practices. It was found that:

» Bodybuilders used a split that hit each muscle group either once or twice per week in the off-season using three to six sets with a rep range of between seven and 12 reps.

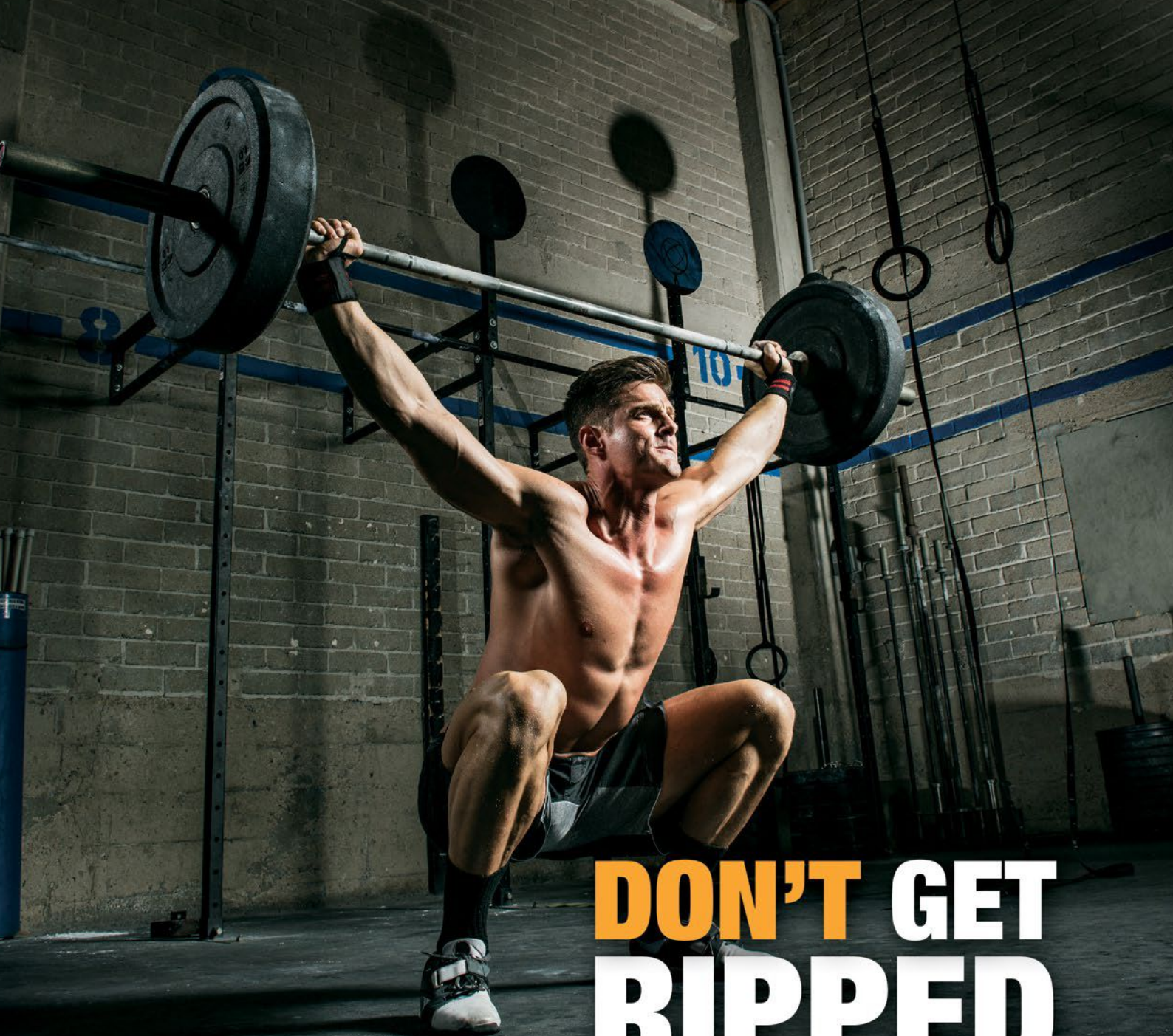
» This amount of work boosts the time under tension in the muscle while generating maximal stress needed for muscle growth – a fact which has repeatedly been shown in exercise research literature.

» Bodybuilders used an average rest period of one to two minutes during their training and some form of overload technique to challenge their bodies in new ways, which is also based on scientific research as the most beneficial for muscle hypertrophy.

» Bodybuilders in the Hackett study reduced the number of exercises they performed while at the same time using lighter loads for higher repetitions (typically between 10 to 15) with shorter rest periods of 30 to 60 seconds as part of their pre-contest training. Science has proven that this was optimal for fat loss.

» The majority of bodybuilders (about 85 percent) who participated in the study used low to moderate-intensity aerobic exercise during their pre-contest training. They performed cardio at five or more sessions per week.

» A total of 77 percent of the bodybuilders surveyed admitted using anabolic steroids. The most commonly used steroid in the off-season was Deca-Durabolin and the most common drug pre-contest was Stanozolol or Winstrol.



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» MYTH THE ANABOLIC WINDOW

» TRUTH

It is simply not true that we have an extremely limited amount of time to replenish our bodies with essential nutrients after hitting the weights to prevent us descending into the abyss of catabolism. Research has shown you have a wider anabolic window of opportunity than initially assumed, during which you can reap the physiological benefits of feeding your body after training.

This is even more so when you've had a pre-workout meal because the food you have eaten before training is often still being utilised in the hours after you visited the gym. When you have trained in a fasted state it makes sense to take in quality protein and amino acids after training.

According to a recent study published in the Journal of Clinical Endocrinology and Metabolism, it seems that a leucine-enriched whey protein may be a key ingredient to enhance muscle protein synthesis rates after training.

Whatever the case may be, don't fret about the time that passes after your final rep in the gym and your next meal. If you take in nutrients within a few hours after training you will be fine as the exact timing for protein synthesis and nitrogen balance is not as critical as many seem to believe.

Eating is something that sustains us both mentally and physically. It is not a chore but a privilege and as long as your total daily nutrient intake for your specific goals is on track, the timing of when you eat is of secondary importance.

“FREE WEIGHTS PRODUCE SIGNIFICANT LACTIC ACID ACCUMULATION WHICH LEADS TO A LARGE RELEASE OF GROWTH HORMONE, A CRUCIAL COMPONENT IN INCREASING MUSCLE MASS AND ELEVATING THE METABOLISM.”

» MYTH HITTING IT FROM ALL ANGLES

» TRUTH

You don't need a lot of equipment to grow bigger and better. You only have to find out what works for you and what your body will accept. When you have that covered it is all about progression and consistency. Consider the following exercises as essential meat-makers:

Legs	Barbell squats & leg presses
Chest	Bench presses & dips
Back	Deadlifts, chins & rows
Calves	Standing & seated calf raises
Shoulders	Military presses & rear delt raises
Arms	Curls & dips

Machines have their advantages, such as working specific muscles, and they are useful when you are rehabilitating an injury. Free weights are more versatile and efficient in developing strength because they promote natural human movement. Free weights also produce significant lactic acid accumulation which leads to a large release of growth hormone, a crucial component in increasing muscle mass and elevating the metabolism. This will increase calories that are burned at rest and during exercise.

Sometimes the goal in the gym is not to do the perfect exercise perfectly, but to get the job done and move on.

FAST FOOD SOLUTIONS

Habits and belief systems will always pervade the bodybuilding subculture as these idiosyncrasies are part and parcel of human existence in almost any field. Unfounded claims will always exist and while some seem to have thrived on it, you shouldn't abandon your curiosity. Don't blindly follow the leader and never stop questioning the reasons why people choose to train and eat a

specific way and, most importantly, determine if it is necessarily optimal for you as an individual.

One size does not fit all and training should be individualised and strategic. The notion of 'It's like that because it has always been like that' needs to be questioned.

Perhaps author Dr. Mel Stiff said it the best in his book 'Supertraining':

“The public usually feels far more comfortable with cerebrally undermining mantras and fast food solutions than with far more accurate, complex methods. This is a major reason why many fitness figures write as they do and market their catch phrases simplistically as they do – society has been processed by mass media to behave like that and they usually do not want to be forced to think too deeply or to have their convenient current beliefs questioned, because that entails a serious threat to their psychological safety. Humankind has always been like that and they receive what they have been processed or educated to want.”

EAT THE COMPETITION & KILL YOUR WORKOUT



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JOHNNY LUCAS A QUEST FOR

CHEST PERFECTION

THE CHEST IS SECOND ONLY TO THE ARMS IN TERMS OF BODY PARTS BODYBUILDERS LOVE TO TRAIN. AESTHETICALLY SPEAKING, A FULL, THICK AND WELL-DEVELOPED CHEST IS THE HALLMARK OF A TRUE CHAMPION IN THE WORLD OF BODYBUILDING.

TRAINING ALL-OUT

When he started lifting weights as a teenager at Rocky's Gym in Vanderbijlpark in 1998, Johnny Lucas was like any other youngster in a hurry to build a big chest. "The walls of Rocky sure have some stories to tell," laughs Johnny, who is currently in prep mode for the upcoming Arnold Classic Africa. Johnny's plan of action is to first qualify at either the Millennium Gold Plate or the King Shaka IFBB shows to flex with the best in May.

Johnny has a competitive streak in him which quickly helped him gain a reputation for training all-out at the Vaal Triangle-based gym where he lifted his first weights. "From the start I knew I had to have the mental strength to push aggressively when I was training."

SIZE AT ANY COST

At first Johnny didn't give much thought to balance, shape, definition and proportion. He was just looking for size and mass at any cost. He made use of the bread-and-butter basic exercises such as flat barbell bench press, incline barbell bench press and flat dumbbell flyes.

"What I did differently was that I focused on the upper pecs with incline barbell bench presses, whereas beginner bodybuilders often neglect this exercise because they're too concerned about moving a ton of weight on flat bench presses. I added flyes because they stretched my chest after I hammered it with heavy weights." Johnny based his whole chest workout around these three exercises.

"I would typically do one to two warm-up sets and then two to four really hard sets for each exercise. My goal from the start was pretty straight forward: I wanted to get as big and as strong as possible. Gym made me stronger for rugby and that was all that mattered. Bodybuilding did not enter the

equation immediately. There were a couple of guys at Rocky's that looked great so I watched them train, but mostly I was on my own mission and doing my own thing. The owner of the gym, Rocky Slater, always showed the boys some tricks when he had a chance. He was a competitive bodybuilder back then."

QUALITY OVER QUANTITY

"Genetics matter and fortunately I was blessed with round muscle bellies. That doesn't mean that I never trained hard. On the contrary, I trained my butt off, but my chest was one of the easier muscle groups to improve. Young bodybuilders must realise that size will come over time, through hard work and consistency with both training and dieting," he explains.

"Everyone wants to be bigger, but size is not everything. When you compete against others and you're up there, under the lights, what matters is that you have quality over quantity. It

is here where training for hypertrophy comes in, which translates into keeping constant tension on the muscle you are working on," says Johnny.

Johnny heard from more experienced bodybuilders that upper pec development is important when you want to compete in the sport, especially in all your side poses. He would later focus on doing more movements on an incline bench to beef up his upper pecs. **Three of the most common mistakes beginners make when they train chest, according to Johnny, are:**

■ **TOO MUCH BENCHING.** "It's an awesome exercise, but guys should focus on switching to dumbbell work, cables and machines for a more balanced workout."

■ **IGNORING THE UPPER CHEST.** "Upper pec development is important when you want to compete in the sport, especially in all your side poses."

■ **NEGLECTING FULL RANGE OF MOTION.** "Guys focus on heavy, compound moves and forget about isolation exercises and performing them with a full range of motion."





MUSCULAR ANATOMY

The pecs are found attached to the humerus of the arm, right near where the shoulder joint is located. They run across the front of your body and originate on the breastbone. The pectoralis major is attached to the front of your body on the rib cage. The pectoralis minor is found underneath the pectoralis major. It originates on the ribs and attaches up to the scapula, specifically at the coracoid process. The pectoralis major brings the humerus across your body while the pectoralis minor moves your shoulders forward.

BREAKING DOWN THE CHEST MUSCLE INTO DIFFERENT PARTS:

PECTORALIS MAJOR:

This is the largest chest muscle and consists of three sub-heads: The clavicular head, the sternal head and the abdominal head. The different heads can be specifically trained through specific movements in the gym.

CLAVICULAR HEAD:

It is the upper part of the pectoralis major and runs from the clavicle (collarbone) down and across the upper part of the chest. It attaches to the humerus or upper arm. Most lifters neglect to build the top portion of their chest.

STERNAL HEAD:

The sternal head runs from the sternum and comes across the chest and inserts at the humerus.

ABDOMINAL HEAD:

This muscle runs from the rectus sheath, a big piece of connective tissue that surrounds the abdominal muscles, up and across the bottom portion of the chest and attaches to the humerus.

PECTORALIS MINOR:

This is a relatively small muscle group that lies beneath the pec major. It runs from the top of the scapula (called the coracoid process) and attaches to ribs three, four and five.

SERRATUS ANTERIOR:

The serratus anterior starts from the inside of the shoulder blade, wraps around the side, and attaches onto the front of the ribcage. The serratus anterior is important for a balanced physique.

BUILD YOUR BASE WITH BARBELLS

Barbell exercises serve as the basis for all future training. Johnny used the flat barbell and incline presses to make strength gains during his first serious period of training.

Adding weight to the bar and progressing on these exercises will do more for your training than anything else during your first few months. Starting out with the basics is also time-efficient since you don't have to perform a lot of isolation or assistance work for chest. Johnny included flat dumbbell flies as the perfect finisher for getting a deep stretch and blood rushing into the muscles. Common sense and paying attention to how your body responds to the weight are your best guides when you start out with the basics.

JOHNNY'S CHEST ROUTINE AS A ROOKIE INCLUDED:

EXERCISE	SETS	REPS
Flat barbell bench press	4	10 - 12
Incline barbell bench press	4	10 - 12
Flat dumbbell flies	4	10 - 12

FLAT BARBELL BENCH PRESS

THE PROBLEM:

Everyone does this exercise in the gym, but few know how to execute the bench press correctly. Lifters think benching is simple, but it's not only about lowering the barbell to your chest and pushing it back up again. It's about making the chest do all the work.

"When you have a good mind-muscle connection you get more out of each rep, even when you do a basic exercise such as the flat barbell bench press," says Johnny. "My mistake with this exercise was using too much weight. We are bodybuilders not powerlifters and for that reason we need to focus on feeling the weight and using the correct form. I ended up using other accessory muscles like the shoulders and triceps rather than the chest when I was benching as a beginner. That's cool if you're trying to impress your friends, but in terms of real world results it's not efficient."

HOW TO FIX IT:

Always keep your butt on the bench to keep the movement strict and prevent potential cheating. You'll also be able to generate more force through the pecs if you stabilise yourself on the bench. When lowering the barbell, you should consciously retract your shoulder blades and push your chest out to prevent your shoulders and triceps from taking over the load.

With the scapula retracted, as you lower the barbell, the sternum elevates, ultimately shortening the path the barbell travels.

HERE'S HOW TO DO IT CORRECTLY:

1. Lie back on the bench and take a tight grip on the barbell. Take the barbell off the stand and lock it out first
2. Focus on pressing your shoulders back into the bench and down toward your waist at the same time, as if you're about to perform the bottom part of a shrug.
3. Now, without arching your back off the bench, thrust your chest out and start the movement.
4. Try to maintain this position. When you push your shoulders down and back your sternum arches up, which concentrates the stress on the chest.

"If you struggle to get into this position start with a weight that is lighter than what you would normally use," says Johnny. "Your goal on the bench press is to feel the pecs expanding and contracting on every rep. If you limit the involvement of your shoulders and do the move with your pecs you will be on your way to better development. Benching for me means basically the following: back on the bench, shoulders flat and chest out, and no weird twisting or arching!"

BE A BENCH AND NOT A DELT PRESSER: Don't be a delt presser when you bench press. This is when you rely too heavily on your shoulders to push the weight up. The result, if not rectified, will be a super set of front delts and an inferior chest. In order to bench press properly to develop the entire pectoralis major – the muscle that covers the rib cage from the collarbone to the bottom of the rib cage and from the sternum or chest bone to the arm pit – it is necessary to set up your pectoral girdle to the best mechanical advantage to place stress on the pecs and not the delts.



INCLINE BARBELL BENCH PRESS

THE PROBLEM:

Not feeling the chest, but executing the move by using the shoulders.

HOW TO FIX IT:

The primary benefit of the incline press is to target the upper pecs more thoroughly. This is also the reason you can add a decline bench press to your routine to focus on the lower pecs.

The steeper the bench, the more you recruit the shoulders to lift the weight. Change the angle to a lower point, use a lighter weight and work on your form until you feel it more in your chest. Johnny targets his upper pecs even more by bringing the bar down to his neck area rather than his chest.

FLAT DUMBBELL FLYES

THE PROBLEM:

Using your arms and shoulders to complete the movement.

HOW TO FIX IT:

Dumbbell flyes are an isolation exercise. Emphasise the chest by keeping your little finger a little higher than your thumb.

"COMMON SENSE AND PAYING ATTENTION TO HOW YOUR BODY RESPONDS ARE YOUR BEST GUIDES WHEN STARTING OUT WITH THE BASICS."

STICKING POINTS WHEN BENCHING

■ TROUBLE AT THE

BOTTOM: Allow the barbell to settle on the safeties in the power rack just off your chest for a 2-second count before powering out of the hole. This strategy is called paused benching and the idea is to develop power at the bottom of each rep. Avoid bouncing the barbell off your chest. Build up strength from the bottom over time to overcome the sticking point.

■ TROUBLE AT THE TOP:

Train over a smaller portion of the bench press by using a bench-press board or using the safeties in the power rack if you are weakest at the lockout of the movement.

BRING ON THE DUMBBELLS!

Within a few months of hitting the weights hard and heavy, Johnny moved away from barbell presses and started focusing more on dumbbells. Using incline dumbbell flies and presses he found the exercises that gave him the best return on the time he spent in the gym.

Johnny was like most lifters, always starting his chest training on the bench press. He found that he could work his chest through a longer range of motion by using dumbbells and that this change in his training was also kinder to his shoulders.

He still continued with the flat bench press, but he was now using dumbbells to keep the tension high, fill the muscle with blood and take exercises through a full range of motion. Johnny bumped his sets up from 4 to 5, targeting a rep range of between 12 and 15.

JOHNNY'S CHEST ROUTINE AS AN INTERMEDIATE LIFTER:

EXERCISE	SETS	REPS
Incline dumbbell flies	5	12 - 15
Incline dumbbell press	5	12 - 15
Flat dumbbell press	5	12 - 15

THE INCLINE DUMBBELL FLYE (NOT PICTURED)

THE PROBLEM:

When Johnny was performing the incline dumbbell flye movement he tucked his chin into his chest because he was using too much weight.

HOW TO FIX IT:

"If you keep your head up and open your chest more you can move the dumbbells higher up to emphasise the upper chest, which is the whole point of the exercise."

THE INCLINE DUMBBELL PRESS

THE PROBLEM:

Lifters use too much of their shoulders and triceps to move the weight.

HOW TO FIX IT:

When it comes to training, Johnny always emphasises the fact that you must remain in control of the weight and not the other way around. Stick your chest out and don't rely on other body parts when doing the dumbbell press on the incline bench.

THE FLAT DUMBBELL PRESS (NOT PICTURED)

THE PROBLEM:

Going to heavy and not controlling the dumbbells.

HOW TO FIX IT:

Johnny's golden rule here is if you are unable to hold the weight or resist it during the eccentric part of the lift, it is too heavy. "Although fatigue will cause you to struggle towards the end of a set, you should always retain full control of the weight. If you are not in control, it is too heavy!"



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FROM WEIGHTS TO MACHINES

Over time Johnny noticed a difference in his body when he changed his routine from free weights to utilising machines and cables. "My chest has become fuller, more developed and, most importantly, more flexible."

Johnny has also become a firm believer in partial reps: "I always work in some partial rep ranges, especially towards the end of a set to increase the amount of stress I put on the muscle."

He never keeps his routine the same for too long. "I love to train and I frequently change my splits up as I go. Some weeks are the same and some weeks I change it up to keep things fresh."

Johnny admits that stretching is important for longevity in bodybuilding. "You know all my friends, my coach Hennie Kotze and my wife fight with me over this! I'm bad when it comes to stretching but I do try and make it a priority when I train. I recommend that lifters stretch before, in the middle and after a workout. Most bodybuilders are lazy when it comes to stretching."

JOHNNY'S ADVANCED CHEST ROUTINE:

EXERCISE	SETS	REPS
Machine chest press	6	12
Push-ups	6	To failure
Cable cross-overs	6	12

MACHINE CHEST PRESS

THE PROBLEM:

Forgetting about the time under tension (TUT) and neglecting to control the weight you use.

HOW TO FIX IT:

Although he likes to train with volume, Johnny also follows his instinct. "I sometimes would hold the weight at the top or at the bottom of an exercise to increase the time under tension on the muscle instead of only knocking out reps. The machine chest press is one of my favourite exercises to do this and to get the muscle filled with blood. I also like to use techniques to increase the intensity of the exercise, such as drop sets and super setting it with another exercise."

Johnny recommends doing 4 to 6 sets of between 12 and 20 reps. "Sometimes I would go heavy on the chest press. Then my rep range drops to 10 or 12. The exercise has always given me a lot of thickness in my chest."



PUSH-UPS

THE PROBLEM:

Bodybuilders frown upon push-ups, but exercise variety is key for boosting gains in muscle size.

HOW TO FIX IT:

Research has discovered that using elastic band resistance in push-ups can produce similar levels of muscle activity as the bench press. It can even produce similar gains in strength in the long term. Johnny decided to perform push-ups with dumbbells because his wrists were not flexible enough. "I felt some pain in my wrists so I started using dumbbells and that worked very well. After a while I felt no pain and I could do more reps. I now don't count reps any longer and I go to failure, which is terrific for developing the chest along with the shoulders and triceps."

**STRETCHING IS
IMPORTANT FOR
LONGEVITY IN
BODYBUILDING.**

**JOHNNY
RECOMMENDS
STRETCHING BEFORE,
IN THE MIDDLE AND
AFTER A WORKOUT."**

CABLE CROSS- OVERS

THE PROBLEM:

Turning the exercise into a move that stresses the shoulders and arms instead of the pecs.

HOW TO FIX IT:

If you change the position of the cables you use on cross-overs you can target different areas of the chest: high to low emphasises the lower chest, while positioning the cables at shoulder level hits the middle chest. A low-to-high position stresses the upper pecs.



"I LOVE CABLE CROSS-OVERS AND I TYPICALLY DO THEM AT THE END OF A TRAINING SESSION WHEN I'M FATIGUED. I LOCK MY ELBOWS IN A SLIGHTLY BENT POSITION THROUGHOUT THE MOVEMENT." JOHNNY NEVER GOES HEAVY ON CROSS-OVERS, PREFERRED TO FEEL THE CONTRACTION AND STRETCHING THE FASCIA.

