SNI: What is the most silly myth you hear regarding dietary supplements?:

**Brink:** That because they are not FDA regulated they can’t possibly be effective and are inherently less safe than FDA approved drugs. FDA approved drugs kill more people per day than all nutritional supplements combined per decade at least. Does that mean drugs are of no value? Of course not, but it does mean one has to take an objective risk to benefit look at them. I’m a huge proponent of scientific validation for nutritional supplements – vs. the hype and marketing that often passes for research – but seeing FDA approved anything inherently safer than nutritional supplements is a myth perpetuated by the media, who gets their ad budgets from… well…we won’t go there.

SNI: What is the most common mistake folks make with their exercise program when it comes to losing body fat (as their main goal)?

**Brink:** Depending on aerobics to “burn” fat and resistance/weight training to build strength and muscle. Following that, thinking steady state low intensity exercise (LISS) keeps one essentially irrelevant “fart burning zone” and avoiding higher intensity work, such as interval training, (including but not limited to HIIT), resistance training, etc. It’s odd most “in the know” in the fitness/bodybuilding community, as well as the physiology community, have known all this for a long time, yet somehow, it just does not seem to penetrate the “main stream” very well.

SNI: Describe the PERFECT meal (for improving body composition)...

**Brink:** That’s a tricky one as I feel macro nutrient ratios require some variables to be plugged in depending on the individual, which is one of many reasons I hate one-size-fits-all diet plans, but as a general statement, would be high/moderate in lean proteins, moderate in fat (of the right types and ratios) and low/moderate in high fiber nutrient dense carb sources with a heavy emphasis on vegetables cooked or raw. Lean piece of meat (chicken, fish, steak), big salad with perhaps olive oil/flax oil and vinegar dressing, and what left over on the plate for room, some brown rice and lentils. That’s long term healthy eating that, as long as total cals are controlled, will alter body comp in the direction people want. If it’s not long term and generally healthy, I’m not interested.

SNI: List your top 10 fav supplements.

**Brink:** I tend to categorize supplements as worth using, might be worth using, not worth using, which depends on the strength and quality of the studies that may – or may not! – exist for that supplement. Also depends on goals, etc. My personal supplement regimen includes:

- Whey isolate
- Creatine (monohydrate!!!!!)
- Multi vite
- Extra vite D
- Fish oils
CoQ 10

Acetyl L Carnitine

Beta Alinine

L-Tyrosine

Probiotics

I think that’s ten, but I do take more supps then that!

**SNI: How much protein per meal do you recommend? How much protein daily?**

**Brink:** Boring as it is, I’m still generally happy with the one gram per lb of bodyweight for active populations. Modern studies suggest that’s well above what needed to say support protein synthesis, anabolism, and so forth, but protein has many other effects in the human body. Besides, you have to eat something, and you have three choices: protein, carbohydrates, and fat, and I’m not a fan of high fat and or high carb diets, so having protein make up 20-30% of calories is perfectly acceptable in my view as a source of calories, etc. People think way too much about exactly how many grams of protein are needed for X specific effects in my opinion.

**Will Brink** has been a writer for over almost two decades and has been published in a wide variety of publications, including: *Muscle Media*, *MuscleMag International*, *Lets Live*, *Muscle n Fitness*, *Life Extension magazine*, *Muscular Development*, Townsend Letter for Doctors, *IronMan*, *Inside Karate*, *Tactical Response*, *Exercise for Men Only*, *Physical*, *Power*, *Body International*, *Oxygen*, *Penthouse*, *Fitness RX*, *Big*, as well as others over the years and in many different languages. He had a monthly column in *MuscleMag International* called “The Intake Update” for a decade. Many of his articles can be found on the major fitness/health/bodybuilding web sites, such as bodybuilding.com and hundreds of other sites.

This entry was posted in **Fitness, Interviews** on **December 7, 2011** by **SNI**.