DISASTROUS CONSEQUENCES

"You need to squeeze the chest continuously with every rep. If you cannot do this the weight is probably too heavy. Don't overload with weight because you will only limit your ability to recruit muscle fibres when you do that!"

In their quest to always push more weight, some lifters load up more weight than they can handle and as a result their exercise form breaks down. "When you don't feel an exercise you reduce the isolation and contraction you need. I depend on the mind-muscle connection to make sure my shoulders don't take over when I train chest. I also never go too heavy because I always want to be in control of the weight. I follow my own intuition, to be honest. I look at my chest and try to develop it from all angles."

Johnny believes that the value of an exercise eventually decreases over time as part of the process of diminishing returns, unless you introduce new methods to shock your body. He changes things up regularly with giant sets, drop sets and negatives.

"To put the chest under immense stress, week after week, and to continuously use the same training methods with the same rep ranges and volume, can be disastrous. If you want to progress you need to change the stimulus and emphasis of your workouts."

Johnny gives an example: "I would do a giant set where I use incline dumbbell presses, flat dumbbell flies and machine chest presses with a narrow or wide grip. I would do 4 sets of that where I change things up between high volume, low reps with negatives and also drop sets here and there. That really kills my chest. I don't

listen to others as I know my body best."

"I FOLLOW MY OWN INTUITION, TO BE HONEST. I LOOK AT MY CHEST AND TRY TO DEVELOP IT FROM ALL ANGLES."

CONTINUALLY MAKING PROGRESS

Johnny hopes to continue refining his physique in order to compete on stage this year. By incorporating machines, bodyweight exercises like push-ups, and cables, Johnny reduces the amount of poundage on the joints and their connective tissues.

"Connective tissues, including the ligaments and tendons, are usually where bodybuilders suffer when it comes to injuries. As I get older I always think

about placing my joints and connective tissues under the least amount of stress when I train."

Over the years Johnny's chest training evolved from a basic heavy-duty style to him paying more attention to feeling the muscles and frequently changing his exercise selection. "The more frequently you can train without needing time away from the gym due to injuries, the better your chances will be of making progress in the sport." **CR**

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WEIGHING IN ON THE DEBATE ABOUT WHERE TO LOOK WHEN SQUATTING

DIFFERENT HEAD POSITIONS DURING THE SQUAT INCLUDE:

- » **UPWARD**  Looking at the join between the facing wall and ceiling
- » **STRAIGHT AHEAD**  Looking at the reflection of your eyes in the mirror on the wall facing you
- » **DOWNWARD**  Looking at the intersection between the floor and the facing wall

HEADS UP

THE SQUAT IS CONSIDERED THE KING OF ALL EXERCISES AND THE GOLDEN STANDARD FOR STRENGTH IN THE GYM, AND FOR GOOD REASON. THIS TRIED-AND-TESTED COMPOUND MOVEMENT IS ONE OF THE MOST PRODUCTIVE EXERCISES AROUND, NOT ONLY FOR BUILDING THE BEST BODY BUT ALSO FOR THE VAST MAJORITY OF SPORTS WHERE YOU NEED TO RUN FASTER OR JUMP HIGHER.

Scientists have estimated that over 200 muscles are activated during a squat. These include the quadriceps femoris, hip extensors, hip adductors, hip abductors and tricep surae. In addition, the squat also requires isometric activity from a wide range of supporting muscles including the erector spinae, abdominals, rhomboids, trapezius and many others to keep the trunk stable during the movement.



The squat is synonymous with developing the quads, hamstrings, glutes and hips – all the muscles responsible for physical prowess and peak performance in a variety of sports, from speed, power and strength, to endurance.

However, not everyone should perform a squat as it requires a certain level of mobility at the hips, the spine and shoulders, which some people lack. Each athlete may also have differing objectives for including the squat in their programme. While powerlifters aim to lift the most weight, for example, bodybuilders are interested in using the correct technique for developing larger muscles.

The structure of squat sessions may therefore vary in terms of reps and sets, but one thing that remains constant is the correct form and technique required to execute it safely and effectively. This is a topic that has been covered extensively on the pages of this magazine, but recent research has brought back into focus a crucial yet often overlooked component of performing the perfect squat.

There has always been considerable debate regarding the correct head position when squatting. The three options include looking up, gazing straight ahead or looking down. Which, then, is correct?

UP, STRAIGHT OR DOWN?

For record-holding powerlifter Chad Wesley Smith, technique in squatting will differ from person to person. "Not everybody's technique will be the same. Individual body dimensions, leverages, strengths and weaknesses will dictate what technique is most effective for you."

Great technique for Smith starts with a great setup. But where should you put your head? According to a study involving football players using the front barbell squat (D.V. Donnelly et al., "The effect of the direction of gaze on the kinematics of the squat exercise," Journal of Strength and Conditioning Research, 2006) a downward-looking head position produced an 8% greater forward bend at the hips and a 2% greater forward flexion of the spine. The researchers found that this contributed to a greater stress load on the lower back and vertebral disks. An upward-looking head position, on the other hand, led to a loss of

balance. The best head position, according to the study, is maintaining a level head position. It was recommended that lifters should watch themselves in the mirror while performing squats.

Irrespective of what exercise science dictates, some lifters still believe in a head-up position to help maintain balance and shift the weight in the squat into the heels. In most cases, this preference is usually a consequence of inadequate hip flexor and/or ankle mobility, which leads to a person leaning forward while performing the squat.

When tested, it was found that the head-up position during the squat extends the thoracic spine and compressive forces along the entire spine. Lifters should therefore keep their eyes at a fixed point on the horizon and not the ceiling. By doing this a lifter can keep his head in alignment with his spine for a better biomechanical position.



PRACTICAL & ANATOMICAL REASONS

According to Nuckols, most lifters' sticking point is anywhere from one to six inches above parallel when squatting. "The exact joint angles vary from person to person, but it occurs almost universally in the middle of the lift."

Very few people get buried in the hole and don't even start coming up, and very few people miss once they break through the sticking point (unless they just lose their balance). Your goal when you start driving out of the hole is to put yourself in a good position when you reach your sticking point, and your goal through the sticking point is just to grind through as efficiently as possible."

People squat differently not only as a result of practical reasons, such as training for a specific sport but also anatomical reasons. "There are a multitude of differences in hip anatomy that can make people squat differently, including different hip socket depths, different angles of inclination of the neck of the femur, different degrees of rotation of the femoral neck about the shaft of the femur, and different positions for the hip socket on the pelvis. Throw in different femur lengths, varying degrees of ankle mobility, varying attachment points for the muscles around the hip, and different levels of strength in the prime movers, and you have a lot of factors that can influence how someone will squat best," says Nuckols.

» WHY SQUAT? THE SQUAT IS ONE OF THE MOST WIDELY USED RESISTANCE EXERCISES IN THE FIELD OF STRENGTH AND CONDITIONING BECAUSE IT ACTIVATES THE LARGEST, MOST POWERFUL MUSCLES IN THE BODY AND IS OFTEN REGARDED AS THE GREATEST TEST OF LOWER-BODY STRENGTH.

WHAT IF YOUR GAZE IS INCORRECT?

Trainer and author Greg Nuckols, who has taught hundreds of lifters from different experience levels and in varying sporting codes about the biomechanics of the squat, is philosophical about where to gaze when you perform a squat.

According to Nuckols, no one is going to point a gun at your head if your gaze is incorrect. "The best position is the one that lets you train the hardest and the most consistently."

In his popular 'How to Squat: The Definitive Guide', Nuckols says the following: "People obsess about head position to a potentially unhealthy degree. They opine that looking up will strain your neck or damage your cervical spine over time, and they posit that looking down will cause you to cave forward. I also see people talk about a Russian study that supposedly showed that looking up increased activation of the spinal erectors and hip extensors, while looking down increased activation of the quads. I've looked for this study, and I've asked multiple people who've referenced it to send me a copy. So far I've come up empty, and I'm starting to think it simply doesn't exist."

He continues: "After 10 years in the sport, I've literally never seen a neck injury from squatting, and I've seen many successful squatters look up, down, or straight ahead."

So, what exactly does Nuckols suggest? "Here's the important part: Find one point to focus on, whether that be 10 feet in front of you on the floor, somewhere on the wall, or at the juncture of the wall and the ceiling.

Focus intensely on that one point throughout the lift. This will help you keep your balance and avoid being distracted by what's going on around you."

If you've found a spot to look at and the weight shifts forward and you're about to lose your balance, Nuckols suggests that you drive your traps aggressively back into the bar. "When you do that you are simultaneously fighting to extend your hips and drive the bar back."

TAKE-AWAY POINTS

WHAT NOT TO DO WHEN SQUATTING:

» The eyes-to-the-sky position is generally regarded as an incorrect head position. When you look up while squatting you compromise the posterior chain muscles that add stability to the normal structure of the spine.

» Looking at your toes when squatting can lead to bending over because where the eyes and the head go your body will follow. Bending the lower back forward can lead to spinal disc injuries.

THE RIGHT WAY TO SQUAT WOULD BE:

» To looking straight ahead will ensure you don't compromise your neck because this position allows for the chest to stay upright and the trapezius muscles to be under the bar.

» Looking ahead is also conducive to better neck safety, maximal hip power and the spine will maintain its natural structure. M.E

SHOCK... YOUR MUSCLE GROWTH!

It's challenging to get to gym with enough energy to throw some iron around every day, especially in today's age where technology is so portable, we never get a second to our self. Whether you are waking up or going home in the dark, it can be hard to find the energy boost you need to power through your workout.

3D Pre Shock XT gives you that energy kick and pumps your muscle up, priming you for the most intense workouts. The combination of Caffeine and L-Tyrosine releases dopamine, epinephrine, and norepinephrine to combat fatigue and smash your workout. There is an added Vitamin B complex as well, which has been shown to assist in normal energy yielding metabolism.

BCAA's, Taurine, and Beta-Alanine boost muscle performance by giving your muscle much needed energy, as well as buffering lactic acid build up, while L-Citrulline works to deliver more oxygen to the muscle. L-Citrulline combined with Niacin (B3) both contribute to increasing NO (Nitric Oxide) levels in our blood through a process of converting it into NO, with the help of the nitric oxide

synthase (NOS) enzyme, causing blood vessels to dilate thereby increasing blood to muscle fibers.

Citrulline also has the ability to better utilise BCAA's as energy for muscle fibers, along with assisting in removing ammonia and lactic acid from blood, increasing muscle endurance even further. It is a simpler alternative to arginine which still needs to be digested before entering the blood stream, whereas citrulline bypasses this process but is still converted to arginine, allowing a higher amount to be converted into NO.

3D Pre Shock XT provides sleeve-tearing muscle pumps, which not only makes you look bigger and vascular in the gym, but leads to significant long-term muscle growth, as the increased oxygen stretches muscle cells, resulting in amplified muscle development. This along with a serious energy kick from the caffeine, L-Tyrosine, and vitamin B complex, your most intense workouts will become warm-ups with some 3D Pre Shock XT in your bottle!

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ARRIVE ON
SHOW DAY BIG,
FULL & ABSOLUTELY
SHREDDED

PEAK WEEK SUCCESS

WITH TOP COACH
VIC ALLEY

NO ATHLETES IN THE WORLD GET AS LEAN AS QUICKLY AS BODYBUILDERS AND PHYSIQUE COMPETITORS. SOME OF THE TRANSFORMATION THESE ATHLETES UNDERGO IN THE 12 WEEKS PRIOR TO A CONTEST IS ENOUGH TO BOGGLE ANYONE'S MIND.

WHY PEAK WEEK? A peak is the highest point surrounded by two lower points. A bodybuilder's peak week is the period when he works towards building impeccable conditioning in the final week before a show through intelligent nutrition and training. The goal of peak week is nailing a physical peak in conditioning on the one day that counts the most – show day.



WALKING A TIGHTROPE

To peak perfectly for a show, a bodybuilder must walk a tightrope between getting as lean as humanly possible, without destroying too much of the muscle mass they need for a dominant showing on stage.

Peak week, as it is affectionately known in the industry, is the final preparation for a contest and it is extremely tricky to get right, as local bodybuilder and trainer Victor Alley knows all too well.

Vic recently achieved first place in the Men's Over 40 division and walked away as the Men's Overall Champion at the NABBA KwaZulu-Natal Provincial Bodybuilding Championships. This formed part of this veteran's comeback to the sport he loves so much.

"Bodybuilding is my passion and I have an awesome support system, which is honestly everything in this sport," says the 49-year-old, who resides in Edenvale and owns a

gym with his wife Irene called Alleysway Fitness Centre in Bedfordview in eastern Johannesburg.

Vic, currently sponsored by TNT Mercury and coached by John Meadows, has managed to consistently place well over the years, not only maintaining his form, but constantly improving his physique through meticulous training and dieting.

"I love being a bodybuilder, personal trainer, online coach and a tattoo artist." Yes, Vic also has a tattoo parlour in his gym. Having studied graphic design in college and worked in the advertising industry previously, he views the tattoo shop as a creative outlet where he can blow off some steam.

SUPERHUMAN EFFORT

When Vic was prepping for the KZN Provincials as part of his comeback to the competitive stage, he realised that it would take a superhuman effort to get into top notch shape again as he was older than his competitors.

"It was not a case of me being completely out of shape. I knew what it would take – a monumental effort – but I have always liked a challenge and, besides, if you want to run with the big dogs you can't stay on the porch! I believe in eating clean most of the time, not only when it's show time. Every meal is planned. My carbs, fats and proteins are weighed and I eat according to the time of day and what is needed at that time of the day."

VIC'S SAMPLE PRE-CONTEST DIET:

MEAL 1	3 whole eggs, 10 egg whites, 3 slices of Ezekiel bread
MEAL 2	2 cups rice, 180g fish, salad
MEAL 3	2 cups rice, 180g chicken
MEAL 4	3 cups rice, 200g steak
MEAL 5	2 cups rice, 180g chicken, vegetables

SA'S BRANCH WARREN

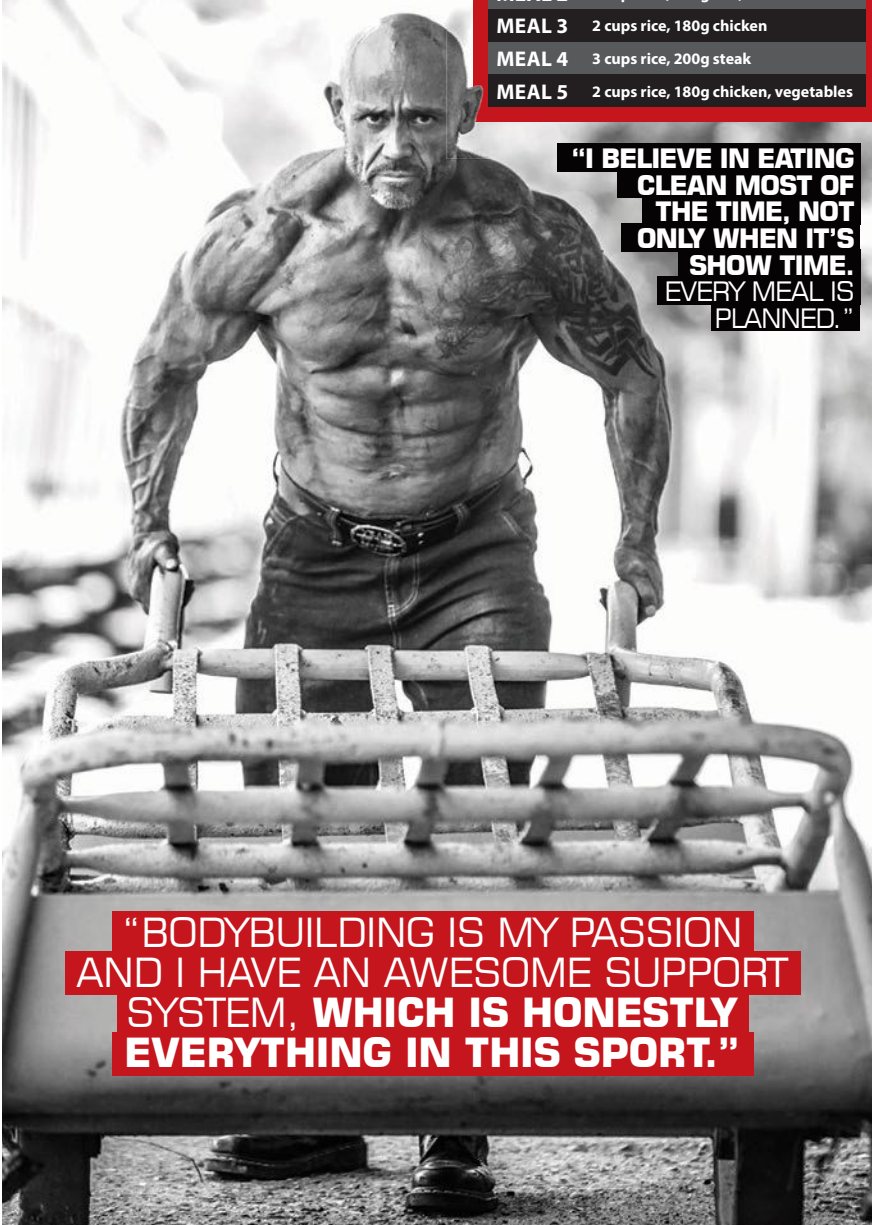
Vic practices what he preaches. He has competed as a bodybuilder for over 27 years. His biggest moment in his career was winning the IFBB SA's in 1998.

He now coaches athletes at both a professional and amateur level. Although he suffered a few setbacks and disappointments along the way, his passion and desire to succeed continues to drive him forward. For Vic, overcoming challenges shows the true character of a person.

At 1.64m and weighing a rock-hard 93kg in the off-season, the bald-headed powerhouse is often mistaken as a shorter version of American IFBB Pro Branch Warren. "When I'm travelling overseas some people mistake me for Branch (I wish!). George Farah used to call me the South African Branch Warren, but other than that it's just plain old Vic!"

Vic first touched a barbell when he played rugby at school level and later used powerlifting to gain strength for the sport. When he was in the army he was allowed a pass to go to the gym because of his powerlifting background. "I did not train but instead watched movies and bugged around town until one day the Military Police almost caught me. After that I decided to go to the gym rather than lose my pass for sports. The bodybuilding bug bit me and it has held on like a pit bull!"

Vic retired from competitive bodybuilding around 2005 after winning some titles in the IFBB and NABBA federations. "I needed a change and started doing MMA (Mixed Martial Arts). I even travelled to Thailand to study it." That was before he got into enduro riding, a form of mountain bike riding consisting of timed special stages on technically demanding terrain. He tore his one tricep during an MMA fight and the other tricep in enduro riding. "I subsequently realised that the only thing I was really great at was bodybuilding. I therefore started again and am so happy I did."



"I BELIEVE IN EATING CLEAN MOST OF THE TIME, NOT ONLY WHEN IT'S SHOW TIME. EVERY MEAL IS PLANNED."

"BODYBUILDING IS MY PASSION AND I HAVE AN AWESOME SUPPORT SYSTEM, WHICH IS HONESTLY EVERYTHING IN THIS SPORT."



"PROTEIN IS VITAL WHEN SHREDDING BECAUSE IT IS THE MOST IMPORTANT MACRONUTRIENT FOR MAINTAINING LEAN BODY MASS WHILE A PERSON IS IN A DEFICIT."

STAYING IN SHAPE

Vic started practicing his posing eight weeks out so he could be stage fit. "Posing can help you win a show so it is something that you should get spot on! Bodybuilding is about creating an illusion with what you have."

For Vic, peak week is all about building yourself up to your best shape for the competition. When he preps his clients for a show some only need fine tuning while others need to work harder.

"This is a cyclical thing. You cannot stay on restricted low calories indefinitely. Sooner or later your metabolism will crash. The trick is to use your knowledge and stay in a respectable condition all year round, for example at 9% body fat for men and about 15% for women. The most difficult part of it is not to balloon in the off-season, but to stay in shape and leave room to ease back into contest mode at the right time," says Vic.

"I try to have my clients ready two weeks out from a show. I may do a small drop in water and a slight carb-up, but nothing dramatic. However, if I feel things are not 100% then I will have a de-carb period for about three days, during which I never cut all the carbs completely from a diet. I will then make my client carb-up in the last three days before a show and follow it up with a water drop protocol. I don't cut water completely. Flushing water is used to create

a diuretic-like effect but it does not leave the muscles full and round with veins popping all over the place. Without water veins don't pop and carbs are used to replace the water in the muscle bellies to get that pop you want for the stage."

"If you are spot on two weeks out you can drink water (like 5 to 6 litres) right up to the contest. If we go the water-drop route then it is 1-2 litres a day before the show and about 500ml to 1 litre of water on the day of the show."

On show day Vic keeps an athlete's protein consumption at a lower-than-normal level, along with carbohydrates, adding small quantities of fats in the form of butter, almond butter or peanut butter. "I don't believe in doing bizarre things like drastic sugar loading or drinking alcohol."

"THE TRICK IS TO USE YOUR KNOWLEDGE AND STAY IN A RESPECTABLE CONDITION ALL YEAR ROUND, FOR EXAMPLE AT 9% BODY FAT FOR MEN AND ABOUT 15% FOR WOMEN."

ADVICE FOR COMPETITORS

"Keep lean in the off-season and you'll come in tight and ready, which will make peak week a breeze! If you are not spot on, you need to do a de-carb and then a carb-up. Monitor your condition on a day-to-day basis. Work on what you see and how you feel. Never eliminate water and never use distilled water. Always keep some water because this is what gets the glycogen into the muscle cell. You can cut salt, but you need to reintroduce it before a show. If you plan your workouts and nutrition properly there are no limits to what your body can accomplish."

CHEATING WHEN DIETING

When a client works with Vic in the off-season he slowly builds up their calorie intake to add muscle mass and not fat. "The more muscle we have, the faster the metabolism. This is a great base to start with when you are looking at competing later in the year. The more food you can eat while prepping, the more you can keep your metabolism firing. If you take away the food the body goes into survival mode and slows down considerably. I like athletes to already start prepping 3 to 4 months out from a show."

During a de-carb, Vic won't go less than 50g of carbohydrates a day. In the carb-loading phase he cannot specify the exact amount because it varies from individual to individual. During peak week an athlete is monitored carefully to see the effect of the carbohydrates. When an athlete carbs-up successfully it means that they will look bigger, harder and leaner at the same time. Another sign of a successful carb-up is a high amount of vascularity – as an athlete's muscles fill with glycogen, their veins become more prominent, especially while posing. Carb intake gets adjusted according to how full a client looks. If a person looks flat, Vic would have him eat more carbs and if there is a spillover effect (when there is water retention under the skin) Vic would pull back the carbs just slightly or hold steady.

Some people are carb intolerant and fare better with fewer carbs. "I would recommend between 4 and 8g of carbs per kilogram depending on their body. I carb-up people on potatoes, sweet potatoes and rice. They all have different entry levels so glycogen never drops. Protein rations I keep the same throughout the diet."

For Vic, protein is vital when shredding because it is the most important macronutrient for maintaining lean body mass while a person is in a deficit.