**Interview – Frank Sepe**

**SNI:** What role did bodybuilding play in the development of your eventual career? (as a model, writer, etc).

**Frank:** Let me start off saying that I have the utmost respect for bodybuilding and what it takes to become a great competitive bodybuilder. When I look back to my hardcore bodybuilding days I don’t have any regrets. I enjoyed the training more than anything. I loved the idea of going into the gym and trying to become as strong and as huge as possible. I miss that aspect of it but I don’t miss actually competing. People always say he is a bodybuilder. NO! Flex wheeler is a bodybuilder. Phil Heath is a bodybuilder. I was a guy who competed as a bodybuilder for three short years and moved on. It was one part of my life not my entire life. Some people don’t realize that. I learned a great deal in the bodybuilding industry from some of the top pros and trainers and the knowledge I learned from these people was priceless. As far as writing about training or bodybuilding, of course I think going through the process of competing gives you a better understanding and perspective of what someone goes through in order to gain mass, shred up and put yourself out there on stage to be ripped apart by the media. lol. I still use a lot of the workouts and training techniques
that I used back in the day and I can honestly say that a lot of these workouts were the basis for the Training Programs I have put in my books. Bodybuilding is the foundation in which I built my physique and it has been a springboard to my success in all areas of media and in the fitness industry.

SNI: What is your honest opinion of how today’s female bodybuilder looks? Do you think it’s attractive?

Frank: This question is usually where people say something derogatory in regards to female bodybuilders. I think female bodybuilding should get more press and they should be respected more for their accomplishments. Whether you are a man or woman I feel that if you are able to build that type of physique you should be able to get your just rewards. As far as being attractive, there have been many female bodybuilders over the years who have been attractive. We seldom hear of any new comers! Female bodybuilding needs a superstar to come forward and bring it back to the level it once was. Will that ever happen; I don’t know, unfortunately for female bodybuilding, figure and bikini have pretty much pushed female bodybuilding to the low end of the food chain.

SNI: How did you get your start in writing, modeling, etc.? Did you have any role models?

Frank: My writing career. Hmm. Long Story…lol I started writing for MuscleMag in 1996. Robert Kennedy gave me a column called “Sets and Reps” and I had a ghost writer for the first three issues. He was a great writer but I just felt that people wanted to hear what I had to say on certain topics. After that I decided that I wanted to write my own column. Once I started doing it, I really enjoyed the feedback I was getting from the readers. During that time I was fitness modeling and I was meeting various editors of magazines and I would always inquire about writing something for that mag. So I was able to write a column, article or be a fitness source for some huge mags like Cosmopolitan, Good House Keeping as well as some of the various fitness mags we all know. Not too long after that I had an idea for a fitness book. I had a friend at Vogue magazine put together a 10 page treatment and bio so that I could pitch it to publishing houses. I got a three book deal with HayHouse and my first book, The Truth- The only Fitness Book you’ll ever need became a top fitness seller at Barnes and Noble and Borders- it is still for sale today and is still doing well. I launched two ancillary books as part of the three book Truth Series as well and both books are still selling on Amazon.com. After the success of my first book, “The Truth” I was asked to be Group Editor for a custom fitness magazine company- The magazines were called AXL, Health Smart Today and Health Watchers. They had a combined circulation for 4.6 million and were distributed through Vitamin World and consumer lists. I wrote so many articles throughout that time on everything from nutrition, training, celebrity interviews etc. Long Story short- After that I became the EDITOR IN CHIEF Of the MET-Rx magazine (www.metrx.com), which I am extremely proud of.. My company Nigel Media II creates the entire magazine for the company. I work with Patrick Cornacchuilo to make sure that each issue is better than the next. I have also launched two more books through the Home Shopping Channel,- under my own brand , “Frank Sepe “Fitness as a Lifestyle” and have written books, manuals, ads etc over the years for MET-Rx. I love writing, I currently have a great blog on the Huffington Post as well. A new book that I wrote is coming out March 2012 and that is going to be more on the mental aspect of wellness. Hope that wasn’t too long winded!!