According to him, cheating has its place when an athlete is prepping for a show. "Cheating is important when dieting. I recommend either two small cheats in the week or one large cheat. It also helps with conversion of thyroid hormones." The goal is to increase the normal production of thyroid hormones to crank up the metabolic fires, using fat to feed these fires and keep them in the high end while working to maintain an anabolic edge. A cheat at the right time is great because, with an increase in food intake, thyroid hormone production increases to turn up the body's metabolic rate and burn extra calories.

According to Vic, the most enjoyable aspect of working as a contest coach is to bear witness to how your work unfolds before your eyes and then the joy when athletes have reached their individual goals.

"To succeed in bodybuilding you need to be aware of the importance of hard work and discipline. There is no better feeling than being there at a show, watching this life-changing day and experiencing the result of the confidence we managed to built up as a team in the weeks leading up to it."



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TRAINING PHILOSOPHY

Vic likes training hard and heavy, but with good form using everything that is available to him at the gym. His future goal is to qualify to compete at the NABBA Mr. Universe in the Over 50s division.

"Pre-contest training is exactly the same as in the off-season. I like the grind and go hard and heavy with good form. I hit each body part twice a week. I pair chest, shoulders and triceps together, back with biceps, and legs by themselves – a classic push, pull and legs rotation." Vic also trains calves up to four times a week and abdominals twice a week.

In the first part of the week, Vic would focus on classic compound movements, using reps as low as five and as high as 12. In the latter part of the week he uses isolation exercises in the form of cables and machines. "In this manner I give my joints a break from the heavy compounds while still hammering the muscle with a higher rep range of between 15 to 20."

"I like compound moves and the barbell squat is my all-time favourite. The squat is about putting yourself to the test, whether it is with low reps for power or higher reps for cardiovascular benefit. You have to grind all the way! I also love doing dumbbell presses for chest because I can move both of my arms freely, which makes it a lot easier on the joints."

His most productive split in his bodybuilding career is following a hybrid between the training styles of Dorian Yates and Milos Sarcev. "The first part of the week I lift the big weights with reps until failure and the second part of the week I introduce giant sets to failure."

Cardio is effective when you strip fat for a contest, says Vic, who

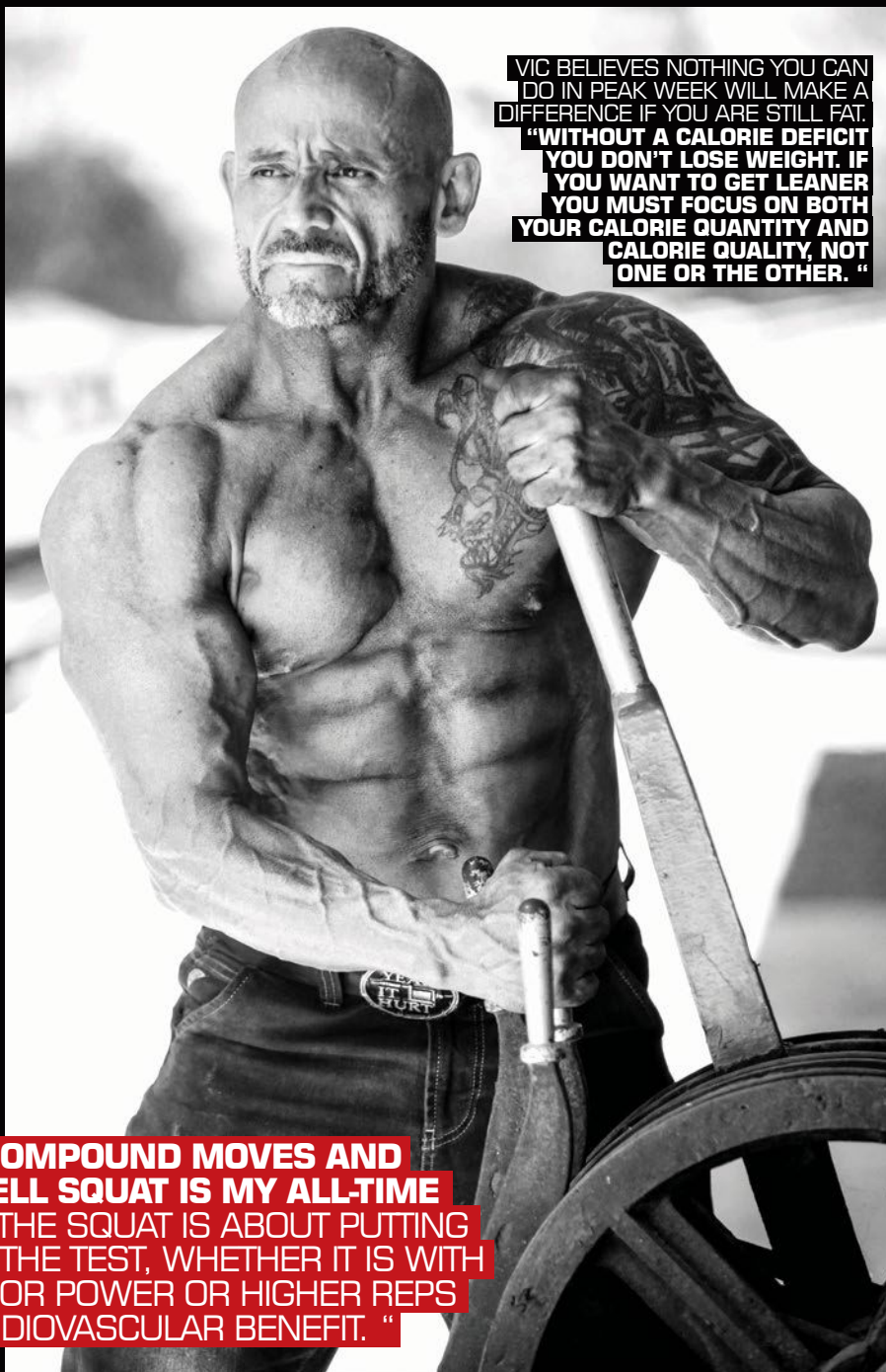
recommends doing 50-minute cardio sessions at 70% of your max heart rate in a fasted state.

"Fasted cardio burns fat immediately. I

believe it is the best form of cardio when your calories are low. You also preserve muscle mass this way. You look your best when you are ripped and there is no excess body fat to obscure the striations."

The majority of bodybuilders don't train for two and sometimes three days before a contest. There are some athletes who train right up to the show, but the whole point of carb-ing up in the last days before you step on stage is to allow your muscles to fill back up with glycogen. Training depletes the muscles of glycogen, preventing them from filling out. As a competitor you don't want to be sore or feel run down when striking a pose. Vic's last training session therefore falls on the Thursday if the show is on a Saturday. It is an upper body workout.

VIC BELIEVES NOTHING YOU CAN DO IN PEAK WEEK WILL MAKE A DIFFERENCE IF YOU ARE STILL FAT. "WITHOUT A CALORIE DEFICIT YOU DON'T LOSE WEIGHT. IF YOU WANT TO GET LEANER YOU MUST FOCUS ON BOTH YOUR CALORIE QUANTITY AND CALORIE QUALITY, NOT ONE OR THE OTHER."



"I LIKE COMPOUND MOVES AND THE BARBELL SQUAT IS MY ALL-TIME FAVOURITE. THE SQUAT IS ABOUT PUTTING YOURSELF TO THE TEST, WHETHER IT IS WITH LOW REPS FOR POWER OR HIGHER REPS FOR CARDIOVASCULAR BENEFIT."

GETTING IT RIGHT

His supplementation consists of a joint support formula, multivitamins, magnesium and omegas. He also adds whey isolate protein as part of his pre-workout regimen and quick-acting carbohydrates, while sipping on a BCAA intra-workout shake during training.

He believes nothing you can do in peak week will make a difference if you are still fat. "Without a calorie deficit you don't lose weight. If you want to get leaner you must focus on both your calorie quantity and calorie quality, not one or the other. Some people only focus on food quantity in terms of calories out and calories in while others believe fat loss is only about the nutritional value of food and not the calories. The assumption is if they only

eat healthy foods they automatically lose weight. The truth is somewhere in the middle. You need to focus on both – calorie quantity and calorie quality."

Vic believes there are nutrition laws and best practices everyone needs to follow if the goal is to achieve fat loss. "Peak week is about finding the right variables such as the quantity of water and the best ratios of foods you can consume that will work best for you." **—Vic**



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Caffeine is a wonder drug. Take a few cups before the iron gets lifted and you have everything you need to power through a hard workout, right?

Well, not always. Admittedly, caffeine can provide a much-needed pick-me-up. It is, however, in some cases a double-edged sword.

WEIGHING THE **PROS & CONS** OF

COPIOUS

COFFEE

CONSUMPTION

SUPER BUZZ

The coffee culture has become part of our society. Caffeine exerts a magical pull that rarely can be left untouched, especially for those who are feeling fatigued and in need of a pick-me-up. It is a substance with almost universal appeal that has stimulated people for many millennia.

Caffeine-yielding plants are speculated to have been discovered as far back as the Paleolithic era, as early as 700,000 B.C. Despite being initially grounded to paste

before ingestion, it was not until the early nineteenth century that caffeine was first isolated and named. Recognised for its stimulating and mood-altering effects, it quickly achieved a pervasive presence all over the world.

Today, caffeine is found in countless beverages, including coffee, tea, energy drinks and colas; products containing cocoa or chocolate; and in medications and a variety of supplements of which some are aimed at weight loss.

MILLENNIALS SPEND MORE ON COFFEE THAN SAVINGS: BASED ON A SURVEY CONDUCTED ONLINE, ALMOST HALF OF PEOPLE AGED BETWEEN 18 TO 34 HAVE SPENT MORE OF THEIR HARD-EARNED MONEY ON COFFEE THAN ON ANY FORM OF RETIREMENT INVESTING. THE SURVEY CALLED MONEY MATTERS OBSERVED THE SPENDING HABITS OF 1,900 MILLENNIALS, OF WHICH OVER 41 PERCENT PREDICTED THAT THEY WON'T BE FINANCIALLY SECURE ENOUGH TO RETIRE UNTIL THEY ARE OLDER THAN 65.



ENERGISING WORKOUTS

Bodybuilders and strength athletes want to squeeze everything they possibly can out of their workouts and for most, caffeine equals energy to perform at a higher level in the gym. According to a 2012 study, published in the Journal of Strength Conditioning and Resistance, men who took caffeine could bench press and deadlift greater poundages compared with others who took a placebo during the experiment.

Follow-up studies underlined the fact that runners and rowers increased their aerobic capacity after a dose of caffeine. Researchers, however, also noticed that the benefits of caffeine reduced as regular users developed a specific tolerance to it over time. For athletes, such as bodybuilders, the whole point of supplementation is to work out harder and more intensely. Caffeine is therefore used to enhance performance in numerous easy-to-consume and highly concentrated formulations. Although touted for its weight-loss properties due to its ability to suppress appetite and burn calories due to thermogenesis, there is no sound evidence that an increase in the consumption of caffeine can result in significant or permanent weight loss.

CAFFEINE INTOXICATION

Caffeine found in coffee and other common beverages is a stimulant of the methylxanthine class of psychoactive drugs. It is known to be addictive and users who have tried to limit their intake are aware of how tough it can be to kick the coffee habit. Withdrawal symptoms include headaches, anxiety, irritability, fatigue, digestive issues, changes in appetite and trouble concentrating.

Caffeine is described by the US Food and Drug Administration (FDA) as 'generally safe' and the average amount of caffeine consumed in the US is approximately 300mg per person per day, which is the equivalent of between two to four cups of coffee. Most brewed coffee has anywhere from 80 to 200 milligrams of caffeine, depending on how it is made and what type of coffee it is.

Over time a regular coffee drinker might need additional doses to achieve the same energising effects because the brain and body naturally build up a tolerance. If you already have trouble sleeping at night caffeine consumption can also increase your insomnia and disrupt the body's natural hormone levels and wake-and-sleep cycles that assist with restful sleep by potentially depleting serotonin and melatonin. In addition, caffeine might also deplete levels of certain key nutrients such as B vitamins, vitamin C, potassium, calcium, zinc and magnesium.



OVERDOSING

A caffeine overdose can occur, especially if you have a known heart condition or high blood pressure. An official diagnosis of caffeine overdose, also known as caffeine intoxication, is made when any of the following symptoms are present following the ingestion of caffeine:

- restlessness
- nervousness
- excitement
- insomnia
- flushed face
- diuresis (you keep passing urine)
- gastrointestinal disturbance (upset tummy, diarrhea)
- muscle twitching
- rambling flow of thought and speech
- tachycardia or cardiac arrhythmia
- periods of inexhaustibility or psychomotor agitation

Even if you don't experience any of the above symptoms, drinking small quantities of caffeine in combination with energy drinks, caffeinated supplements and soft drinks could lead to signs of overindulgence such as the following:

- breathing trouble
- a change in alertness
- confusion
- increased thirst or urination
- irregular heartbeat and palpitations
- sweating
- muscle twitching
- diarrhea, vomiting or digestive issues
- dizziness and fainting
- fever
- hallucinations

CONCLUSION

There are mixed messages whether caffeine is good or bad. Sure, caffeine can give you a boost, but what goes up must eventually come down again. Some individuals develop a resistance after prolonged exposure to a hyper-stimulating substance such as caffeine, which reduces its efficacy considerably. At this point some might find themselves reaching for 'just one more cup' to get a significant response to the stimulus they are looking for.

Due to its widespread consumption, many forget that it is a psychoactive substance – a

ARACHNIDS ON CAFFEINE

IN 1995 NASA SCIENTISTS TESTED THE EFFECT OF DRUGS ON THE ABILITY OF A SPIDER TO BUILD WEBS AND FOUND THAT WITH A 10ug DOSE OF CAFFEINE A SPIDER WOULD BUILD ITS WEB MUCH SMALLER AND THE CIRCULAR THREADS WOULD BE MUCH MORE UNEVEN AND DISORGANISED THAN USUAL. AT A HIGHER DOSE (100ug) THE SPIDER'S ABILITY TO CRAFT A WEB WAS NEGATIVELY IMPACTED.

SOME GOOD NEWS TO DRINK TO

Despite the potential drawbacks, caffeine consumption is not without some helpful health benefits. Apart from boosting a workout, drinking two to three cups of caffeine, an hour before training, could also reduce perceived muscle pain. It can give you a mental lift for 45 minutes and can enhance memories up to 24 hours after consumption.

Researchers have also discovered that drinking four or five cups of coffee a day cuts the risk of Parkinson's disease in half. In addition, according to new research from Stanford University, a daily dose of caffeine prevents inflammation in blood vessels which lowers the risk of heart disease.

Researchers at the Walter Reed Army Institute of Research in the US found that a total daily dose of 800mg of caffeine (just over eight cups of coffee) over successive nights is an effective strategy for soldiers to overcome fatigue and maintain cognitive function when optimal sleep periods during the day are not available. Coffee can also fight underlying chronic inflammatory processes, particularly in elderly people.

"NEW RESEARCH INDICATES THAT A DAILY DOSE OF CAFFEINE PREVENTS INFLAMMATION IN BLOOD VESSELS WHICH LOWERS THE RISK OF HEART DISEASE."

drug that crosses the blood-brain barrier to stimulate the central nervous system. If a person is sensitive to caffeine there could be negative consequences, especially when consumed in high doses. Some medications slow caffeine metabolism, which may increase the risk for intoxication when a person ingests too much caffeine in a short period of time.

However, caffeine can also have positive effects when taken appropriately. Ultimately, the effects of caffeine are dependent on a person's specific genetic characteristics, tolerance levels and lifestyle factors. **DRB**

The USN logo is located in the top left corner. It features a stylized infinity symbol or 'X' shape to the left of the letters 'USN' in a bold, white, sans-serif font, all set against a blue rectangular background.A handwritten signature in black ink, reading 'R. King', is positioned in the top right corner.

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A large, high-quality photograph of a male bodybuilder, Robert King, in a front-facing pose. He is shirtless, showing extreme muscle definition in his chest, arms, and abdominal region. He is wearing blue athletic shorts. The background is a solid blue with diagonal white lines.

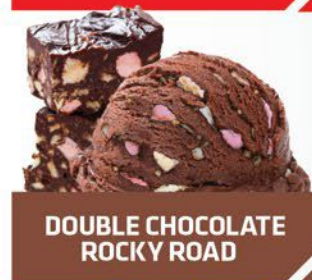
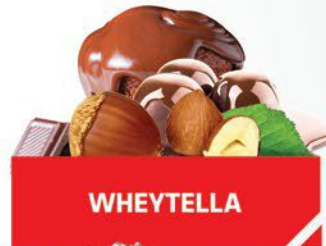
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DEBATE AROUND HOW
**VOLUME CAN HAMPER
YOUR GAINS** SPELLS
END FOR POPULAR
TRAINING SYSTEM

IS THIS THE DEATH OF GVT?

TRAINING SYSTEMS ARE MORE OFTEN THAN NOT RANDOM TECHNIQUES COMBINED FROM A MYRIAD OF DIFFERENT METHODOLOGIES AND BRANDED UNDER A CATCHY NAME.

Over the years there have, however, been a few solid training schemes that earned their reputation as highly effective, with some reaching almost mythical proportions among lifters in the gym. Examples include Dante Trudel's DC Training, Neil Hill's Y3T and, more recently, Mountain Dog Training courtesy of John Meadows.

GAINING & BLASTING THROUGH PLATEAUS

Among these there is also the old school but no less popular German Volume Training (GVT). Also known as the 10 sets of 10 reps method, or 10x10, the idea is to perform a single exercise that targets a specific muscle group using this high-volume approach to training.

Lifters all over the world regard GVT as brutal, yet still superb for gaining serious muscle mass and blasting through plateaus. The popularity of GVT can largely be contributed to Canadian strength coach Charles Poliquin, who brought it to prominence in the mid 1990s.



ORIGINS & PROGRESSION

Although many trainers and athletes have jumped on the GVT bandwagon, it was initially developed in Germany to help weightlifters pack on more muscle in the off-season. It was not uncommon for lifters to move up a full weight division over a period of 12 weeks when following a GVT split.

Since then a number of GVT variations emerged, each promising better results.

Apart from Poliquin, other prominent names such as weightlifting coach Rolf Feser, powerlifter Jacques Demers and bodybuilder Bev Francis have used a variant of the well-known regimen. The key idea behind

GVT remains the same though: Putting a tremendous amount of stress on muscles so that they are forced to respond with new growth.

Adherents start out by selecting a weight that they can manage for roughly 20 reps, which approximately translates to 60% of your one-rep max (1RM). For progression you increase the weight by adding 2kg to the bar when you're able to perform 100 total reps, or 10 sets of 10 reps. Rest periods are usually between 60 to 90 seconds between sets.

Apart from a limited amount of accessory sets, any additional work has the potential of pushing you over the edge and into a state of overtraining. Traditionally considered a slump buster and not for the faint of heart in the gym, Poliquin took it a step further by creating an advanced version of GVT where you perform 10 sets of 5 reps, instead of 10 prescribed in the original training programme to accommodate heavier weight.

"THE KEY IDEA BEHIND GVT IS TO PUT A TREMENDOUS AMOUNT OF STRESS ON MUSCLES SO THAT THEY ARE FORCED TO RESPOND WITH NEW GROWTH."

GVT IN PRACTICE

A typical GVT split would look like this:

DAY 1 Chest & Back	EXERCISE	SETS	REPS	REST INTERVALS
	Bench press	10	10	90 seconds between sets
	Chins	10	10	90 seconds between sets
	Incline flies	3	10 - 12	60 seconds between sets
	One arm dumbbell rows	3	10 - 12	60 seconds between sets

DAY 2 Legs & Abs	EXERCISE	SETS	REPS	REST INTERVALS
	Barbell squats	10	10	90 seconds between sets
	Sumo deadlifts	10	10	90 seconds between sets
	Weighted sit-ups	3	20	60 seconds between sets
	Calf raises	3	20	60 seconds between sets

DAY 3 Off

DAY 4 Arms & Shoulders	EXERCISE	SETS	REPS	REST INTERVALS
	Barbell curls	10	10	90 seconds between sets
	Dips	10	10	90 seconds between sets
	Dumbbell shoulder press	3	10 - 12	60 seconds between sets
	Bent over reverse flies	3	10 - 12	60 seconds between sets

DAY 5 Off

GVT FACTS

- The tempo for exercises involving long-range movements such as dips, chins and squats should be 40x0, which means you lower the weight in four seconds and immediately change direction and lift explosively during the concentric portion. Use a 30x0 tempo for shorter range exercises such as barbell curls.
- Pick exercises that recruit the most muscle mass, such as squats and bench presses when using GVT. Machine exercises do not deliver the same effect as compound exercises.
- Avoid traditional Olympic lifts and their assistance exercises such as power cleans or snatches during GVT because the time under tension of these exercises is too short to create hypertrophy. Although Olympic weightlifters have used the programme to increase muscle mass and move them into a higher bodyweight class, it is not an effective method of improving performance in the sport.
- You can only increase poundages after you complete all 10 sets with a predetermined starting weight. Don't train to failure on all your sets. Typically, only the last three sets should be hard.
- Complete 10 sets of 10 reps and then increase the weight by 2kg. All the reps should be performed without assistance from a spotter.
- Only follow GVT if your nutrition and recovery protocols are on point.
- GVT is definitely not for beginners. You must have at least a year of conventional training under the belt before trying it.
- GVT is associated with an increase in muscle and should not be confused with German Body Comp (GBC), which is more geared towards fat loss by adhering to shorter rest intervals while performing multi-joint exercises to boost maximum growth-hormone production. Well-known trainer Vince Gironda's 8x8 workout template is considered a hybrid of GVT and GBC.
- GVT is not designed to be followed year-round, but rather only once or at the most twice a year.

GVT EXAMINED: A FIRST

However, the latest emerging scientific evidence has delivered a serious blow to the status of GVT.

Researchers (Amirthalingam, Yorgi et al. 2016, "Effects of a Modified German Volume Training Program on Muscular Hypertrophy and Strength") decided to examine the training adaptations when lifters followed a typical GVT protocol. To date, no study has directly examined the link between GVT and muscular hypertrophy and strength.

The GVT 10x10 approach was compared with a more traditional 5x10 work scheme over a 6-week period. Nineteen healthy men were randomly assigned to 6 weeks of 10 or 5 sets of 10 reps performing specific compound exercises as part of a workout split. This protocol was followed 3 times per week. The total and regional lean body mass, muscle thickness and muscle strength of the participants in the study were measured prior and after completing the training programme.

The researchers stuck to the original GVT format, focusing only on primary movers in the form of the barbell bench press, lat

pulldowns, leg press, dumbbell lunge, shoulder press and upright rows as part of a three day per week workout schedule.

The conclusion of this study was as follows:

"It seems that the modified GVT programme is no more effective than performing 5 sets per exercise for increasing muscle hypertrophy and strength."

As part of the experiment, one group performed 50 total reps per exercise while the other completed 100. It was found that both groups experienced muscle growth, with the men performing fewer sets per exercise gaining more muscle in the trunk and arm areas. The total lean body mass changes also favoured the 5-set group.