SNI: Describe the ‘Frank Sepe’ brand?

Frank: I do so many different things that I don’t think I could explain everything in a 100 words so i will give you the short version. Lol First I have my own fitness brand called Frank Sepe” Fitness as Lifestyle”. I have had products on the Home Shopping Channel since 2009 and thank god have done really well with a product called the Fitness Disc. I will be launching new products under my brand through various other media outlets and retail in 2012. I have a media company that creates custom publications such as the MET-Rx magazine, which think is the best custom magazine in the fitness industry. So creating a 100 page mag takes up some time, lol. I also have a design and web company that has created some big projects. I also do a ton of photography. My office building is set up for photo and video shoots. I shoot a lot of stuff for MET-Rx. the new calendar with Ms. Bikini Olympia Nicole Nagrani and Figure Olympia Nicole Wilkins is out now. I have shot everything from Bud Light Ads, to
clothing catalogs, celebrities, etc. My favorite shoot was with ex.80's rocker Bret Michaels...LOL. I have over 1500 tear sheets and I have never solicited work. How crazy is that. Besides all that I have my own WebTV show launching in 2012 with a huge social media company and I just formally signed with MET-Rx on a very special project. That you will have to check out on the MET-Rx site in 2012. Besides all that I have a few non fitness businesses that I enjoy and I love the fact that every day brings something new.

SNI: What is the most common misconception people have of you?

Frank: The biggest misconception about me. Hmm. There are so many. LOL. I honestly got to a point in my life where I don’t care what people think about me. I can't change the past and I can’t make everybody happy so who really cares what negative cyber people are saying. No matter what you do or how great something is, there is always going to be a person who disagrees with you or hates you personally. You are better off focusing on what you need to do and not what people think you should do. I try to stay positive and I don’t let the negativity creep in. I know at the end of the day the most important thing is my family. My three year old son Dylan does not care if Dad should be 260 ripped or 220lbs, he just wants his dad around. So I let all that negative stuff roll off me like rain.

SNI: Bonus Q: If you could be any superhero, who would it be and why?

Frank: That's easy- Superman. he can fly, take a bullet, super-strong, never ages, and he has Lois Lane.

BIO – As a leader and innovator in the fitness industry for over 15 years, Frank Sepe proves to be one of the top fitness and nutrition experts. He has won body building titles, written best selling fitness and nutrition books, been recruited as a personal trainer to many celebrities, and has been behind some of the most revered fitness content in top magazines as an editor and writer. Frank has graced the cover of countless magazines, fitness encyclopedias, and you may have even seen him on dozens of romance novels, as he is one of the most photographed fitness models of his time. Frank is a fitness media expert both on television and radio, and now he takes center stage on HSN. Frank’s well-rounded talent and easy-to-use programs have helped countless people embrace his fun and innovative approach to fitness. His devotion to helping people and his true fitness expertise, has led him to bring the message of getting fit, motivating yourself and living Fitness as a Lifestyle, exclusively to HSN! For more info on Frank, go to: http://www.franksepe.com/about-frank.html

Interview – Debbie Lipski, Massage Therapist and Physique Athlete

SNI: What kind of training do you need to become a licensed massage therapist?

Debbie: Each state is different as far as what is required to be a Licensed Massage Therapist. In South Carolina, where I practice, Massage Therapists are required to have at least 500 hours of training from an accredited Massage Therapy School. They must also be Nationally Certified, pay an “Application” and “Licensing” fee, and obtain 12 hours of Continuing Education every 2 years.

SNI: What are the different types of massage?

Debbie: There are over 150 types of massage, but the 5 most popular are as follows (in no particular order):
1) **Swedish** – This is the most common form of massage therapy in America. Long, soothing strokes are used on the superficial layers of each muscle group. Swedish Massage is most beneficial for increasing circulation, eliminating toxins, and improving overall relaxation.

2) **Deep Tissue** – This treatment focuses on the deeper layers of muscle and connective tissue (fascia), and is applied with greater pressure than a Swedish Massage. This therapy aims to alleviate pain and tension in specific problem areas. Deep Tissue massage is recommended for those who are involved in extreme physical activity, have chronic pain, or are recovering from a specific physical injury.

3) **Sports** – Sports Massage is used to manipulate the body’s soft tissue in order to improve an athlete’s overall performance. This type of massage helps to increase flexibility and range of motion of an athlete’s joints and muscles. It also helps to speed up recovery from injury or surgery, and rid the body of any toxins in the soft tissue. This type of massage is good for all levels of athletes from “Weekend Warriors” to more elite competitors.

4) **Neuromuscular** – This type of therapy treats specific areas of soft tissue within the body using static pressure to relieve pain and improve the body’s overall biomechanics. In turn, balance is brought to the body’s Central Nervous System (CNS) and Musculoskeletal System. Neuromuscular Therapy (NMT) helps increase circulation to the soft tissue and restores postural alignment, strength, and flexibility of the injured tissues. NMT is most beneficial for those experiencing back pain, sciatica, migraines, numbness and tingling in extremities, and several other conditions caused by muscle hypertonicity and spasm.

5) **Shiatsu** – Originating in Japan, Shiatsu is a therapy that restores the flow of energy within the body. There are different energy pathways that run along the head, arms, legs, and torso called ‘meridians’. Each meridian is associated with an organ in the body. Pressure is applied along these meridians using fingers, thumbs, palms, or elbows while the client is lying on a futon, fully clothed. As the therapist works along each meridian, it releases blocked energy, allowing it to flow freely throughout the body. Shiatsu is known not only for increasing relaxation, but also for helping to strengthen the body’s immune system and relieve pain.

SNI: What are the different massage strokes and under what circumstances would you use them?

**Debbie:** Of the various types of massage techniques, the 5 most commonly used are:

1) **Effleurage** – A gentle, gliding motion where the therapist’s hands maintain constant contact with the skin. Generally this is used at the beginning and end of a massage treatment.

2) **Petrissage** – A technique where the pressure is deeper than that used in Effleurage. Muscles are pressed and kneaded in order to break up adhesions and increase circulation in a specific area. This is used after the soft tissue has been warmed up with Effleurage.

3) **Friction** – Quick, deep massage strokes are used in this technique to break up scar tissue and increase blood circulation within a focused area. This is usually done in a linear or circular pattern. Friction is best used in areas of bound up muscle fibers such as trigger points or scars.

4) **Tapotement** – This involves short tapping movements with alternating fingers, cupped hands, or the outer edge of both hands. This technique is good for increasing blood circulation, eliminating toxins, and stimulating muscle reflexes.

5) **Compression** – A technique where firm pressure is applied with fingers, palms, or fists to a specific area of soft tissue in the body. This is used in order to help relieve tension or pain in that area.

SNI: What is the biggest misconception about massage therapy?
Debbie: One of the biggest misconceptions about massage therapy is that it is still considered a “luxury” by many. When people think of ‘massage’, often times they believe it is a treatment that is simply for relaxation. A therapeutic massage actually does more than just relieve stress and tension. Massage Therapy can help increase circulation of blood and lymph, decrease pain, improve joint range of motion, and break up scar tissue, in order to aid in muscle repair and recovery. The amount of health benefits that massage offers is endless.

Another misconception by many is that one must go to a spa and pay ‘an arm and a leg’ just to receive a massage treatment. Nowadays, Massage Therapy is becoming more prevalent in healthcare facilities other than spas, and at more affordable rates as well. With the price of healthcare rising every year, it would be more cost effective for people to become proactive with their health, and incorporate alternative therapies such as Massage into their lives.

SNI: Are male or female clients easier to massage? Why?