Amirthalingam and colleagues also found no significant changes in leg growth in either group. While both groups experienced quality strength gains during the study, the 5-set group showed better numbers on the bench press and lat pulldown exercises. All in all, results indicate that there was no additional benefit to the higher volume advocated by adherents of GVT.

ACCORDING TO THE GVT STUDY:

- GVT was inferior with regard to gains in arm and trunk size.
- No substantial improvements in leg size were seen in either group.
- GVT delivered inferior results with regard to overall mass gains, but it was equal with regard to strength gains with both groups making quality progress.

IS GVT STILL RELEVANT?

You should always ask yourself the question of which training style is right for you and your goals. The answer to this question generally revolves around the following:

- The amount of time you have to work out. If you do have time, a body part split is ideal, but if time is an issue, a full-body blast three times a week is the way to go.
- Select your workout by taking your training experience, conditioning and age into consideration.
- The type of training you would like to engage in. It could be Olympic-style lifting to increase strength, or a bodybuilding approach with light to medium poundages and higher reps for hypertrophy. It could also be a combination of both.

GVT IS JUST ONE METHOD YOU CAN USE. OTHER OPTIONS INCLUDE:

- Classic full-body strength training
- Olympic/powerlifting
- Pyramid training
- Escalating density training

With multiple approaches to training available these days it seems working muscles with a variety of stimuli is best to boost muscle growth from various components of the muscle tissue itself. In this case, the latest information on GVT is just a piece of the training puzzle.

What studies such as the one on GVT do is help to establish guidelines – a framework that then can be customised to the individual. Intelligent training is all about ramping up your volume, but doing so over the course of three to four weekly workouts and assessing whether you are still recuperating adequately and making progress after the four-week block. All your sweat and toil in the gym will also amount to nothing if you don't follow a proper nutrition protocol. Training might provide the stimulus, but what you put into your mouth is what ultimately determines if you grow or not. **M.E**



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TAKE ALTERNATE ROUTES TO REACH YOUR FULL POTENTIAL

SMALL MOVES BIG IMPACT

IN THE BEGINNING YOU PROBABLY TRAINED USING A TRAINING SPLIT THAT A FRIEND OR SOMEBODY AT YOUR GYM GAVE YOU. USUALLY IT WOULD INCLUDE BIG BASIC COMPOUND MOVES, WHICH YOU WERE TOLD YOU NEEDED TO FOLLOW TO BECOME BIG BEYOND BELIEF. SO YOU SET OFF AND FOLLOWED ALL THE MOVES WITH DILIGENCE, ONLY TO FIND THAT YOU SOMEHOW GOT LOST ALONG THE WAY...

Although the map to serious muscle growth has been charted, it does not mean you cannot take alternate routes to reach your full potential. To take you to the next level, open your eyes to these under-the-radar moves, some of which are small in comparison with the famous meat-makers.

You're probably thinking: "Yeah right, there is nothing new under the sun!" and you have a point. There are no revolutionary moves out there, but that does not mean you cannot challenge yourself with new levels of intensity. Variations as simple as a change in position or source of resistance will allow you to target your body from new angles while emphasizing different muscles. Over time, this will translate into more strength and more size.

Bodybuilding is not a performance-based sport such as rugby or weightlifting. To succeed, champion bodybuilders have to train systematically, adjusting both volume and intensity and, yes, sometimes relying on small moves to make a big impact. Follow their lead and let your body's reconstruction begin!

TRAINING TRICK

Resist the urge to put some body weight into the pushdown. Don't use momentum, and squeeze your triceps at the bottom before resisting the weight all the way back to the top of the exercise. Don't forget to start with your hands together at the top of the movement and end with the rope in an upside down V at the bottom, before returning under control to the starting position. Mdu would occasionally use the same movement, but with one arm at a time, typically placing his one leg in front of the other for better balance.

"DON'T USE MOMENTUM, AND SQUEEZE YOUR TRICEPS AT THE BOTTOM BEFORE RESISTING THE WEIGHT ALL THE WAY BACK TO THE TOP OF THE EXERCISE."

THE MOVE

MDU GREEN'S ROPE PUSHDOWNS

Mdu Green is not afraid of improvising when he is training, in particular when targeting his triceps. He includes a variety of different handles, bars, and single or double rope attachments to work the back of his arms. Using the rope is one of his favourites. He stands close but faces away from the cable pulley machine with his knees slightly bent, before pushing the rope down over his shoulders. **As he pushes down he opens the handles of the rope in opposite directions.** Mdu knows the tricep's main function is to extend the

elbow like a hinge of a cabinet door – it opens and closes. **When you extend your elbow all three parts of the tricep muscle participate in the elbow extension.** Mdu's goal is to fully stimulate his muscles by increasing the intensity via the weight and reps he uses, as well as the number of sets he performs. At the bottom part of the movement, the point of contraction, Mdu feels the most resistance and it is here where he fully contracts the triceps. He keeps his back straight and stationary throughout the exercise.



THE MOVE

GEORGE'S LYING ONE-ARM DUMBBELL EXTENSION

George Herwill has been training harder than ever for the day he can walk out onto the stage as a Pro athlete. For George, it takes a good diet, discipline, knowledge and a positive attitude to build muscle.

He changes the order of his exercises, the angles and the speed of execution, using how he feels as a guide rather than the weight he trains with. High-intensity training produces the greatest gains.

To do George's move you need to lie on a bench while holding a dumbbell, with your feet on the floor or in front of you. George makes sure that the palm of his hand is facing towards his feet as a pronated grip is required to do this exercise properly. He slowly lowers the dumbbell down, pausing before it touches his forehead and squeezing his tricep for a second before lifting the dumbbell upward again. Only his forearm moves. When he is finished he switches arms and repeats the exercise to blast his triceps into oblivion for muscle growth.

In a study done by scientists at the American Council on Exercise, the tricep extension was approximately 70 to 90 percent more effective compared to the triangle push-up for triceps. By using a variety of overhead extensions in your tricep programme, you can add more mass to your arms. **George recommends starting off with a light weight before gradually increasing your poundage as your triceps get stronger. The key to reaping the benefits of this particular exercise is to pay meticulous attention to form.** It is a unilateral exercise which means that you train one side of your body at a time. As with all unilateral exercises, start with your weak side and knock out more repetitions with your strong side. This promotes equal contralateral strength (the same strength in both sides). You can also use your non-working arm to spot yourself to get in those last few extra reps!

TRAINING TRICK

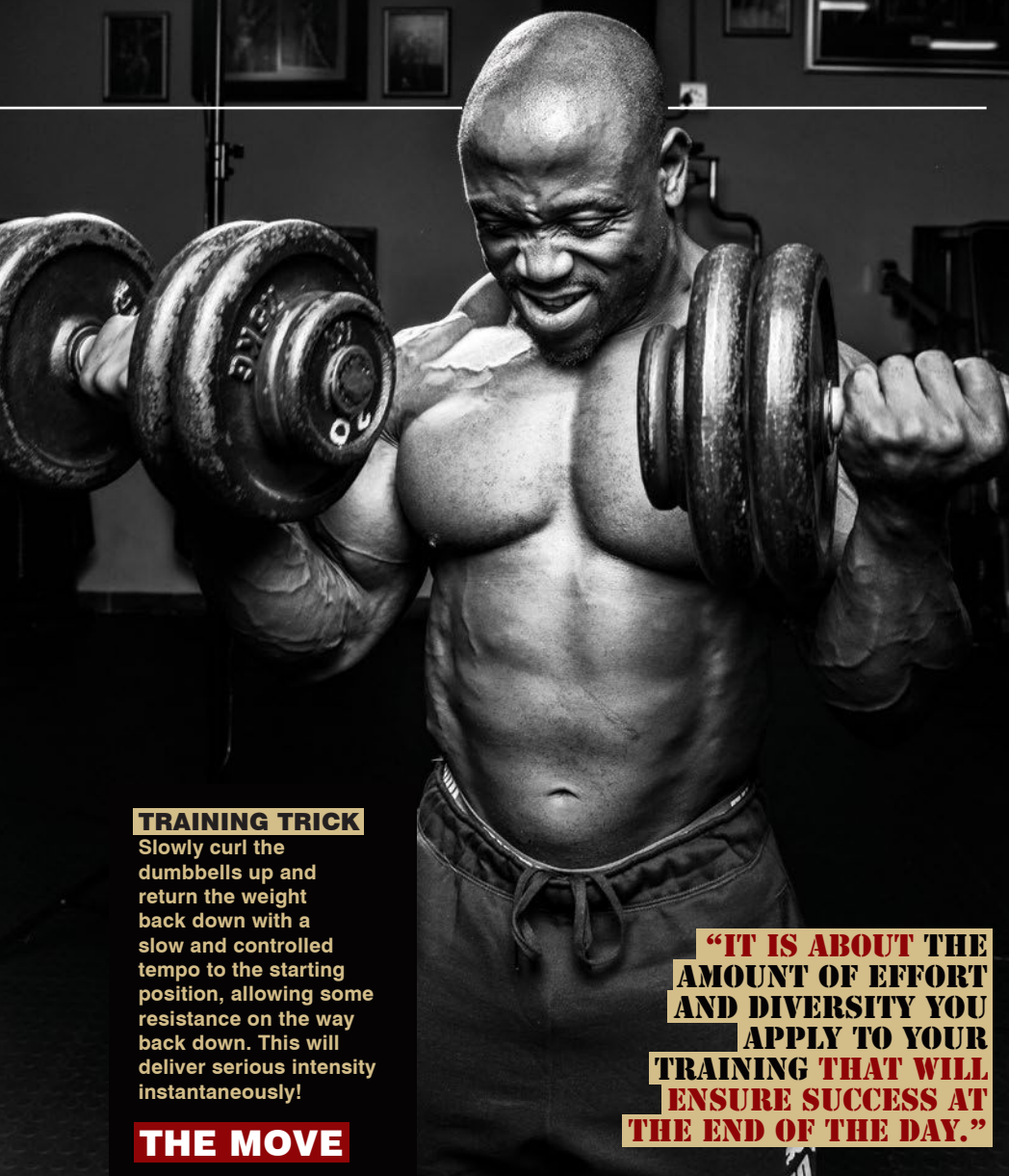
Keep your upper arm as still as possible throughout the exercise. As with any exercise, it is important to keep the weight under control and move smoothly on both the way down and back up. When the dumbbell is lowered to your forehead, both the lateral and medial triceps are being worked. When the dumbbell is lowered behind the top of your head the long head of the tricep is worked. A variation is lowering the dumbbell across your body to your chest or working the move with both arms at the same time.



"TO WORK BOTH THE LATERAL AND MEDIAL TRICEPS, LOWER THE DUMBBELL TO YOUR FOREHEAD. FOR THE LONG HEAD OF THE TRICEP, LOWER THE DUMBBELL BEHIND THE TOP OF YOUR HEAD."



PHOTOGRAPHY BY SOULBY JACKSON



TRAINING TRICK

Slowly curl the dumbbells up and return the weight back down with a slow and controlled tempo to the starting position, allowing some resistance on the way back down. This will deliver serious intensity instantaneously!

THE MOVE

CURL DUMBBELLS SIMULTANEOUSLY, NHLANHILA-STYLE

Curling lays at the heart of any successful bicep programme. It is the basic move so many lifters have gotten awesome results from. However, unless you know how to properly stimulate your biceps you will be limiting much of your potential. Unlike other muscle groups you can strengthen by using a variety of exercises, bodybuilders depend on the curl for bigger guns, which can become boring and thereby stopping you from making progress. Make a small adjustment to the alternating pattern by performing your dumbbell curls simultaneously on every repetition. This is a surefire way to challenge yourself!

Nhlanhla Mathebula has arms he can display with the utmost of confidence at any full-blown gun show alongside South Africa's finest athletes. Nhlanhla believes

"IT IS ABOUT THE AMOUNT OF EFFORT AND DIVERSITY YOU APPLY TO YOUR TRAINING THAT WILL ENSURE SUCCESS AT THE END OF THE DAY."

in shocking the body from time to time. For this hardcore bodybuilder, who loves to train arms, it is about the amount of effort and diversity you apply to your training that will ensure success at the end of the day.

The dumbbell curl targets the biceps, but also engages the front deltoid and trapezius muscles for stabilisation. Begin with the dumbbells at your sides. **Lift both dumbbells simultaneously until your elbows are completely bent. Remember to control the dumbbells back down while keeping your wrists in a neutral position.** The move forces you to work both arms in unison. Don't be surprised if you feel a new type of soreness the next day.

Nhlanhla's training philosophy is to curl if you want big biceps. If you want bigger biceps, do different kinds of curls.

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"THE SLD WILL STRETCH THE HAMSTRINGS EFFICIENTLY AND YOU DON'T NEED TO USE HEAVY POUNDAGES TO ACHIEVE A PROPER TRAINING EFFECT."

THE MOVE

HENK SMITH'S SLD

Henk Smith, also known as 'The Tank', is not restricted by all the myths in the gym. He is always willing to go against the grain to add some size and strength. Henk understands the concept of muscles adapting to the stress induced by weight training to grow larger and stronger. To intentionally apply stress to the muscle, he manipulates his training to continue to increase stress, which is what leads to muscle growth.

This means he loves performing the Straight Leg Deadlift or SLD. There is something powerful about bending over, grabbing a weight and standing up with it. For Henk the movement is about more than merely hoisting heavy weights. Bending the knees less, as the Straight Leg Deadlift requires, encourages activation in the posterior chain (the muscles on the back of the body, especially the glutes, hamstrings and lower back).

The main difference between a conventional deadlift and the SLD is that the latter requires straighter legs. Apart from that, the bar path and set-up are identical. Henk pushes his glutes back and engages his abdominal muscles to increase his stability when performing the move. He keeps constant tension on his hamstrings and glutes by not resting the barbell on the floor between repetitions.

To develop a strong and powerful physique, you need to build the hamstrings along with the quads and calves.

TRAINING TRICK

Don't worry if the bar drifts out in front because the range of motion is short. The SLD will stretch the hamstrings efficiently and you don't need to use heavy poundages to achieve a proper training effect. Old school lifters used to stand on a bench when performing these, descending all the way until the bar touches their shoes for a better stretch.



William Bonac
THE CONQUEROR

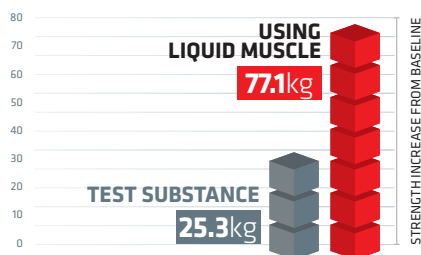
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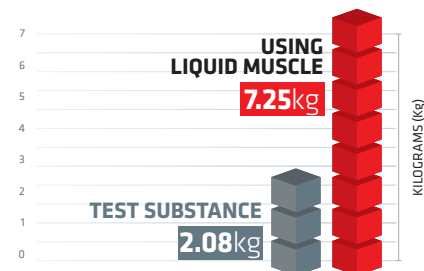
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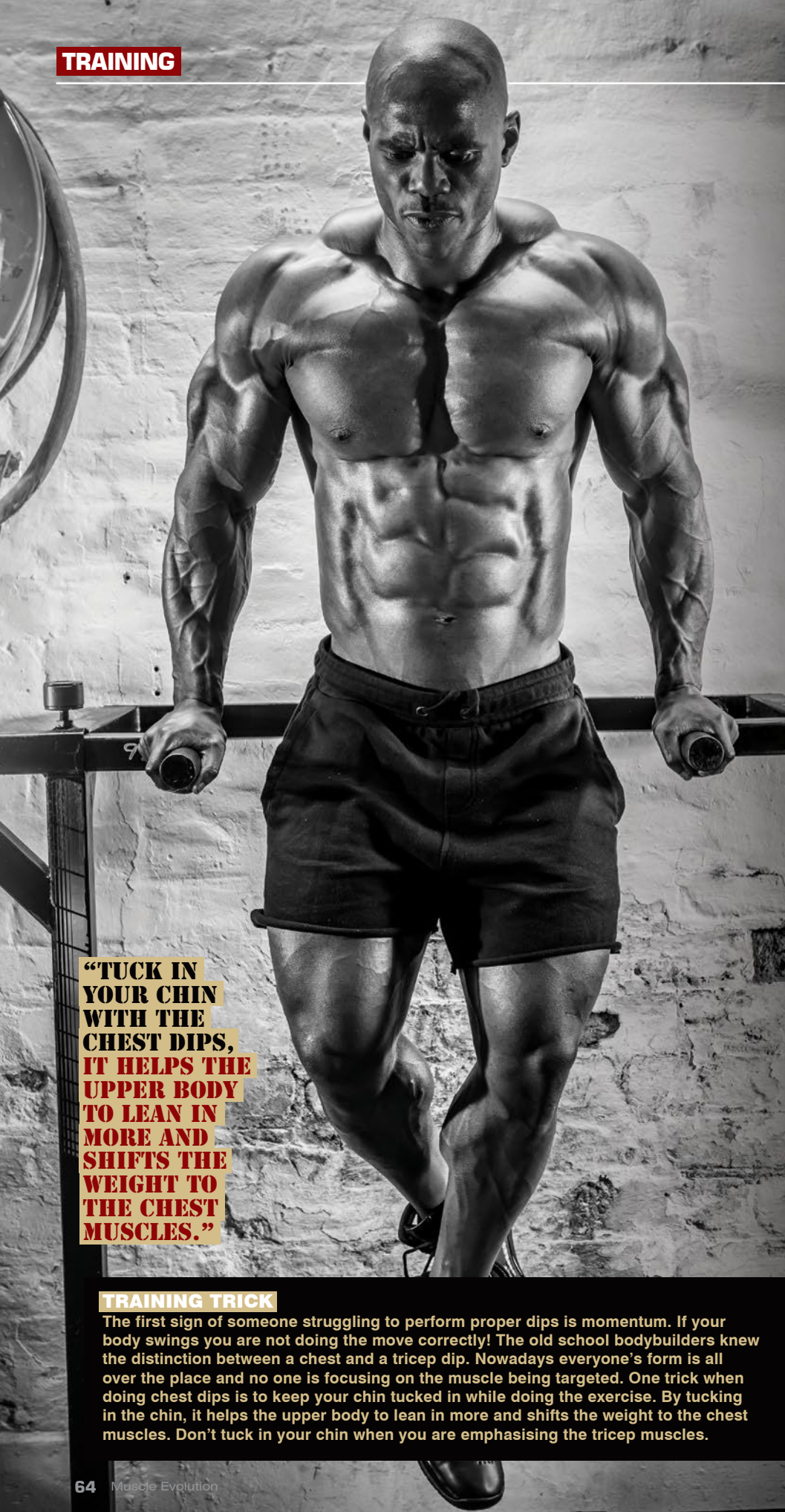
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“TUCK IN YOUR CHIN WITH THE CHEST DIPS, IT HELPS THE UPPER BODY TO LEAN IN MORE AND SHIFTS THE WEIGHT TO THE CHEST MUSCLES.”

TRAINING TRICK

The first sign of someone struggling to perform proper dips is momentum. If your body swings you are not doing the move correctly! The old school bodybuilders knew the distinction between a chest and a tricep dip. Nowadays everyone's form is all over the place and no one is focusing on the muscle being targeted. One trick when doing chest dips is to keep your chin tucked in while doing the exercise. By tucking in the chin, it helps the upper body to lean in more and shifts the weight to the chest muscles. Don't tuck in your chin when you are emphasising the tricep muscles.



THE MOVE

MDU GREEN'S DIPS

Mdu Green does not regard the dip as a shoulder killer. When 'The Green Mamba' is doing dips to build his chest he leans forward and contracts his abdominals to maintain proper form throughout the exercise.

Mdu resists the urge to lock out and maintains a neutral head position. He drops his shoulders slightly below the elbow in the bottom position. **To hit triceps he keeps his body in a strict, upright position with his legs back. He squeezes his glutes instead of his abdominals to maintain proper form and locks out his elbows when he is in the top position.**

Remember, dips for chest require that you lean forward into the movement and that you go right to the bottom to feel a stretch across your chest. When you build your triceps you should keep your body more upright than the chest dip. More importantly, don't go lower than when your upper arms are parallel to the floor.

The biggest mistake you can make on dips is to turn it into a shoulder movement. How? By allowing your shoulders to move forward as you go down. This will put tremendous and unnecessary pressure on the shoulder joints and its muscles.

Executing the right form on dips can be tough at first, but soon enough your strength gains from this exercise will transfer to barbell pressing moves for fantastic chest and tricep power! **M.E.**

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WE REMINISCE OVER THE
SEXIEST M.E BABES
FEATURED IN MUSCLE
EVOLUTION OVER THE YEARS

TEN BABES TEN YEARS

Over the years Muscle Evolution has featured some of the sexiest women in both the local and international fitness industry. Their toned, muscular and curvy physiques are synonymous with strength, femininity and self-empowerment which belies their seemingly unlimited drive and motivation to be the very best at what they do. We recently took a stroll down memory lane and picked 10 of the hottest M.E Babes we featured over the years. Here they are again in all their glory. Enjoy!



JAMIE EASON

- Houston, Texas
- Former cheerleader, personal trainer, fitness model, entrepreneur
- **NAUGHTY CHEAT:** Fudge

Jamie Eason featured in the July/Aug 2007 edition where we gave our readers an inclusive insight into the world of this strikingly beautiful international fitness sensation. The former cheerleader has a look that can drop the jaws of most men, while still motivating and inspiring women. Jamie walked away with a Pro Card when she entered her first fitness competition in 2006 at the Hardbody Entertainment Model Search at the Olympia, when her stint as an NFL cheerleader for the Houston Texans ended.

Jamie got hooked on training while studying for a degree in speech communication in Texas. With proper nutritional and sound training principles she managed to totally transform her body to become a highly sought-after fitness model. She also has written various workout plans which are followed by millions of people all over the world and prefers lifting weights over cardio. "Most women overdo the cardio and avoid weights for fear of getting too big. That is a huge misconception! I tell women all the time that they can do cardio and diet all day long, but they are never going to achieve the tone they are after without incorporating weights."

"YOU WILL NEVER SEE NUDE IMAGES OF ME. I WANT TO APPEAL TO BOTH MEN AND WOMEN. I HOPE THAT THE MEN FIND IT SEXIER WHEN I LEAVE SOMETHING TO THE IMAGINATION AND THAT WOMEN CAN RELATE TO THE DESIRE TO LOOK AND FEEL SEXY."

AVA COWAN

- Sacramento, California
- Fitness model, personal trainer, figure competitor
- **NAUGHTY CHEAT:** Sushi

Ava Cowan rose to popularity in the fitness industry when she won the 2007 Ms. Figure America. She used to suffer from low self esteem, but training with weights gave her the confidence she needed to break out of her shell. She has competed as a professional figure athlete, winning multiple titles over the years and also worked as a model, writer and spokesperson in the health and fitness industry. Growing up in Sacramento, California, Ava starting lifting weights and eventually sent some pictures of herself to influential people in the industry for exposure. "The response was so good I just continued to set up shoots and submit my images to different publications."