Debbie: In my experience, female clients tend to be easier to massage than male clients. Every so often I get the occasional big, muscular guy who is crying ‘uncle’ at the slightest amount of pressure, or a little old lady who would barely notice if I used a jack hammer on her to break up the tension in her muscles. The sensitivity in the muscle tissue itself determines how much the client can tolerate when receiving a therapeutic massage. Many factors come into play such as past injuries/surgeries, certain autoimmune disorders, and muscle tissue density. No matter what the case may be, I manage to adjust the pressure to each and every client’s needs.

SNI: How often do men experience “involuntary anatomical arousal” and how do you deal with that?

Debbie: It happens very rarely, but when it does it is usually unintentional. I just ignore it and continue with the massage session. More often than not, the client is embarrassed and is hoping I am not even aware of what has happened. If the client has intentions of wanting an “inappropriate” massage I immediately end the session, require full payment, and suggest that he take his business elsewhere.

SNI: If you could be a superhero, who would it be and why?

Debbie: If I could be any superhero, I would want to be Wonder Woman. Not only does she have amazing speed, super strength, and the ability to fly, but she also has that cool ‘magic lasso’ that forces people to tell the truth. I can think of a few politicians I wouldn’t mind using that on. To be honest, I really just want to wear that fun red, white, and blue outfit of hers with the metal headband and wristbands.

SNI: Who is the most interesting client that has ever received a massage from you?

Debbie: Of all the amazing people I have worked with throughout my 10-year career, the most interesting would have to be a retired gentleman I met back in 2008. A few years before we met, he had undergone ‘routine’ surgery where he had acquired Sepsis (an infection in the bloodstream). As a result, his body began to shut down and he fell into a coma for 72 days. Within that time, he was pronounced dead on 3 separate occasions and miraculously came back to life each time. When I met my client, he had had ½ of his organs removed, was suffering from neuropathy in his legs, and was only able to walk with the use of a walker. After 4 years of massage and strong mental determination, he is to the point where he can walk on his own again and is able to play 18 holes of golf once or twice a week. Talk about a “Miracle”!
BIO – Debbie Lipski, LMT, NCMT is a Licensed and Nationally Certified Massage Therapist. She received her B.A. in Psychology in 1999 from Indiana University where she competed in Platform and Springboard Diving. In 2001, she graduated from the Boulder College of Massage Therapy where she has done extensive studies in Sports and Orthopedic Massage. Debbie has worked directly with numerous professional athletes including the Colorado Rapids Pro Soccer Team, Monica Seles, and several Nationally ranked, Olympic and World Champion cyclists. Currently, Debbie has her own Massage Therapy practice in Columbia, SC specializing in Deep Tissue, Sports Massage, and Injury Rehabilitation. Debbie is a NPC National Level Figure Competitor, Fitness Model, and part-time Soigneur for various professional road cycling teams.

This entry was posted in Fitness, Interviews, Sports Nutrition on November 23, 2011 by SNI.

6 Tips for Sticking to Your Weight Loss Plan
By: Raphael Calzadilla

Date Published: November 2011

People tend to fear starting a weight loss plan because they never seem to get it right. They start, life gets in the way, the process becomes too difficult, the temptations become too easy to give in to, and they quit. I’ve seen history repeat itself time and again, and what I see is that when a person brushes herself off and decides to go back to a fat loss plan, she often follows the same process all over again. Same diet, same restrictions, same process, etc., but this time she hopes to stick with it.

Big mistake.

When something isn’t working, you have to find a different approach. Here’s what I find trips people up:

– They try to be overly restrictive and think they’ll be on a perfect plan seven days a week.

– They follow a meal plan that’s tolerable, not enjoyable.

– They expect quick and unrealistic results such as trying to lose 5 pounds in a week. This means it’s a diet to them and not a lifestyle change.

– If they go off the plan for even one meal, they believe they failed and might as well give up.

– They don’t have goals.

– They just can’t imagine themselves with the weight off. Their minds can’t even come close to visualizing it.