Having been a gymnast since the age of three, Ava used her solid work ethic and discipline to compete in the world of fitness. Her secret to a beautiful body is lifting weights, and the heavier the better! Ava was hired as an extra for the popular television series Baywatch when she moved down from Sacramento to Los Angeles when she was 19. She worked as a regular on the set for the entire summer: "I was featured in many of those girl-in-a-bikini slow motion montages. It was just great!"

"I AM A SUCKER FOR GREAT ARMS AND A HANDSOME FACE ON A MAN."

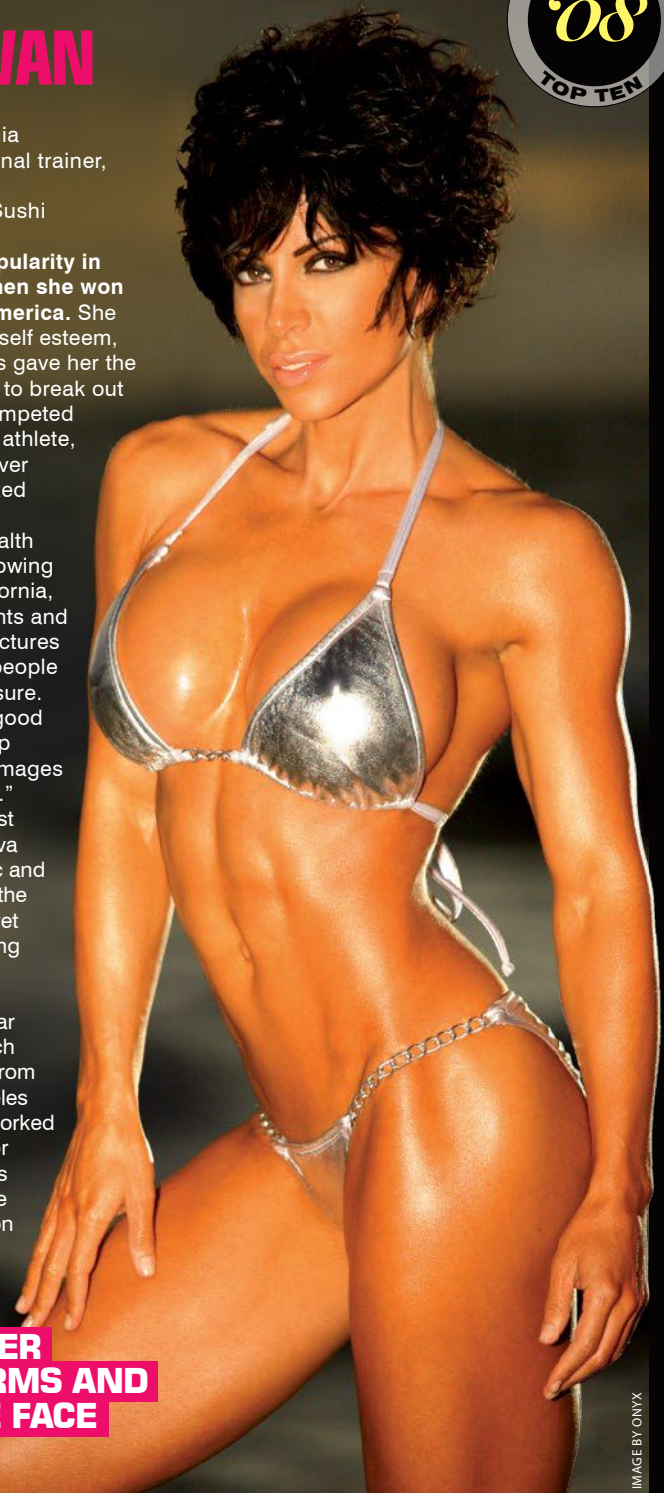


IMAGE BY ONYX

2007



2008



SAMANTHA BAKER

- Boston, Massachusetts
- Figure competitor, fitness model and former NFL cheerleader
- **NAUGHTY CHEAT:** Pizza, Lasagna or Spaghetti

Samantha Baker is a figure competitor, fitness model and former NFL cheerleader. Her face popped up in numerous magazines all over the world after winning the 2011 Jay Cutler Classic. She describes herself as driven, loyal, determined, trustworthy and intelligent. Samantha always loved to play sports and began lifting weights in the summer before she started college. It became a central part of her daily routine. "I had to always stay in shape for what I did, but when I started to train with weights I noticed significant changes and really liked it!" Being in incredible shape led to her being chosen as an NFL cheerleader. Once she was done with cheerleading she pursued a career in fitness modelling while also trying her hand at competing. The best part of being a figure competitor for Samantha is seeing how all the hard work and dedication pays off when she steps onto the stage.

"I LOVE A CHALLENGE AND THAT I CAN PUSH MYSELF TO HIGHER LIMITS EVERY TIME I STEP INTO THE GYM."



IMAGE BY WENDI SHINKLE, WWW.SATIOPHOTOGRAPHY.NET



"I WANT TO BE THE BEST I CAN BE IN EVERY ASPECT OF MY LIFE."



RIANA ROBERTS

- Johannesburg
- Personal trainer, model, presenter, interior designer
- **NAUGHTY CHEAT:** Anything with chocolate

Riana Roberts was only 21 when she did her first photo shoot and since then she has featured in many national and international magazines as a cover, fitness and lingerie model. She has also featured as one of the Hexagon Girls for EFC Africa. What motivates Riana the most is the drive to be the best she can be in every aspect of her life. She has always been a super-active girl and loves being fit and healthy. For Riana, life is all about being happy and comfortable in your own skin! She loves running, cycling, Pilates, yoga and lifting weights.

IMAGE BY CINDY ELLIS, WWW.CINDYPHOTO.COM

2009



2010



LARISSA REIS

- Brazil
- Coach, fitness model, athlete
- **NAUGHTY CHEAT:** Anything with sugar

Larissa Reis is the quintessential Brazilian bombshell. Her photo shoot, shot on location in the dunes of the Nevada desert, was one of the hottest ever published in M.E. The blond beauty was first inspired by Monica Brant and Cory Everson and started competing in 2005 before turning Pro in 2008. "I know how much hard work and dedication goes into building a great physique," said Larissa, who loves the sport and the lifestyle that comes with it. She trains old school, utilising heavy basic movements with maximum intensity. She has an all-or-nothing attitude in anything she is doing: "I never give up and I fight to the end." Larissa loves training her glutes – she attributes this to her Brazilian heritage. Outside of fitness she also loves martial arts, longboard skating and watching true stories, documentaries and European movies.

IMAGE BY MICHAEL PALMER, WWW.MICHAELPALMER.COM



"I'M A BIT OF A DREAMER!"



IMAGE BY BAHRAM DIDEBAN, PIRATE PICTURES

LAURA PRESTIN

- Ontario, Canada
- Cover model, personal trainer and author
- **NAUGHTY CHEAT:** Nutella

One look at Laura Prestin and you can easily see why she is one of the most sought-after fitness models on the planet. Known for her sexy photographs and savvy business approach, Laura lives for the adrenaline rush and to keep her mind and body stimulated. "The photos that turn out the best are the ones where I am having fun and staying natural." Laura finds a confident man irresistible and confesses that she absolutely despises the phrase "clean eating". "In reality no one can eat clean unless we own our own farm, grow our own crops and slaughter our own animals!" Although she does not follow a strict diet to stay in such phenomenal shape, she makes sure to eat every 2 to 3 hours during the day. She loves trying out new restaurants, especially when they serve delicious thai food or sushi. Laura trains five times a week and incorporates everything from strength and Pilates-type training to high-intensity circuit workouts. She never counts reps or sets. Laura is not scared of posting sexy and revealing photos of her sculpted body on social media. The most important piece of advice she can offer other women regarding fitness modelling is to not take themselves too serious and to think like a businesswoman and not like a model.

"LOOK F*CKING HOT!"

2011



2012





IMAGE BY SLADE - WWW.PURESTUDIO.CO.ZA

MELISSA STORM

- Durban
- Bikini physique competitor, graphic designer
- **NAUGHTY CHEAT:** Cup cakes

Melissa Storm is one of the best bikini physiques to ever hit a South African bodybuilding stage. Driven and determined with a never-settle-for-anything-less-than-the-best attitude, it was a pleasure to edit this classic 'girl on fire' photo shoot. This born-and-bred Durbanite lives and breathes fitness and training, which intensified after she saw pictures of Jenna Limerick on stage. "That's when I thought to myself 'that is what I really want to do'." Melissa can't lift weights without her iPod. "Music is very important to me as it keeps me focused." She likes pushing heavy weights and never does cardio. She trains her legs twice a week with one workout fully dedicated to sculpting her glutes. She believes in mixing things up when she trains and to shock her body when she reaches a plateau. When she is not training she loves going to the beach, drawing portraits and surfing.

"NEVER GIVE UP. **KEEP ON PUSHING TO REACH YOUR GOALS.** YOUR BIGGEST COMPETITION OUT THERE IS YOURSELF."

JENADINE HAVENGA

- Johannesburg
- Fitness and figure model, entrepreneur
- **NAUGHTY CHEAT:** Chocolate, cup cakes and vanilla lattes

Jenadine Havenga burst onto the competitive scene in 2013 and soon became a serious contender on the local bikini stage thanks to her incredible physique, bubbly personality and dominant stage presence. Being the epitome of what can be achieved through hard work and dedication, she regularly sets small goals while moving forward to the next challenge in her life. Jenadine competed in numerous figure model competitions before earning her WBFF Pro Card. She always makes sure that she is the hardest worker in the room, and when she has set her mind on a goal she never gives up. "I am someone who never wants to ask myself 'what if', so I go out and do it instead!"

Jenadine left the corporate world to focus on making an impact in the health and fitness industry. "In 2008 I bought my first *fitness* magazine and was absolutely in awe with Ava Cowan, who was on the cover. Competing was something I have always wanted to do and in 2013 I just decided to start focusing on my dreams. The rest is history."

"STOP USING WORK AND KIDS AS AN EXCUSE FOR NOT BEING ABLE TO TRAIN. IT ONLY TAKES AN HOUR OF YOUR DAY. AND THESE ARE NOT EXCUSES FOR BEING DISCIPLINED ENOUGH TO FOLLOW YOUR DIET EITHER. IT'S YOUR BODY AND YOUR HOUSE. RESPECT YOURSELF."



IMAGE BY CINDY ELLIS - WWW.CINDYPHOTO.COM

2013



2014





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BORN IN THE GYM
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BURNEDINE MEERHOLZ

- Johannesburg
- Bikini competitor, personal trainer, Pilates instructor
- **NAUGHTY CHEAT:** Peanut butter and carob rice cakes

Burnedine Meerholz achieved her main goal when she was chosen as a top-six finalist in the USN Face of Fitness Cover Model Search in 2014. Since then she has met the most amazing people in the fitness industry. "Being a fitness competitor has been one of the most challenging things I have ever done, but at the same time the most rewarding. I have grown so much as a person." Burnedine believes the biggest difference between winners and losers is that winners do the things that losers don't want to. One glance at her stunning physique will tell you that Burnedine is fanatical about training. She follows a six-day-a-week split consisting of a combination of Pilates, weight training and cardio. She loves gardening, sleeping late and watching movies. Burnedine is also a professional make-up artist and an avid chess player, saying that she can easily beat anyone, any day at any time.

"THE KEY IS KNOWING YOUR BODY AND GIVING IT WHAT IT NEEDS, WHEN IT NEEDS IT. EVERYTHING IN BALANCE AND EVERYTHING IN MODERATION, THOUGH."



"I LOVE ANY VARIATION OF SQUATS, PULL UPS AND DEADLIFTS BECAUSE I BELIEVE THE BASIC MOVEMENTS ARE THE BEST FOR BECOMING FIT AND FABULOUS!"

IMAGE BY SLADE - WWW.PURESTUDIO.CO.ZA

SHANNON CORNELL



- Durban
- Beach bikini, fitness bikini competitor
- **NAUGHTY CHEAT:** Anything sweet

Shannon Cornell is one of South Africa's most alluring Fitness Bikini athletes. This Durbanite likes the challenge, the grit and the glamour of the competitive stage. She was an avid swimmer at school, but found her love for the fitness industry once she left school and started working. "An old friend of mine encouraged me to compete and I started in 2012." Shannon trains four times a week using workouts that target legs, glutes, back and shoulders. She also includes calisthenics to increase her strength, fitness and flexibility. Cardio in the off-season consists of three 30 minute sessions. "Cooking is second nature to me. There is nothing as wholesome as cooking and enjoying a healthy family meal. I like roast chicken and vegetables. I love watching movies with a witty script and terrific acting. I love all the funny one-liners. I can also get lost in a book for days, especially while doing cardio when I'm prepping for a show." **M.E**

IMAGE BY RICHARD COOK, WWW.RICHARDCOOK.CO.ZA

2015



2016





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

WHATEVER HAPPENED TO... » ANDRE VAN DER MESCHT

**MUSCLE EVOLUTION
BRINGS YOU
ANOTHER LOCAL
BODYBUILDING ICON,
ONE WHO COMPETED
AGAINST THE BEST
OF THE BEST FROM
ACROSS THE WORLD
AND EMERGED
TRIUMPHANTLY.**

Andre van der Mescht has served as a major source of inspiration for countless up-and-coming athletes due to his down-to-earth demeanour, determination and meticulous attention to detail over the course of his 11-year competitive career.

Andre has truly seen it all. From working as a detective in the South African Police Service and promoting nutritional brands as a sales representative, to putting clients through their paces as a personal trainer and competing at the highest level in the sport of bodybuilding, both locally and internationally.

Now retired from the iron game, the 47-year-old finds happiness as a devoted husband to his wife Vanessa and as a dedicated father to their children. Muscle Evolution caught up with Andre in Sunward Park, Boksburg where he owns and operates a successful Postnet franchise.

Striking a most muscular at the IFBB SA's in 2007.



**"YOU GET OUT WHAT YOU PUT IN.
THIS APPLIES TO EVERYTHING IN LIFE."**

QUICK FACTS

CURRENT RESIDENCE

Alberton, Gauteng

ORIGINALLY FROM:

Kroonstad, Free State

HEIGHT: 1.89m

MOST MEMORABLE VICTORIES:

□ 1st Men's Class 1 at NABBA

Mr. Universe 2003

□ 1st Men's Class 1 at NABBA

World Championships 2004.

WORDS HE LIVES BY:

"With God, all things are possible."

FAVOURITE EXERCISES:

Squats and leg presses.

LEAST FAVOURITE EXERCISES:

Any upper body pressing movement.

STRONGEST BODY PARTS:

Legs and back.

WEAKEST BODY PART:

Calves (which he says are the most stubborn muscles of all). Andre used to train them every day to bring them up on par with the rest of his body.

Andre, when did you stop competing as a bodybuilder?

My last show was in 2009. I came 2nd in the Senior Super Heavyweights and Marius Dohne won the division. It was the IFBB SA Championship held in East London. Hennie Kotze was crowned the IFBB SA Overall Champ for that year. I decided then that I had had enough. At that point in my life I was ready for a new challenge, having competed in numerous bodybuilding shows from 1998 through to 2009.

Please take us back to the beginning. Tell us how you started out.

I first picked up a barbell as a scrawny kid in high school after I injured my ankle in a rugby match. I was so thin my mates used to call me 'vlermuis' (bat in English), but I had tremendous speed and for that reason I played on the wing. I was sent to the gym for rehabilitation and fell in love with weight training. Before that I used furniture as weights while following a three-month workout routine I found in a local newspaper. Over that period I noticed positive changes to my body and I liked the feeling of confidence and self-respect I got from training. After school I joined the police and continued lifting weights, but real ones this time and in a proper gym. I think the place was called Olympic Health in Bergbron. With the encouragement of some friends of mine, I entered and won my first bodybuilding competition. From there the joy of training, eating healthily and basically adopting a 24/7 bodybuilding lifestyle created a sense of satisfaction that only truly dedicated bodybuilders can really understand and share with each other.

What do you feel is the most significant thing you have learned over the years while competing as a bodybuilder?

The values that competitive bodybuilding gave me have served me well throughout my career, from where I started as policeman, then as a sales rep, and then a personal trainer and, eventually, a businessman. The sport taught me that if you want something badly enough, you have to work extremely hard for it. You have to put in everything and go all the way in the pursuit of success. And while doing so, you must remain positive at all times, otherwise you will never be able to reach your goals. I used bodybuilding as a positive force for change within myself. When I dieted for a show I never cheated. I trained hard and planned everything meticulously – every meal and every training session. Everything was recorded and saved on my computer. I think that was part and parcel of my success – sticking to a plan and executing it. I'm also grateful to have had a fantastic support structure of family and friends. Without them I would not have achieved anything significant.

What about all the obstacles on your path to success?

Bodybuilding is an extremely selfish sport and at times it can suck you in and pull you in weird directions. When you are on a hectic schedule of prepping for a show your life can become one dimensional. All you do is



Andre at the helm of his Postnet business in Boksburg.

"BODYBUILDING IS AN EXTREMELY SELFISH SPORT AND AT TIMES IT CAN SUCK YOU IN AND PULL YOU IN WEIRD DIRECTIONS. **WHEN YOU ARE ON A HECTIC SCHEDULE OF PREPPING FOR A SHOW YOUR LIFE CAN BECOME ONE DIMENSIONAL.** "

Andre flexing at the Mr. Universe competition when he dominated the stage and fully devoted himself to the sport of bodybuilding.





I ALWAYS STRUGGLED WITH MY POSING PRESENTATION. TO PULL OFF A SUCCESSFUL POSING ROUTINE YOU NEED RHYTHM, SOMETHING I ADMITTEDLY DON'T HAVE A LOT OF!

eat, train and sleep to become bigger, fuller and harder. It is an obsession and very addictive. I missed out on a lot because it was always about training and eating. I would constantly carry a cooler bag around with all my food. Peaking for shows is just as hard on the mind as it is on the body. This obsessive behaviour can be tough, especially on your loved ones. Today, away from the stage, I feel as if I'm getting a second lease on life. I'm incredibly lucky to have Vanessa, my children, and good friends with whom to share it.

Tell us about all the different places you were fortunate enough to travel to during your stint as a bodybuilder.

The Czech Republic, United Kingdom, South Korea, Australia and Russia. I also visited the United States. You have this vision of Russians as being stoic, militaristic and introverted, but when we travelled to Moscow they were open-minded, sociable and treated us as if we were kings!

You've had the distinct pleasure of meeting some of the greatest bodybuilding legends when you travelled the globe. Who impressed you the most?

Definitely Jay Cutler. After being a four-time Olympia runner-up to Ronnie Coleman, he refused to give up and finally got his hands on a Sandow. I admire it when people are absolutely driven to succeed. I also like Lee Priest, Dorian Yates and, of course, Ronnie Coleman.

What was the hardest aspect of the sport for you?

I always struggled with my posing presentation. To pull off a successful posing routine you need rhythm, something I admittedly don't have a lot of!

Who did you admire the most among the local athletes from the era you competed in?

Marius Dohne for his distinct shape and size. He managed to craft a body that flowed seamlessly from top to bottom – a classic X-frame. Also, the incredible Carlos Nunes for his extraordinary work ethic and commitment.

What do you think about the Arnold Classic now being hosted on local turf?

Apart from the prestigious Mr. Olympia, the Arnold Classic is today's standard-bearer of what a bodybuilding show should look like. It is an awesome opportunity for local bodybuilders to compete and stand as champions. It gives them

a fantastic platform to compete with some of the superstars from overseas, which leads to continued growth. It also attracts more people to support the scene and teaches them that the sport is so much more than just great genetics, training and nutrition. It also takes a tremendous amount of discipline, hard work and self-belief.

Do you still train, Andre?

I lift five days a week, focusing on lighter weights and higher repetitions. I also run on the treadmill for 20 minutes a day.

Have you had any serious training injuries?

I had a torn bicep tendon, but apart from that, nothing serious. My rotator cuffs now irritate me, but that is a common result of using presses for chest and shoulders for too long. I'm a huge believer in warming up sufficiently and keeping your form real tight. At this stage in my life it is all about maintaining flexibility and improving blood flow. If you want to stay in the sport for a long time you need to pay attention to your body and not ignore warning signs, such as odd aches or pains.

Did you change your training split frequently when you were still competing?

In the off-season I usually trained once a day, five times a week. I preferred to obliterate the different parts of my body once a week and have an extra rest day. Muscles are built with weights and while I believe you need to shock your body with higher reps now and then, the core of anybody's training needs to be relatively heavy, using straight sets with reps ranging from 10 to 12 with proper form. This is what has worked for me and thousands of other bodybuilders for many years. A bodybuilder's main concern should be about feeling the muscle and working it as hard as possible with strict form and a strong mind-muscle connection.

When prepping for a show I trained twice a day. I always worked my calves and abdominals more frequently than the other body parts.

I kept my cardio separate from my weight training, but would use common sense. If I noticed my lifts going down, I would back

NOTHING IN THE SPORT IS ACHIEVED BY DOING IT HALF-HEARTEDLY. WHEN YOU FAIL TO MAKE THE CALLOUT YOU CAN ONLY BLAME YOURSELF.

off some, but if not, I kept pushing. It varies quite a bit from person to person on precisely how much you can tolerate. The golden rule, however, is to really pay attention to what your body is telling you and then to listen to it and learn. I believe intensity, discipline and drive are what pay the most dividends in the long run.

If you could give some general words of advice to the younger generation of aspiring bodybuilders, what would they be?

While I haven't been involved in the sport for many years, I never cease to marvel at how weight training has become an important part of everyday life for so many people. Bodybuilders are a special breed. To become a champion you must exhibit great mental fortitude. Size for the sake of size is not good enough. Proportion, muscle separation and hard muscularity are the main elements in determining bodybuilding success. Nothing in the sport is achieved by doing it half-heartedly. When you fail to make the callout you can only blame yourself. I think that was also the main reason I loved it so much. When I arrived at a show, I was always covered up in long sleeve clothing, but when it was time to go on stage I would notice the surprise on the faces of other athletes when I finally stripped down and revealed what I had worked so hard for during my prep, which comprised of 12 weeks of all-out training and dieting. Success in bodybuilding, for me, is basically built on a foundation of many hours of hard work in the gym and an adherence to a sound nutritional plan. You can be the biggest in your gym, but on a bodybuilding stage, surrounded by the biggest and the best, standing out in the pack is a lot more difficult. It is a rude awakening when you have to diet down to rid yourself of what you thought was muscle, but later found that it was nothing but fat and extra water!

I was once at a show as a spectator and the guy sitting in front of me was making rude comments about the weaknesses in the physiques of the competitors. I asked him if he ever competed, to which he replied 'no'. I then told him to rather keep quiet and show some respect as all the athletes who stood on that stage, regardless of where they ultimately placed, travelled a long and arduous road in order to compete. **THE**

"SIZE FOR THE SAKE OF SIZE IS NOT GOOD ENOUGH. PROPORTION, MUSCLE SEPARATION AND HARD MUSCULARITY ARE THE MAIN ELEMENTS IN DETERMINING BODYBUILDING SUCCESS."



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TAURINE IS ONE OF THE MOST ABUNDANT AMINO ACIDS IN YOUR BODY, YET YOU'VE PROBABLY NEVER HEARD OF IT. IN FACT, IS IT CONSIDERED TO BE THE SECOND MOST ABUNDANT IN THE BODY'S MUSCLE AFTER GLUTAMINE.

Not only has taurine been widely used by the pharmaceutical industry, along with caffeine, to improve mental focus, but it also commonly features as the go-to ingredient in most energy drinks and pre-workout formulas available on the market today aimed at boosting athletic performance.

TAURINE: WHAT IS IT?

Taurine, also known as L-Taurine or 2-aminoethane sulphonic acid, is classified as a non-essential or conditional amino acid, which means that the human body is capable of manufacturing it.

Taurine was isolated in the 19th century from ox bile and derives its name from the Latin word for ox or bull. It is produced in the liver and brain via cysteine or methionine. The brain, heart and skeletal muscle tissue contain high concentrations of taurine.

Taurine can also be derived from sources outside the body in the form of foods such as eggs, meat and fish. It has acquired a reputation for its ability to increase a muscle cell's capacity to hold more water, thereby increasing its volume, and it's also used to temper anxiety and hyperactivity.

Although dieticians recommend a daily dose no higher than 500mg of taurine when taking it synthetically, higher amounts from food have not shown any toxic effects.

THE RESEARCH

Some studies suggest that taurine may improve athletic performance, which explains the reason why it is so abundantly used in energy drinks. Scientists report improved mental performance when combining taurine with caffeine, but the combination remains controversial.

Doctors have found that taurine has multiple benefits for the heart, including the reduction of hypertension and the prevention of plaque build-up in the arteries. It can also lower the amount of inflammation in the body because it exerts antioxidant-like effects to protect the body's cells from damage. Researchers also recorded an increase in fat oxidation with an acute dose of 1,660mg of taurine supplementation in trained cyclists.

Tests on mice have shown that taurine cleared amyloid beta plaques, which build up in the brain in the early stages of Alzheimer's disease, and restored their cognitive function to normal. While still in its preliminary stages, this research raises hopes for drugs that can prevent the accumulation of amyloid plaques and potentially halt the progression of the disease.

TAURINE CONTROVERSY

US military health officials have warned soldiers deployed at military bases across the world who are chugging too many energy drinks to increase energy and performance, that this practice could lead to harmful side effects. Most of these energy drinks contain taurine as an ingredient and have become the beverage of choice over water for soldiers.

After analysing data collected among service

members during the wars in Afghanistan and Iraq it was found that nearly 45 percent of deployed service members consumed at least one energy drink daily and nearly 14 percent reported drinking three or more per day.

Patricia Deuster, professor and director of the Consortium for Health and Military Performance at the Uniformed Services University of the Health Sciences, believes troops are hooked on energy drinks that are loaded with caffeine and recommends not using more than 200 milligrams a day of this ergogenic aid. According to Deuster,

higher amounts could lead to increased blood pressure, panic attacks, anxiety, dehydration, insomnia, heart palpitations and even bowel irritability when energy drinks are mixed with alcohol.

Deuster is also concerned about the inclusion of taurine because little is known about its neuroendocrine effects. "Doctors don't know what the effects of ingredients are in larger doses. I don't think anybody has an answer to the long-term effects question. Excessive consumption of energy drinks can cause sleep problems and hamper performance."

DOCTORS HAVE FOUND THAT TAURINE HAS MULTIPLE BENEFITS FOR THE HEART, INCLUDING THE REDUCTION OF HYPERTENSION AND THE PREVENTION OF PLAQUE BUILD-UP IN THE ARTERIES. IT CAN ALSO LOWER THE AMOUNT OF INFLAMMATION IN THE BODY.

Nutrition's position statement on energy drinks cites the need for additional research on supplements, including those that contain taurine and caffeine. On the basis of current research, the effect of taurine on cognitive and physical ability remains unclear. There is one report of brain damage in a bodybuilder who took about 14g of taurine in combination with insulin and anabolic steroids, but it is unknown whether this was caused by the taurine or the other drugs taken.

NEUROLOGICAL DEVELOPMENT

Scientists have known for years that taurine is involved in the development and function of the brain, but only recently discovered a more defined area of taurine's neurological activity on brain receptors – the thalamus.

Located deep in the brain, the thalamus is involved in what scientists call 'behavioural state control', which helps to regulate transitions between sleep and wakefulness. According to Neil Harrison, Ph.D, researcher and professor of pharmacology at the Weill Cornell Medical College in New York, the discovery showed that taurine interacted with a neurotransmitter called gamma-aminobutyric, otherwise known as GABA, the brain's key inhibitory transmitter involved in brain development.

"It seems that taurine shares these receptors. We found that taurine is extraordinarily active on GABA receptors in the thalamus. GABA is important for forging new cell-to-cell connections within the developing brain, and because taurine shares a receptor with GABA, it, too, may play a role in neurological development."

Harrison is puzzled about taurine's inclusion in energy drinks because his research suggests that instead of taurine acting as 'a pick-me-up', it could actually have more of 'a sedative effect' on the brain. "Taurine may actually play a role in the 'crash' people often report after drinking highly caffeinated beverages," Harrison suggests.

USE WITH DISCRETION

According to pharmacist Gayle Scott, energy drinks that include taurine as an ingredient have had detrimental effects reported. "Taurine appears to be safe for most people, but energy drinks should be used with discretion," she adds.

According to researchers at the Mayo Clinic, a single can of energy drink can boost blood pressure and cause the fight-or-flight hormone norepinephrine to increase in just 30 minutes. In an experiment by Svatikova A, Covassin N et al. (2015), 25 volunteers downed an energy drink on an empty stomach in five minutes or less. The energy drink contained 240mg of caffeine and 2,000mg of taurine, along with guarana seed, ginseng root and milk thistle extracts.

After drinking the energy drink, the average amount of norepinephrine rose from 149.8 to 249.8 picograms per milliliter of blood. The researchers concluded that increases in blood pressure and norepinephrine could make some people more vulnerable to cardiovascular problems.

Additional common side effects among those who are not taurine tolerant include digestive problems, including an upset stomach, and even ulcers, because taurine triggers the stomach to make more acid. For this reason, people with ulcers or those who suffer from acid reflux should refrain from taking taurine.

Excessive intakes can also lead to a state of dehydration because a person's body naturally tries to get rid of it by flushing it out with urine. This obviously requires water and if an individual is not replacing what is lost by drinking more fluids, dehydration can occur. **M.E**

Taurine as an exercise supplement for bodybuilders was piqued by research suggesting that it might be released from muscle during exercise. Follow-up research found that taurine supplementation could enhance exercise capacity, possibly via its antioxidant effects. A combination of taurine and caffeine can increase alertness, but the caffeine, not taurine, appears to be responsible for the improvement of enhanced physical and cognitive performance. Some research suggests that taurine, when combined with branched chain amino acids (BCAAs), may reduce muscle soreness and damage after high-intensity workouts.

However, the International Society of Sport

TAURINE & DECA

A study recently published in a Brazilian medical journal (Roşca AE, Stoian I, et al. 'The impact of chronic administration of anabolic androgenic steroids and taurine on blood pressure in rats', 2016) supports the idea of adding taurine to stabilise blood pressure when an individual is on a cycle of anabolic steroids. Scientists gave rodents a 12-week cycle of Deca (nandrolone decanoate) before introducing taurine. The latter seemed to offset higher systolic blood pressure. The question, of course, is if this will carry over to humans?

BODYBUILDING IS BIGGER AND BETTER IN 2017. THE COMPETITIVE STAGE IS THE FIELD WHERE BODYBUILDERS WAGE THEIR BATTLE. IT IS HERE WHERE ALL THE PREPARATION FINALLY CULMINATES IN A FIGHT SET TO MUSIC AND WON BY THE MOST MUSCULAR, THE MOST RIPPED AND THE MOST TALENTED.

Judges will look for balance, proportion and symmetry, mass, size and shape, separation, definition, and, most importantly posing presentation and stage presence.

Fans of the sport are definitely spoiled for choice this year with all the different shows on offer by local federations and associations covering bodybuilding, classic bodybuilding, fitness, men's and women's

physique, among other divisions. The show calendar is based on information provided to Muscle Evolution at the time of publication. Contact the individual show promoters or visit their websites for all the categories that will be featuring. Also refer to each organisation's website for more information on all the rules and regulations and what precisely is expected of you as a competitor.

2017 SOUTH AFRICAN BODYBUILDING SHOW CALENDAR

BBSA/IFBB



Michael Adonis won the Men's Overall at the IFBB SA's 2016 and Nicolene Booyen took the Fitness Bikini Overall

BBSA – Bodybuilding South Africa was established in the 1960s and is affiliated to the International Federation of Bodybuilding and Fitness (IFBB), originally conceived by bodybuilding icons Ben and Joe Weider in the 1940s.

Today there are 181 countries affiliated to the IFBB which produced legendary bodybuilders such as Ronnie Coleman, Jay Cutler and Phil Heath.

A big money show is bound to hit the bodybuilding stage this year. Known as The Gentle Giant Classic, a total of R500 000 will be up for grabs. To qualify for this show, scheduled for 16 September 2017 in Johannesburg, athletes need to earn their IFBB Platinum League points.



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- » Fitness

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- » Fitness Bikini
- » Body Fitness
- » Physique
- » Fitness

Contact Ellmari Wroe of the BBSA/IFBBSA on 083 549 3674 for more information or email her on ifbbsapa@gmail.com



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NABBA/WFF

NABBA, the National Amateur Body Building Association, is one of the oldest competitive bodybuilding associations in the world.

Formed in 1950, NABBA's first Mr. Universe contest was won by Steve Reeves. Other top names who won the Mr. Universe title include Reg Park, Bill Pearl and Arnold Schwarzenegger. In South Africa NABBA and the World Fitness Federation (WFF) functions as a dual federation under the guidance of Alet Lemmer and Bev Scott.

NABBA SA was established in 1986 and affiliated to NABBA International in the same year. WFF SA joined the fold in 2011.



» **NABBA/WFF SA HAS BEEN OFFERING ATHLETES A SELECTION OF CATEGORY OPTIONS SUCH AS:** Juniors, Masters and Open divisions for men divided into different height classes. Ladies' categories include **Toned Figure** and **Miss Figure** according to height. NABBA's international contests include a **Men's Professional** line-up for Pro athletes.

» **WFF SA FOCUSES ON MORE TONED AND AESTHETIC PHYSIQUES. THEIR CATEGORIES INCLUDE:** Miss Bikini for women as well as **Sports Model** divisions for men. WFF SA categories are governed by weights within heights ensuring athletes of similar proportions compete against each other. There are also **Juniors, Masters, Aerobic Fitness, Mr. and Miss Fitness, Performance** and **Athletic**, all categorised by weights within heights. For the more muscular athletes there are **Super** and **Extreme Bodies** categories.

Contact Bev Scott on 082 374 7227 or email bev.scott7@gmail.com or Alet Lemmer on 079 377 4350 or email alet.lemmer@gmail.com for more details about NABBA/WFF.



Thembelani "Terra" Dlodlo won the Men's Bodybuilding Overall at the NABBA SA's 2016 and Monique Lopes took the Bikini Model Overall

IBFF

The International Bodybuilding and Fitness Federation is a new federation for a new generation of athletes. Launched locally in 2015 divisions include **Masters over 40, over 50, and the best athlete over 60 and over 70.** Juniors are categorised as those under 23 years of age. There are also **Mixed Pairs, Miss Figure, Miss Fitness, Miss Fitness Model, Miss Fitness Model Teen** (for girls aged 14 to 19), **Miss Fitness Over 40, Mr. Fitness Model, Mr. Fitness** and **Mr. Athletic.** The bodybuilding for men comprises of **Small, Middle and Tall** categories. The IBFF is already present and building a solid competitor base in 45 countries around the world.



Contact Arnie Williams, local IBFF President, on 082 410 7858 or email him at viperpro@iafrica.com for more information.

INDEPENDENT SHOWS



A brand new show called **Elite Athlete Extravaganza** is aimed at preparing, conditioning and developing new and upcoming local athletes and gym enthusiasts by providing a non-affiliated platform to encourage and enable athletes to achieve their dreams at a competitive level. The show will take place on Saturday, 18 March at the Lyric Theatre at Gold Reef City. Register at www.eliteathleteextravaganza.com to become a legend.

Follow regular updates on this new development by visiting **Elite Athlete Extravaganza** on Facebook, contacting Drienkie on 082 449 4584 or sending an email to pureeliteathlete@gmail.com

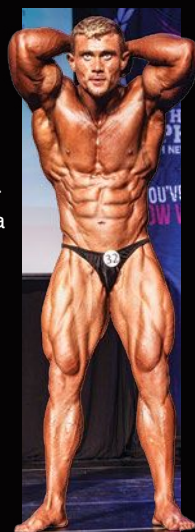
The inaugural **Conrad Nagel Xtreme Classic 2017** will be held in memory of show promotor and athlete Marco Rossi on 25 March 2017. Other independent shows such as **Battle of the Titans** and **Ms. Diva Extravaganza** create excellent platforms for athletes to showcase their talent without having to be affiliated to a certain bodybuilding organisation.

Contact Kevin Schwartz on 072 447 7520 or kevin@bbfisa.co.za for additional information about these independently-run competitions.

Drop Everett Hand an email at everett@ppnonline.co.za or call 072 160 3410 if you are interested in entering **The Rise of The Phoenix**, the ever-popular non-affiliated contest in the Eastern Cape.

CONRAD NAGEL XTREME CLASSIC 2017

BATTLE OF THE TITANS V **MS. DIVA EXTRAVAGANZA**



Louis Bessinger is the Men's Bodybuilding Champ at the Rise of the Phoenix 2.0





BATTLE OF THE TITANS V

LET THE GAMES BEGIN™

AFFILIATED TO:



2ND - 3RD JUNE 2017

HS DURBANVILLE AUDITORIUM
LANGENHOVEN STREET, DURBANVILLE

DAY 1 - FRIDAY 2 JUNE LIVE JUDGING

ATHLETE REGISTRATION

R150.00 @ 12H00 TO 14H00

ATHLETE DIVISION ENTRY R300

MAIN SHOW @ 17H00

SPECTATORS ENTRY FEE @ R150, VIP @ R250

ROUND TRIP TICKETS FOR DAY 1 & 2 R250

VIP ROUND TRIP TICKETS FOR DAY 1 & 2 R400

- | | |
|-----------------------------------|--------------------|
| 1 NOVICE MEN U75KG | 21 OVERALL NOVICE |
| 2 NOVICE MEN U75KG | 22 OVERALL JUNIORS |
| 3 JUNIORS - U18 YEARS | 23 OVERALL LADIES |
| 4 JUNIORS - U23 YEARS U75KG | BEACH BIKINI |
| 5 JUNIORS - U23 YEARS U75KG | 24 OVERALL MEN'S |
| 6 LADIES BEACH BIKINI UP TO 163CM | BEACH MODEL |
| 7 LADIES BEACH BIKINI U163CM | 25 OVERALL MEN'S |
| 8 LADIES BEACH BIKINI U35 YEARS | COVER MODEL |
| 9 LADIES PHYSIQUE | 26 OVERALL MEN'S |
| 10 COUPLES | COVER MUSCLE |
| 11 MEN'S BEACH MODEL UP TO 175CM | MODEL |
| 12 MEN'S BEACH MODEL U175CM | |
| 13 MEN'S BEACH MODEL 35+ | |
| 14 MEN'S COVER MODEL UP TO 175CM | |
| 15 MEN'S COVER MODEL U175CM | |
| 16 MEN'S COVER MODEL 35+ | |
| 17 MEN'S MUSCLE MODEL UP TO 175CM | |
| 18 MEN'S MUSCLE MODEL UP TO 178CM | |
| 19 MEN'S MUSCLE MODEL U178CM | |
| 20 MEN'S MUSCLE MODEL 35+ | |

DAY 2 - SATURDAY 3 JUNE LIVE JUDGING

ATHLETE REGISTRATION

R150.00 @ 08H00 TO 10H00

ATHLETE DIVISION ENTRY R300

MAIN SHOW @ 14H00

SPECTATORS ENTRY FEE @ R150, VIP @ R250

ROUND TRIP TICKETS FOR DAY 1 & 2 R250

VIP ROUND TRIP TICKETS FOR DAY 1 & 2 R400

- | | |
|--|---------------------------|
| 1 LADIES FITNESS BIKINI
UP TO 163CM | 13 SENIOR MEN U60KG |
| 2 LADIES FITNESS BIKINI
OVER 163CM | 14 SENIOR MEN U65KG |
| 3 LADIES FITNESS BIKINI
U35 YEARS | 15 SENIOR MEN U70KG |
| 4 MEN'S MUSCLE MODEL
PLUS UP TO 175CM | 16 SENIOR MEN U75KG |
| 5 MEN'S MUSCLE MODEL
PLUS UP TO 178CM | 17 SENIOR MEN U80KG |
| 6 MEN'S MUSCLE MODEL
PLUS U178CM | 18 SENIOR MEN U85KG |
| 7 MEN'S MUSCLE MODEL
PLUS 35+ | 19 SENIOR MEN U90KG |
| 8 CLASSIC BODY BUILDERS
UP TO 85KG | 20 SENIOR MEN U95KG |
| 9 CLASSIC BODY BUILDERS
U85KG | 21 SENIOR MEN U100KG |
| 10 LADIES FITNESS | 22 SENIOR MEN U100KG |
| 11 LADIES BODY FITNESS | 23 OVERALL BEST MEN'S |
| 12 MASTERS | ROUTINE |
| | 24 OVERALL MS PERSONALITY |
| | 25 OVERALL LADIES |
| | FITNESS BIKINI |
| | 26 OVERALL MEN'S MUSCLE |
| | MODEL PLUS |
| | 27 OVERALL CLASSIC |
| | BODY BUILDERS |
| | 28 OVERALL TITAN (MEN) |

TICKETS AVAILABLE AT



TICKETS GO ON SALE FROM 28 APRIL 2017. CONTACT KEVIN SCHWARTZ FOR MORE INFORMATION - 072 47 520 OR INFO@BATTLEOFTHETITANS.CO.ZA.

BODYBUILDING SHOW CALENDAR 2017

MARCH

DATE	EVENT
4	IFBB Gauteng Central, Athletes Seminar IFBB Gauteng North, Athletes Seminar, New Judges Exam IFBB Mpumalanga, Judges Seminar IFBB North West, New Judges Exam
4	IBFF Sibanye Development Show (Hannes, 081 566 5619)
11	IFBB Champions Arise, Potchefstroom (Sanctioned Show & Arnold Qualifier)
18	Elite Athlete Extravaganza, The Lyric Theatre, Gold Reef City, Johannesburg (Drienkie, 082 449 4584 pureliteathlete@gmail.com)
24 - 25	Conrad Nagel Xtreme Classic, Western Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
25	IFBB King Shaka Classic, Durban (Sanctioned Show & Arnold Qualifier)

APRIL

DATE	EVENT
1	IFBB Buffalo City, Novice Show, Guild Theatre, Buffalo City
1	NABBA/WFF Muscle Dynamix Classic Western Province (Mohammed Jahjah, 072 550 5732 info@muscledynamix.com)
8	IBFF Klerksdorp Classic Open Show (Hannes, 081 566 5619)
8	Destiny: Rise of Iron, Garden Route (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
8	IFBB Millennium Gold Plate, Kempton Park (Sanctioned Show & Arnold Qualifier)
8	IFBB Nelson Mandela Bay Novice Show, Nelson Mandela Bay
8	IFBB KwaZulu-Natal Novice Show, UKZN Westville
22	IFBB Shameen Classic, Western Cape (Sanctioned Show & Arnold Qualifier)
22	IFBB Mpumalanga Novice Show
22	IFBB Gauteng Central Show
22	IFBB Ekurhuleni Novice Show
29	IFBB OR Tambo Novice Show
29	NABBA/WFF Xtreme Body Classic, Free State (Kobie Pieters, 084 208 3627 kobie@supremesport.co.za)
29	IFBB Gauteng North Novice Show

MAY

DATE	EVENT
5 - 7	2nd Arnold Classic Africa, Sandton Convention Centre
13	IFBB West Rand Novice Show
13	NABBA/WFF Pretoria Classic PRO-AM, Gauteng (Alet Lemmer, 079 377 4350 alet.lemmer@gmail.com)
27	IBFF Fire & Ice, Gauteng (Peter, 082 533 0284)
27	IFBB Kathu Classic Novice Show, Northern Cape

JUNE

DATE	EVENT
2 - 3	Battle of the Titans V, Western Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)

17	IFBB Miss SA Xtreme (Sanctioned Show & Arnold Qualifier)
17	Queens Grand Prix Body Building Competition, Eastern Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
24	Garden Route Casino Body Building & Fitness Classic, Garden Route (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)

JULY

DATE	EVENT
1	IFBB Gauteng North, Intermediate Show
1	IFBB Buffalo City, Intermediate Show, Guild Theatre, Buffalo City
8	IBFF Border (Deon, 076 920 4136)
8	IFBB Muscle Mulisha Grand Prix, Ekurhuleni (Sanctioned Show & Arnold Qualifier)
8	IFBB East Coast Classic, Intermediate Show, KwaZulu-Natal
14 - 15	Rise of Phoenix 3.0, Eastern Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za) Everett Hand, 072 160 3410 everett@ppnonline.co.za)
15	IBFF North West Classic Provincial Show (Hannes, 081 566 5619)
15	IFBB Ekurhuleni Provincial Show
21 - 22	Ms. Diva Extravaganza, Western Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
22	IFBB Mpumalanga Intermediate Show
22	IFBB Boksburg Classic, Gauteng Central (Sanctioned Show & Arnold Qualifier)
22	IFBB Friendly City Classic, Intermediate Show, Nelson Mandela Bay
29	IBFF Welkom Classic (Kiewiet, 082 561 8203)
29	IFBB West Rand Provincial Show
29	IFBB Sedibeng Provincial Show
29	IFBB OR Tambo Intermediate Show

AUGUST

DATE	EVENT
5	IBFF SAPS (Deon, 076 920 4136)
5	Nelson Mandela Bay Body Building and Fitness Championship, Eastern Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
5	IFBB H&H Classic, Gauteng North (Sanctioned Show & Arnold Qualifier)
12	IFBB Mpumalanga Provincial Show

12	IFBB North West Provincial Show
12	IFBB Northern Cape Provincial Show
12	IFBB Nelson Mandela Bay Provincial Show
12	IFBB KwaZulu-Natal Open Provincial Show
12	IFBB Buffalo City Provincial Show
19	Butterworth Classic Body Building Competition, Eastern Cape (Kevin Schwartz, 072 447 7520 kevin@bbfsa.co.za)
19	IFBB Gauteng North Provincial Show
19	IFBB Gauteng Central Provincial Show
19	IFBB OR Tambo Provincial Show
26	NABBA/WFF Provincial Preliminary Mpumalanga (Jaco Venter, 082 553 3259 jaco.venter699@gmail.com)

SEPTEMBER

DATE	EVENT
1 - 3	IFBB SA Championships, Witbank, Mpumalanga
2	NABBA/WFF Provincial Preliminary Gauteng (Alet Lemmer, 079 377 4350 alet.lemmer@gmail.com)
2	IBFF Zim Classic (Contact Victor +263 77 301 5868)
9	IBFF SA Championships (Contact Arnie 082 410 7850)
16	IFBB Gentle Giant Classic (Sanctioned Show & Arnold Qualifier)
16	NABBA/WFF Provincial Preliminary Free State (Kobie Pieters, 084 208 3627 kobie@supremesport.co.za)
23	NABBA/WFF Provincial Preliminary KwaZulu-Natal (Bev Scott 082 374 7227 bev.scott7@gmail.com)
23	NABBA/WFF Provincial Preliminary Western Province (Mohammed Jahjah, 072 550 5732 info@muscledynamix.com)

OCTOBER

DATE	EVENT
6 - 7	NABBA/WFF Nationals, Unisa, Pretoria (Bev Scott 082 374 7227 bev.scott7@gmail.com) Alet Lemmer 079 377 4350 alet.lemmer@gmail.com Allistair Watson 084 693 9900 alistair@epts.co.za Victor Alley 082 454 9225 vicalley@gmail.com Manie Lemmer 079 355 6759 maniesnr@gmail.com)
21	IFBB OR Tambo Classic

NOVEMBER

DATE	EVENT
25	IFBB Summer Superbodies, West Rand

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WARDING OFF SPIKING OESTROGEN LEVELS

KNOWING WHAT YOU PUT INTO YOUR BODY CAN MAKE ALL THE DIFFERENCE WHEN IT COMES TO PREVENTING POTENTIALLY HAZARDOUS SIDE-EFFECTS, ESPECIALLY AMONG ATHLETES WHO USE ANABOLIC-ANDROGENIC STEROIDS (AAS).

One such health scenario is a process called aromatisation which is when aromatase, an enzyme complex in the body, converts androgens (such as AAS) into oestrogens, also known as female sex steroid hormones.

Many AAS convert into oestrogenic metabolites leading to side-effects that include the development of gynecomastia (known in bodybuilding circles as 'bitch tits' – a disorder that causes the enlargement of a man's breasts), cholesterol problems, decreased immunity and testicular shrinkage. Even a low aromatising steroid can become oestrogenic when an individual has a high number of aromatase enzymes already present in their body.

Oestrogen dominance can further contribute to the occurrence of male breast and colon cancer. The first signs of high aromatase activity in the body include headaches, fatigue, a drastic decrease in libido and greater fat deposition, especially visible in the face and around the waist. The lower oestrogenic activity in the body while an athlete is on an AAS cycle, the less water they retain with more gains in visible lean muscle mass.

If gynecomastia is left untreated, the cost of surgery may be more cost efficient than battling the condition through drug and lifestyle changes which could take months and even years of intervention.

"AROMATISATION IS WHEN AROMATASE, AN ENZYME COMPLEX IN THE BODY, CONVERTS ANDROGENS (SUCH AS AAS) INTO OESTROGENS."

THE IMPACT OF

AROMAT

INHIBITING AROMATISATION

The dreaded effect of aromatisation is triggered when high levels of testosterone enter the body. Although many male athletes view oestrogen as negative, it has specific functions in the body such as improving libido, adding muscle mass and increasing bone mass if it is combined with testosterone.

When aromatisation occurs the body converts a surplus of testosterone into oestrogen. There are aromatase inhibitors (AI) available that inhibit the activity of the aromatisation. Taking these drugs that either block or inhibit oestrogen conversion and production is recommended during the total duration of an AAS cycle. Trial and error based on individual genetics and bodybuilding goals will determine which product is best to take.

Two types of aromatase inhibitors are commercially available:

- **Non-steroidal**, which prevent the transformation of androgens such as testosterone into oestrogen via aromatisation. Examples include letrozole (femara) and anastrozole (arimidex).

- **Irreversible steroidal**, which averts aromatisation by permanently shutting it down. This eliminates the possibility of an oestrogen rebound when coming off a steroid cycle. An example is exemestane (aromasin).

Some of the most prevalent side-effects of aromatase inhibitors are the following:

- **Stiffness and pain in joints** such as ankles, wrists and knees. Research has also found symptoms similar to carpal tunnel syndrome in the hands.

- **Tiredness**, specifically in the first few days of using aromatase inhibitors, which is the body's natural response to the fluctuation of hormonal levels. The fatigue will eventually taper off, depending on how low your testosterone levels are.

- **A temporary decrease in cognitive ability** as a result of a sudden increase of testosterone in the body.

While there are theoretical arguments as to which aromatase inhibitor strategy is the best, all the currently available

drugs suppress oestrogen synthesis to comparable degrees and data from clinical trials are not sufficient enough to support the use of one type over another.

Three generations of AIs have been used, each successive generation with higher specificity and less adverse effects. Third generation AIs are more specific and its use increased drastically over the years.

Aromatase, being the key enzyme in the synthesis of oestrogen, has attracted much attention, particular among bodybuilders and strength athletes who use AIs during PCT (Post Cycle Therapy) regimens when trying to restore natural testosterone production levels in an attempt to avoid what is called a post cycle crash. It is a fine balancing act as too little oestrogen can cause its own set of problems, often leading to hindered muscle gains and the loss of libido, as already mentioned.

Athletes resort to PCT after the use of AAS and pro-hormones by combining drugs and supplements in an attempt to kick-start the hypothalamic-pituitary-gonadal axis, otherwise known as the HPG axis, a term used to describe the interrelationship between three glands in the endocrine system, namely the hypothalamus, pituitary gland and gonads, and their functioning via a feedback loop process.

"IT IS A FINE BALANCING ACT TO RESTORE THE NATURAL TESTOSTERONE PRODUCTION LEVEL. TOO LITTLE OESTROGEN CAN CAUSE ITS OWN SET OF PROBLEMS, OFTEN LEADING TO HINDERED MUSCLE GAINS AND THE LOSS OF LIBIDO, AS ALREADY MENTIONED."

SARMs & THEIR ROLE

The development of SARMs, or Selective Androgen Receptor Modulators based on the modification of the testosterone molecule dates back as far as the 1940s. Since then there has been an emergence of a large number of SARMs developed by pharmaceutical companies. The major impetus for SARM development has come from the potential anabolic effects of these compounds on skeletal muscle and bone. This formed part of the pursuit by doctors to treat muscle wasting in patients who are diagnosed with cancer.

The rising diagnosis of male hypogonadism, a condition where the body is unable to produce enough testosterone, has also driven pharmaceutical efforts to develop SARMs. Hypogonadism is linked to the

loss of muscle mass, fat gain, depression and low libido.

Although testosterone supplementation increases skeletal muscle mass and maximal strength, high doses can lead to adverse effects such as erythrocytosis, leg edema and prostate problems. SARMs as an alternative can achieve anabolic effects on skeletal muscle and bone without adverse effects commonly associated with testosterone, which include significant increases in oestrogen and shutting down the HPG axis.

SARMs act on androgen receptors found in a number of key tissues in the body such as the prostate, genitalia, seminal vesicle, testis, skin, pineal and sweat glands, hair follicles, sebaceous glands, gastrointestinal vesicular cells, cartilage, cardiac and smooth muscle, thyroid follicular cells, and the liver and

ISATION

brain. They block or stimulate these key receptors to increase the positive effects and decrease unwanted side effects usually associated with pro-hormones and AAS, hence their name.

They are not toxic to the liver nor do they convert into active androgen or oestrogen compounds.

While SARMS block some of the actions of oestrogen, it will allow others, as opposed to Als which inhibit all oestrogen. SARMS achieve this by binding to oestrogen receptor sites, rendering them inactivate. They do not lower oestrogen levels in the serum, which Als accomplish by inhibiting the formation of oestrogen. SARMS are therefore considered selective oestrogen receptor modulators, binding to the oestrogen receptor itself rather than the aromatase. In contrast, Als inhibit all oestrogen. SARMS are therefore able to prevent these undesirable negative effects by blocking oestrogen's androgenic properties.

FINE-TUNING SARMS

Doctor Josh Baker, physician and online contributor to the Health and Performance Update, a website started by military physicians who are passionate about optimising health and performance, points out that SARM usage is becoming more and more common.

"SARMS are like testosterone but different. First, SARMS can be taken orally. Traditional testosterone supplementation does not have the chemical make-up to withstand the digestive system. Second, they have selective preference for the androgen receptor in skeletal muscle and bone over prostate tissue. This allows for the preferential expression of anabolic activity in muscle and bone. Third, they avoid being converted to estrogen and dihydrotestosterone. These items together should in theory lower the risk of side-effects."

According to Baker, research on SARMS demonstrated lean body mass gain but there were also negative side-effects such as the suppression of HDL, the good cholesterol that protects a person from atherosclerotic heart disease, vision changes and, in the case of the SARM called Cardarine, cancer observed in test animals.

"As the pharmaceutical companies continue to fine-tune SARMS with their chemical Darwinism, athletes are left assessing their personal risk limits. The literature has begun to give credence to the online claims for SARMS' ability to create lean muscle gains. But a version with zero side-effects does not exist today. Regardless of your opinion as to whether the risk is worth it, SARMS seem to be rising as the new vogue androgen," says Baker.



SARM USAGE IS BECOMING MORE AND MORE COMMON:

- SARMS CAN BE TAKEN ORALLY.
- SARMS HAVE SELECTIVE PREFERENCE FOR THE ANDROGEN RECEPTOR IN SKELETAL MUSCLE AND BONE OVER PROSTATE TISSUE.
- SARMS AVOID BEING CONVERTED TO OESTROGEN AND DIHYDROTESTOSTERONE.

ON THE LIST OF 'NO NO'S'

Structurally, SARMS can be categorised as steroidal and non-steroidal. Steroidal SARMS are developed by modifying the chemical structure of the testosterone molecule. Non-steroidal SARMS do not aromatise, but gains reported in muscle mass were modest in comparison with doses of testosterone during the few clinical trials conducted in humans.

In one such trial (Bhasin et al. 2009) gains of 1.0 to 1.5 kg in muscle from SARMS over a 4-6 week period contrasted with the 5-7kg gains in muscle in subjects who administered between 300-600mg doses of testosterone. Keep in mind that these clinical research studies were performed on individuals with muscle-wasting conditions and not on healthy athletes.

Despite having no full clinical approval for human consumption as prescription drugs, SARMS are used as an alternative to AAS and pro-hormones or as part of a PCT cycle. Examples of SARMS include Andarine, Ostarine, Ligandrol and Cardarine, among others.

There are instances where products containing SARMS are sold illegally as dietary supplements and this caught the attention of the US Food and Drug Administration (FDA) who has issued a warning to supplement companies not to sell products that contained SARM ingredients. There are also SARM-like products sold online under the banner that they mimic the effects of actual SARMS.

Three benefits of SARMS:

- Increase muscle tissue
- Increase bone mass
- Decrease fat mass

Although the International Olympic Committee (IOC) added SARMS to its list of prohibited anabolic substances back in 2008, research continues to develop more potent and selective SARMS. The drugs are also prohibited by other bodies such as the World Anti-Doping Agency (WADA) and by various bodybuilding, powerlifting and strongman federations who observe the list put forth by WADA.

"THE LITERATURE HAS BEGUN TO GIVE CREDENCE TO THE ONLINE CLAIMS FOR SARMS' ABILITY TO CREATE LEAN MUSCLE GAINS"

FIGHTING OESTROGEN DOMINANCE

Although your body has the ability to restore its hormones to optimum levels naturally, it takes time which leaves you open to issues that could be detrimental to your health in the long term, especially after repeated cycles with AAS or pro-hormones.

Every time you increase testosterone you risk increasing oestrogen because excessive testosterone, as mentioned, can be converted into oestrogen as part of the process of aromatisation. Some athletes are also more prone to aromatisation than others.

"SOME ATHLETES ARE NOT JUST PSYCHICALLY BUT ALSO PSYCHOLOGICALLY ADDICTED. RESEARCH HAS SHOWN WITHDRAWAL SYMPTOMS OF LONG-TERM AAS ABUSE AS SIMILAR TO THE MECHANISMS AND COMPLICATIONS THAT ACCOMPANY COCAINE, ALCOHOL AND OPIOID ABUSE."

A suppressed level of testosterone coupled with a raised level of oestrogen from the aromatisation of steroids can result in a hormone imbalance. Despite using PCT drugs, some athletes are not just psychically but also psychologically addicted. Research has shown withdrawal symptoms and underlying biological mechanisms of long-term AAS abuse as similar to the mechanisms and complications that accompany cocaine, alcohol and opioid abuse. While users may require treatment to restore physiological hormonal regulation, supportive counselling and anti-depressant medications are also used to help with the psychological aspects of AAS abuse.

Both AIs and SARMS play an important role for athletes who choose to enhance their performance with AAS and pro-hormones. They can be advantageous in one area such as combating the potential disruption of oestrogen metabolism, but usage can also lead to a negative impact on the body in other ways, such as adversely affecting blood lipid profiles. Their selection should therefore match an individual's own unique needs and in consultation with a health professional. Blood work is essential in determining the impact on oestrogen levels, as well as other relevant health makers.

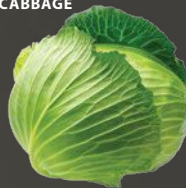
Down-regulating aromatisation remains important as researchers have found cancer cells becoming overstimulated in the presence of oestrogen dominance and aromatase activity in the body.

KEEP OESTROGEN IN CHECK NATURALLY

IF AAS, AIS OR SARMS ARE NOT ON YOUR IMMEDIATE AGENDA YOU CAN STILL FILL YOUR DIET WITH THE FOLLOWING NATURAL ANTI-AROMATASE FOODS TO KEEP YOUR HORMONES BALANCED AND TO HELP PREVENT THE DEVELOPMENT OF HORMONE SENSITIVE CANCERS:

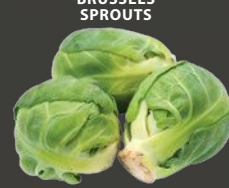
■ Cruciferous vegetables such as **broccoli**, **cabbage** and **Brussels sprouts**, which have nutrients such as sulforaphane and phenyl isothiocyanate that destroy cancer cell activity and stimulate the natural detoxification of the liver.

CABBAGE



BROCOLI

BRUSSELS SPROUTS



■ Flowering plants that belong to the allium family, which contain sulfur, amino acids and the flavone antioxidant quercetin that aid in liver detoxification and eliminate excessive levels of oestrogen in the body. Examples of alliums include **garlic**, **chives**, **onions**, **leeks** and **scallions**.

ONION



LEEKS



GARLIC



■ Citrus fruits such as **oranges**, **lemons** and **mandarins**, which contain powerful flavonoids providing health benefits not to be missed out on. In particular they boost the immune system and fight the growth of tumours.

MANDARIN



ORANGE



LEMONS



■ Foods high in saturated and omega-3 fatty acids such as **raw nuts**, **salmon**, **grass-fed beef** and **organic poultry** help to regulate proper hormone function. Nuts and seeds like **sesame** and **flax** also assist in lowering excessive oestrogen levels.

SESAME



ORGANIC POULTRY



SALMON



■ Herbs such as **sage**, **oregano**, **turmeric**, **rosemary** and **thyme** promote liver detoxification and aid in the removal of oestrogen in the body. Turmeric in particular is capable of destroying oestrogen receptor positive cancer cells. Another cancer suppressor is the leaf of a plant called **ginkgo biloba**. The latter has been used for centuries in China to treat an assortment of ailments. Ginkgo biloba leaves contain antioxidants that are believed to shut off the supply of oestrogen to oestrogen-dependent cancers effectively inducing cancer cell death. **M.E**

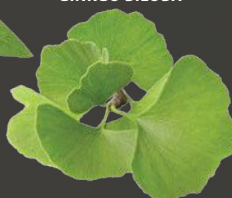
TURMERIC



SAGE



GINKGO BILOBA



OREGANO



ROSEMARY



THYME





**SIBUSISO
'THE KID PRODIGY'
KOTOLE**

BODYBUILDING BLUNDERS

So you've just competed in your first bodybuilding show without a coach or any guidance, because you thought that you could wing it yourself. You've placed in the top three and now you believe you have the knowledge to help others who also want to climb the ladder of success. It may seem like you've gone from novice to the latest and greatest fitness guru, but it's best you stop right there!

I have only been in the bodybuilding industry for the past three years and although I still view myself as a rookie, one thing I pride myself on is the fact that I've recognised and rectified classic blunders I have made along the way. I would like to use this opportunity to open your eyes to some of the mistakes we often make in the sport.

MISTAKE #1 I KNOW WHAT I AM DOING!

I hate to be the one breaking the bad news to you, but the Internet does not have all the answers.

People who write articles don't know your body stats, your specific goals or how you look. They give you general information, but it is entirely up to you how you apply it to your particular situation. If you want to become a better bodybuilder you need to get your information from the right sources. A good example would be getting information from someone with a similar physique as yours or someone you aspire to be like. You need someone who will look at things from the outside, who is not afraid to criticise or compliment you. Thinking that you know what you are doing is totally misguided and can easily blow up in your face. Never stop thinking critically about nutrition and training principles. A huge percentage of what you read and see on YouTube and social media is simply inaccurate advice that is passed around from person to person without any solid evidence behind it.

MISTAKE #2 NOT MUTING OUT VOICES

This is essentially part and parcel of the first mistake about not questioning things more deeply and not holding the advice you are given to a higher level of scrutiny. Let's say you've just competed and feel on top

of your game. You are approaching every second athlete to gain insight on how you can make further improvements in your physique. While it's always great to use others as a sounding board, you must not listen to every person who throws you a bone!

Block out all the voices and listen to your coach on how you can use your strengths to your advantage. There might be ups and downs, but hold on because your coach will have your best interests at heart. There is no way you can make it big in this sport without being a good student and listening to the wisdom of an experienced coach. Mentorship is the most valuable thing you can have in your corner when you're a competitor.

MISTAKE #3 AN INFLATED EGO

No one can argue the fact that bodybuilding is an extremely self-centered endeavour. Think about it for a minute: Everything you do revolves around you and your needs. To keep a healthy balance in your life you need to find something that is not so egotistical, like volunteering to help the less fortunate in your community. You need to do something selfless to keep you grounded, because if you don't the industry will swallow you up and spit you out! Don't develop an ego. Stay humble!

If I look back now I can clearly see how much I have learned and evolved since I first started lifting and competing. Hopefully you can benefit from my experience and apply it to your own goals on this journey we call bodybuilding. Stay humble, but stay hungry!



**JOHN 'THE
TERMINATOR' LESLIE**

PUSH THE LIMITS

To gain muscle mass is the primary goal of any hardworking bodybuilder. To this end I have always believed in increasing clean calories to reach your goals. When I was younger one of the extreme measures I took to gain mass for the competitive stage in the off-season was waking up in the middle of the night and drinking a protein shake of between 50 to 60g of protein. I would wake up in the morning with fuller looking muscles. Using this approach I managed to put on quality mass over time and I would recommend it for hardgainers and lifters with a fast metabolism who are struggling to put muscle on their skinny frames.

Another thing I did in my early years as a bodybuilder was to drink at least three litres of skim milk a day to push my protein consumption up. I would also add a meal replacement shake twice a day, along with eating a ton of tuna on whole-grain sandwiches. It might sound crazy, but this particular strategy helped me to gain my first 10kg of bodyweight when I started lifting weights.

I have also found that drinking



JOHN SAYS

"WHEN I WAS YOUNGER ONE OF THE EXTREME MEASURES I TOOK TO GAIN MASS FOR THE COMPETITIVE STAGE IN THE OFF-SEASON WAS WAKING UP IN THE MIDDLE OF THE NIGHT AND DRINKING A PROTEIN SHAKE OF BETWEEN 50 TO 60G OF PROTEIN. I WOULD WAKE UP IN THE MORNING WITH FULLER LOOKING MUSCLES."

"THESE DAYS IT IS NOT JUST ABOUT THE MAXIMUM BODYWEIGHT YOU CARRY AROUND, BUT ALSO A SHARPER, LEANER PHYSIQUE WITH LESS THAN 10% BODY FAT. IT IS ABOUT QUALITY AND COMING IN AT A THICKER, HARDER AND MORE SHREDDED CONDITION ON STAGE."

a simple sugary shake with 100g of carbohydrate along with 50g of whey protein first thing in morning and while I am training, can do wonders for your body! The body 'sucks' it up and grows like crazy. I am also carb-sensitive so I can easily add weight. I was at my heaviest at around 139kg in the off-season. Currently I am sitting at 130kg, but these days it is not just about the maximum bodyweight you carry around, but also a sharper, leaner physique with less than 10% body fat. It is about quality and coming in at a thicker, harder and more shredded condition on stage.

The training philosophy I have followed over the years is based on finding what works for you and sticking with it. I believe in squatting, deadlifting, benching and shoulder pressing with heavy weights. I do high volume training with lots of exercises, sets and reps. The majority of my training takes up to three hours of my day if I work larger body parts like legs and back. Small body parts usually take two hours. I used to hit deadlifts hard and heavy back in the day with between 300 to 310kg for back thickness. I would shoot for 1 rep maxes on the heavy lifts, but have found Arnold Schwarzenegger's pyramid system of increasing the weight and decreasing reps perfect for building muscle. I do 5 sets of 15, 12, 10, 8 and 6 on most exercises. I believe in good form, a full range of motion and controlling the weight. I also believe you have to push the limits. Basically, to gain mass you have to eat a lot and train hard and heavy.



AWONKE NGOMA

DELT TRAINING SECRETS

Well-developed deltoids will change the appearance of your entire upper body. Not only will wider shoulders make you look more symmetrical, but your waist will also appear smaller. This is the illusion we are after when we step on the stage as bodybuilders. Unfortunately, deltoids have never been one of my fastest growing muscle groups, but hey, I like a challenge. I believe the key to developing awesome delts that are round and three-dimensional in appearance is to develop all three heads proportionally.

Most lifters over-develop their anterior or front delts while their middle and rear delts lag behind.

This is the reason why I almost always start my delt routine by doing 3 to 4 sets that are not taken to concentric failure. I like to use

rear delt cable extensions and rear delt kickbacks to hit my rear delts.

Take note that these aren't similar to tricep kickbacks you do for arms. It comprises of a reverse flye movement where you don't bend your elbows and you kick your arms back using your elbows along with your rear delts. This is why I call them rear delt kickbacks. Also, avoid retracting

your shoulder blades so that you isolate your delts.

I also like to include a lateral raise variation to emphasise the medial delts. I love standing dumbbell lateral raises. Most lifters do this exercise incorrectly to optimise the line of pull of the middle delts. Your palms should be facing down at the top, contracted position. Fine-tune the move by tilting the thumb-side of the dumbbell a few degrees so that the pinky's side is up.

I prefer volume training as I feel it works better for me and I get

bored very easily. I think this is the result of my background in sports. One of my secrets is also to keep continuous tension on my shoulders because they are particularly responsive to high-tension training.

You're not only in the gym to move heavy loads – you're there to put continuous resistance on a muscle. The sweet spot of maximum tension is often the path to the most pain. You must not pause at the bottom or at the top of an exercise to reduce the amount of continuous tension you generate. Eliminate the dead zones and focus on total tension.

Check these out:

DELT PROGRAMME 1:

EXERCISE	SETS	REPS
Barbell overhead press	4	6 - 8
Dumbbell lateral raise	3	8 - 12
Cable lateral raise (behind back)	3	12 - 15
Rear delt dumbbell raise	4	10 - 12

DELT PROGRAMME 2:

EXERCISE	SETS	REPS
Dumbbell overhead press	4	6 - 10
Barbell front raise	3	8 - 12
Dumbbell lateral raise	3	8 - 12
Rear delt dumbbell kickback	3	10 - 15

GIVE THEM A TRY IF YOU WANT TO GO BEYOND NORMAL DELT DEVELOPMENT.

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HENK 'THE TANK' SMITH

PERI-WORKOUT NUTRITION

Everyone has a different opinion about what exactly constitutes the best peri-workout protocol. I've seen people in the gym carry two or three different shakers around with them, taking a sip of one shaker after the first set and then from another during the following set. I could not help but wonder if these people could even keep track of what they were sipping and how much focus was ultimately lost in their attempt to have a great workout!

Depending on who you ask or who you talk to, you may have different views on what is necessary or important for a successful workout. I have also experimented with lots of different peri-workout combinations and don't think there is one magical peri-workout plan out there.

In fact, to be totally honest, I get terribly nauseous when I consume a lot of liquids while I'm training, which significantly reduces my intensity level for the rest of the workout.

On the other hand, I have also noticed guys not drinking anything,

not even water, when they train.

I believe, even though you might have had a solid pre-workout meal, you'll always need fluids in your system when you hit the weights. The key seems to be balance.

We definitely need nutrition around our workout, but what is the use in having something that can only be absorbed an hour after you've trained? I therefore believe in BCAAs as an ideal peri-workout supplement, especially when you are in pre-contest prep. There is more than enough research supporting the use of leucine and BCAAs to stimulate muscle protein synthesis. I also like to add a good quality and quick-absorbing carbohydrate to the mix in the form of waxy maze or vitargo. If you have ingested leucine and BCAAs and you want to add muscle, you can afford to also consume some sugar pre-workout. However, you would need to determine what your particular sweet spot is for carbohydrates as we all handle them differently.

A lot of guys only consume huge amounts of protein around their workouts and not at other times in the day. Remember, your body always needs protein and your body stores protein in your muscles. So if you don't constantly give your body protein, it will start using your reserves, essentially placing you in a catabolic state. If your aim is getting shredded for the stage, you should drink an intra-workout shake with no carbohydrates in it. Rather look to consume leucine, beta-alanine, citrulline malate, glutamine and electrolytes. This potent combination will give you plenty of energy while you burn fat.

Lastly, exercise is a tool to help your body grow bigger and stronger, but you also need to eat and rest for that to happen. It is therefore vitally important that you get sufficient sleep and proper nutrition before you experiment with different peri-workout strategies.

"IF YOUR AIM IS GETTING SHREDDED FOR THE STAGE, YOU SHOULD DRINK AN INTRA-WORKOUT SHAKE WITH NO CARBOHYDRATES IN IT. RATHER LOOK TO CONSUME LEUCINE, BETA-ALANINE, CITRULLINE MALATE, GLUTAMINE AND ELECTROLYTES. THIS POTENT COMBINATION WILL GIVE YOU PLENTY OF ENERGY WHILE YOU BURN FAT."



HENNIE KOTZE MANAGING STRESS

The life of an athlete can be highly stressful. Not only are we subjected to the physiological stress of hard training and extreme dieting, but all of us – local amateurs and Pros – have to still contend with work commitments and family responsibilities. In my situation, work is the greatest source of stress, particularly during contest prep. As a coach, trainer and gym owner my days are long and I'm on my feet a lot. That leaves little time to rest between hard training sessions. The final weeks before a show are the hardest as athletes are tired and find it hard to concentrate and perform at work. I therefore tell my clients to take the week before a show off to rest, if they can.

Then there is the stress of managing and maintaining a successful business or perform at work, which is essential to provide you with the resources needed to compete and sustain your lifestyle. In fact, this should be your priority. That's why one of the first things I do with my clients is sit down and work out a budget for the up-coming competition, including the cost of competing (travel, food, entry fees, coaching, etc). If the amount is more than a person can afford I generally advise them to first find the money before starting because the stress of finances can become overwhelming. You also don't want to divert finances away from your family so that you can compete. Athletes often say this is an individual sport, but that couldn't be further from the truth. Your family is your primary support system during this demanding period. I know that without mine I couldn't compete. It is therefore also essential that you don't neglect them during prep. If you do, it creates stress in your relationships at home, which also impacts your prep. It's also not fair to your family. I therefore always try to find a

healthy balance between family, work, training and food prep. On your off days, spend quality time with your family. Be selective about the events and engagements you commit to, but don't brush off your friends altogether. Also, get as much sleep as you can. The weekend is often a good time for me to add in a short nap or two.

And finally, the best way to minimise stress during prep is to be organised. The sport is predominantly about training hard and eating well, which requires lots of meal prep. Get that right first and use whatever time that is left for the other things you want to do in your life. It also pays to be organised in all other areas of your life so that no time is wasted. You need to be as productive as possible during the 12-16 weeks before a show.

However, you need to give equal energy and time to all the important things in your life, which means never placing the sport above all else. So find the right balance in your life. It's the best way to manage stress as a body-builder.



HENNIE SAYS

"ATHLETES OFTEN SAY THIS IS AN INDIVIDUAL SPORT, BUT THAT COULDN'T BE FURTHER FROM THE TRUTH. YOUR FAMILY IS YOUR PRIMARY SUPPORT SYSTEM DURING THIS DEMANDING PERIOD. I KNOW THAT WITHOUT MINE I COULDN'T COMPETE."

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COBUS VAN DER MERWE

PREVENTION IS BETTER THAN CURE

When we start out in this game, we all believe we're bullet proof. Take it from someone who has two decades plus of hardcore training behind them: IF YOU WANT TO REACH YOUR TRUE POTENTIAL, LOOK AFTER YOUR JOINTS AND STAY INJURY-FREE.

Imagine never being able to squat again because you've ruptured everything in your knees or spine!

Despite how impatient, or full of testosterone you may be, take the time to warm up an area properly before you start hammering out heavy sets. Allow all the connective tissue and muscle insertions to properly warm up by increasing blood flow to that area. Shoot for 20-30 reps, with a slow and steady motion. Ensure you work through a full range as you increase the poundage, making sure that the fibres are worked for maximum flexibility under load.

Every time we hit the weights we are creating trauma. This trauma presents itself by way of fine micro tears (hence the fact we are sore after an effective session). To build the extreme mass we all so desperately desire we walk a fine line between generating constructive trauma and a possible devastating injury.

Most often



COBUS SAYS

"DESPITE HOW IMPATIENT, OR FULL OF TESTOSTERONE YOU MAY BE, TAKE THE TIME TO WARM UP AN AREA PROPERLY BEFORE YOU START HAMMERING OUT HEAVY SETS."

(but not limited to) this has shown to be evident in pectoral or bicep tears. The two biggest culprits in this particular example would be the bench press and the deadlift respectively. In both exercises, we more often than not find the muscle insertion has been placed under significant load with little to no flexibility as a result of the bar restricting the plain and arc of movement. Don't chase poundage if you're not ready for it on the day. Don't force your muscle into a restricted plain of movement if it's not 100% comfortable under load and don't go for a max press with a barbell if you haven't preceded your all-out lift with at least several lighter sets through a full range of motion.

Although warm-ups are crucial, you also must not limit your prep to just sets of high reps with light weights. Take the time to investigate effective stretching and mobility techniques to incorporate into your routine. This will drastically improve the range and flexibility of the target muscle, as well as aid in getting a significantly better rep range where you can stimulate more fibres for increased growth. It will also reduce the risk of tears. Don't be shy to treat yourself to a deep tissue massage once or twice a month to really infiltrate those trigger points and clear the muscle of toxins. Many international Pros swear by this and so do I!

When it comes to looking after your joints, I believe prevention is always better than cure. Unlike muscle tissue, cartilage does not receive blood flow. So, if you neglect to look after your joints they will pack up. The impact we place on our joints in the gym is unreasonable. Stay on a regimen of joint support supplementation to minimise inflammation, which will drastically reduce joint decay. I use Joint Armour by TNT Mercury because it is mega dosed specifically for resistance training athletes.



JACO VENTER

FOOD CHOICES

Nutrition can make or break a physique on stage. It has always been fascinating to me how we all respond differently to the foods we consume. In an ideal world we would all eat organic food and drink lots of water, but the reality is that we live in a world overrun with foods that are made with artificial ingredients and are manufactured with preservatives for longer shelf lives.

Foods that I suggest most people, including athletes, should stay away from would be deep fried foods and fizzy drinks with high amounts of artificial sugars.

A safe macronutrient ratio to follow is proteins 40%, carbs 35% and fats 25%.

PROTEINS

Believe it or not, not everyone enjoys eating meat. These people tend to find that their body reacts negatively to red meat. As an example, my wife has an A+ blood type. If she eats red meat she tends to feel tired. This is her body's way of telling her to stay away from that specific food. That's why we need to listen to our bodies.

Another thing I discovered was that genetically modified soy protein could lead to unwanted decreases in testosterone and an increase in the female sex hormone oestrogen. On the other side of the coin, some researchers believe soy protein is beneficial and even more so when it is used with whey protein because they actually complement each other well.

CARBOHYDRATES

I recommend staying away from carbohydrates that aren't grown from crops. Carbs that are manufactured by humans cause a massive insulin spike, leaving you feeling tired and run down. I therefore exclude from my diet bread (except rye bread) and cereal. I'm also not too crazy about pasta, unless I really want to gain weight in the off-season.

In terms of supplementation, I often see bodybuilders replace a meal with a shake containing a certain amount of carbohydrates. I would never replace a meal with a supplement, but if I have no other choice I would consume some slow-digesting carbs to cover for the two-hour gap before I need to eat again. Ingredients such as dextrose, glutamine, maltodextrin, cyclic dextrin and glucose commonly found in supplements won't work in this particular scenario. You'd be better off taking a waxy maize product. Always remember that supplementation is there to supplement, not replace, real food.

FATS

Fats can be purchased at almost any shop or cafe in the form of almonds, macadamias or cashews.

I personally don't like to go over 12% body fat in the off-season and seldom go over 9%. My secret for staying lean is to have more fats in the off-season before lunch. After that meal I would increase my carb intake, especially around my training. This method of eating leads to a fat-burning state from early morning when you wake up until past lunch time.

I also notice that many athletes drink their BCAAs throughout the day, even when they get closer to a competition. I've recently studied some work conducted by top sports nutritionists in America and discovered that BCAAs compete with tryptophan for absorption in the body. Tryptophan is responsible for the release of endorphins. Sipping on BCAAs all day can therefore lead to depression and, in some cases, even aggression. Rather take them around your training. Moderation is key here. A final suggestion is to read food labels. You'll often find that they're misleading because companies play with words and hide certain ingredients that might be harmful or detrimental to your results.



MDU GREEN **DREAM BIG!**

Bodybuilding is synonymous with discipline and I am a person who lives and breathes the sport. My goal this year is to develop and maintain a better physique. Training and nutrition go hand in hand and you cannot succeed in the one without the other.

Don't fall into the trap of not planning ahead, waiting until the last minute and just doing whatever you feel like doing. This haphazard approach only leads to a lack of direction and your results will definitely suffer and fall short of what you have set out to achieve. When I prep for a show everything must be exact and precise. Everything must fall into place – the exercises and the weight I use, what I eat, how I sleep, my sets and reps. I like to lift heavy, although I don't go over the top and push too much weight. I am not a person to use poor form while trying to impress other people in the gym. Though others might think you are strong when you use a lot of weight, you are only placing yourself in a dangerous position as you increase the risk of injury. Using perfect form is far more beneficial and a lot more difficult to do



MDU SAYS

"WHEN I ENTER THE GYM I ALWAYS HAVE A PLAN OF WHAT I AM GOING TO DO. I KNOW WHAT MUSCLE GROUPS I AM GOING TO HIT ON THE DAY AND WHAT RESULTS I NEED IN ORDER TO REACH MY GOALS."

than simply tossing weights around like a maniac!

The gym for me is also not a place to socialise. I go to the gym to train. When I am there I am definitely in the zone, ready to smash things! You will never see me having lengthy conversations while someone else is standing around, waiting for a piece of equipment I am training on.

I believe there is no way you can focus on what you need to train if your mind is somewhere else.

I pick the competitions I want to compete in carefully and I always look at who is going to be there to bring the best out of me on stage! I love the competitiveness of bodybuilding.

If you don't give a competition your full attention, what is the point in going through the painful process of bulking and cutting in the first place? The old rule of more is always better does not apply to bodybuilding. I am a big believer in quality over quantity. I have to confess that I do like my fair share of volume when I am training, but for me there is always a limit. You should never just add weight for the sake of trying to lift more. Quality is the name of the game.

When I enter the gym I always have a plan of what I am going to do. I know what muscle groups I am going to hit on the day and what results I need in order to reach my goals. I love the saying: "If it were easy, everyone would do it". It rings especially true when your goal is to build a better physique. It is hard, but not impossible. Many people give up because they don't see any major changes in their body. Once you have started a pre-contest programme, give yourself at least a couple of weeks to monitor how you look and feel. The most important thing, however, is to keep going back to the gym with the idea that you will change. Dream big and you will achieve it!



SHOWS WORKOUTS FEATURES



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LEND0 GREYLING

LOOKING GREAT YEAR-ROUND

Bodybuilders used to eat like machines to add mass in the off-season, but today we use a more measured approach. I believe bodybuilding is a year-round sport now. We want to look great all year and not just when we are competing.

For this reason my diet remains tight 365 days a year. Instead of focusing on the quantity of food I consume, I now make sure that I get high quality nutrients. I don't want to pack on extra weight where I don't want it. If you get too fat in the off-season your body's physiology will go to the dogs, which will only lead to high blood pressure and the risk of cardiovascular disease. The so-called 'dirty bulk' approach where bodybuilders eat everything in sight also puts a tremendous amount of stress on your joints and ligaments. If you get injured it is game over.

Another negative aspect of dirty bulking is that it can take up to 16 weeks or more to strip off all the excessive body fat you have accumulated in the off-season. You can lose a lot of muscle mass in the process, up to the point where you eventually are ready to diet-down for a show.

I like to keep my weight closer to the ideal weight for the stage and ease into a prep, as opposed to playing catch-up. I look at it from the standpoint of supplying

"I LIKE TO KEEP MY WEIGHT CLOSER TO THE IDEAL WEIGHT FOR THE STAGE AND EASE INTO A PREP, AS OPPOSED TO PLAYING CATCH-UP. I LOOK AT IT FROM THE STANDPOINT OF SUPPLYING MY BODY WITH THE RIGHT AMOUNTS OF CARBOHYDRATES AT THE RIGHT TIME, THE RIGHT AMOUNTS OF PROTEIN AT THE RIGHT TIME AND ALSO DISTINGUISHING BETWEEN HEALTHY AND UNHEALTHY FATS."

my body with the right amounts of carbohydrates at the right time, the right amounts of protein at the right time and also distinguishing between healthy and unhealthy fats.

Eating better nutrients gives me the energy I need to complete my workouts. My strength levels also shoot up, even if I am prepping for a show.

Diet, while always important, requires extreme attention at the beginning of a prep phase and also towards the final stages. Use good judgment when determining what foods you can eat and also how much. Not everyone can follow the same diet as some people have faster metabolisms than others and may respond differently to different macronutrient ratios. Some might lose weight easily while others struggle to shred. I usually follow a high carbohydrate diet with a moderate protein intake and very little fat. Research has shown that getting plenty of protein can boost your metabolism causing you to burn an extra 150 to 200 calories a day. Protein is predominantly made up of amino acids which are harder to break down than carbohydrates and fats, so you are able to burn more calories metabolising them. I avoid going without food for long periods because then I tend to become so hungry I overeat! I only tweak my diet when my body hits

a wall. In the last few weeks of a prep, my carbohydrates will be significantly lower, but I will never go a day without them because they keep my metabolism humming nicely. I normally start prepping 12 weeks out from a show. This particular timeframe allows me to put all my focus and energy into what I need to do. Find what works for you, learn what you are doing wrong and how to fix it, and stay far away from the dirty bulk approach of yesteryear's bodybuilders.



EARL 'THE BEAST' ABRAHAMS

MY RULES FOR BODYBUILDING

As I write this I'm prepping hard for my Pro debut show at the Arnold Classic in Australia. I have had limited time to prep for this prestigious competition and get stage-ready from a slightly out-of-shape physique to one that can do battle with the big boys! I have to admit that this mammoth challenge made me reminisce about my amateur days and how tough the competition was on the stage.

When I started out as an amateur bodybuilder I was not always successful and sometimes I would not even place among the top 10 at a show. Here are a few of my own rules, words and sayings that helped me in my journey to keep me motivated and focused:

1. PERSEVERANCE. I always knew where I wanted to go and what I wanted to achieve in the sport. No matter what the setback was, I have always made a comeback.

2. CONSISTENCY. When you know what your goal is and the amount of work you have to put in to beat the other competitors, you have to be consistent in what you do.

"MR. OLYMPIA DORIAN YATES MENTIONED THAT HE ALWAYS FELT SATISFIED WITH HIS PREP BECAUSE HE KNEW THAT THERE WAS NOT A SINGLE OUNCE MORE OF EFFORT THAT HE COULD HAVE PUT INTO HIS TRAINING AND PREPARATION FOR A SHOW."

3. HARD WORK. You must always be the hardest worker in the room. When he was still competing, former Mr. Olympia Dorian Yates mentioned that he always felt satisfied with his prep because he knew that there was not a single ounce more of effort that he could have put into his training and preparation for a show. You need to also make sure that you pull out all the stops and go for it. This mindset will make you extremely dangerous on stage.

4. NO DISTRACTIONS. No matter what the circumstances in my personal life, I will always keep one-hundred percent focus on what I need to do to achieve my goals. I always try not to allow my personal life to interfere with my bodybuilding career. Distractions can only lead to failure.

5. AVOID COMPARING YOURSELF TO OTHERS, because, the truth is, you cannot change what they look like or what they bring to the stage. You can only control what you bring to the stage. This applies to bodybuilding and to life in general.

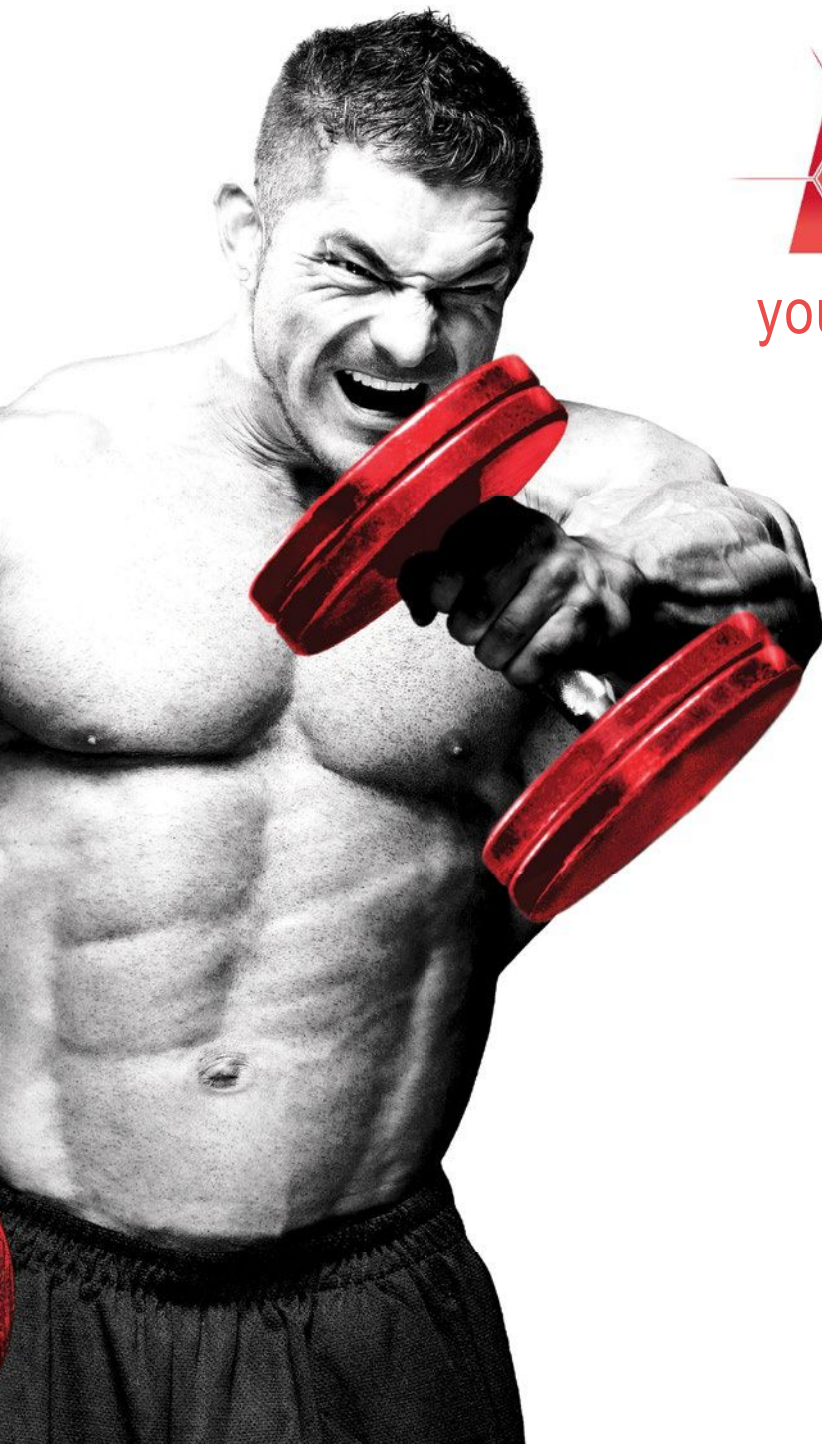
6. MY LAST AND MOST IMPORTANT SAYING I WANT TO SHARE IS:

"Always aim to beat your previous best." In doing so you'll always make progress, time after time. You are then bound to reach greatness.

In conclusion I would like to leave you with the following:

- Believe in yourself, then others will too.
- You are enough and have what it takes if you apply yourself.
- Never give up on your dreams.

Until next time, train smarter!



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- STAMINA & RECOVERY
- CONTRIBUTES TO MUSCLE GROWTH

12g SERVING

1.3g
CARBS
PER SERVING

9000mg
TOTAL AMINO
ACID BLEND

ALL-IN-ONE INTRA-WORKOUT GLYCO-AMINO FUEL

PREMIUM FORMULATION:

- VOLUMIZING INTRA-WORKOUT
- INCREASED MUSCLE PUMP
- ENHANCED RECOVERY

36g SERVING

22g
CARBS
PER SERVING

2:1:1
BCAA RATIO

USN GLOBAL MANUFACTURING IS CERTIFIED BY THE FOLLOWING QUALITY CONTROL ENTITIES, WHERE RELEVANT.



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