Let’s keep this simple. Here’s what I want you to do:

1) Set a goal for 30 days. Make it realistic. One pound a week is just fine.

2) Create a meal plan that you find enjoyable. Don’t worry about protein, carbohydrates, fats or even total calories…yet. Just write down each meal and snack and what time you expect to eat it. Keep it healthy, but choose foods that you enjoy.
3) Include one small treat each day. It might be a few chips with your lunch. Such as a small amount of Godiva chocolate with one of your meals etc. Don’t shake your head no to this. You’ve tried everything else and nothing’s worked, so change the approach.

4) Once you have all the foods listed, use an online food log to determine the total calories along with protein, carbs and fats.

5) Consult with a professional, whether it’s a trainer or dietician. But find someone who can relate to what seems to screw you up all the time. Show him or her your meal plan, and describe what you’d like to eat. Ask them to tweak it but not make it intolerable.

6) Create a realistic exercise program. It doesn’t matter if it’s only 3 days of walking for 25 minutes. Start somewhere. And, just like with the meal plan, choose something you find enjoyable. And, if you can find a buddy to work out with, even better. You’ll motivate each other.

This weight loss stuff isn’t easy. You can have a trainer screaming in your face, you can have every person telling you that you need to lose fat and get in shape, but until you decide to approach this realistically and for the long haul, nothing will work. So change your approach and focus on 30 days and the other tips I recommended. It will work.

You can do this.

I’m a certified personal trainer with the American Council on Exercise (ACE) and have been personal training for almost 20 years, an online coach for nearly 10 years, and I’ve been working out for 40 years – so I think I’ve learned a thing or two. I’ve presented at many events across the country, produced a significant library of online videos and podcasts, and I’ve written for and been quoted in a number of consumer lifestyle print and online magazines (Women’s Health & Fitness, OK!, Essence, msnbc.msn.com and many more). I’ve worked with hundreds of people from all walks of life – people who’ve needed to lose more than 100 pounds, new moms, busy professionals, athletes and people who’ve never set foot in a gym. Check out my site: [http://fitbyraphael.com/](http://fitbyraphael.com/)

This entry was posted in Fitness on November 18, 2011 by SNI.

**Interview – Celebrity Spokesperson, Rachel Elizabeth Murray.**

**SNI:** Rachel, you have a varied background that includes being a nutrition coach and celebrity spokesperson. When it comes to working with clients on nutrition, what is the single biggest misconception your clients have about healthy eating?

**Rachel:** Shoot, the single biggest? It’s tough to narrow down, but what immediately comes to mind is the misconception people have about the difference between eating for ‘weight loss’ vs. ‘fat loss’ and the Law of Thermodynamics (LOT) which basically says: “eat less + move more=weight loss”. Most people try to cut calories so drastically, but aren’t eating enough to lose fat. The LOT true as a matter of weight on the scale to a point. If you simply eat less and move more, you will probably make the number go down, but you’re most likely losing hard earned muscle in the process too, and being an active tissue, muscle is what keeps you leaner longer with less effort in your ‘rest’ hours anyway. If you want to take an obese pear-shape down to a weak, flabby and soft smaller pear-shape, by all means, abide by the LOT only, and keep killing it, ‘Cardio Queen’! I sure don’t want to waste muscle just to become ‘skinny fat’ and set myself up for future fat gain just to appease the bathroom digits. My real point is, what the LOT and the media doesn’t explain in enough detail, is the principle of ‘catabolism’ or ‘starvation mode’ under-eating and fat storage for survival. In a nutshell, the LOT only goes so far until you’re starving yourself and
working out so hard without proper fuel, that your body says “I’ve had it!” and starts storing body fat for survival (it’s the most efficient, slow burning energy source that will keep you alive the longest if need be) instead of burning it for fuel (it will use ATP, then glucose/carbs, and muscle tissue first). We need to get word out about optimal nutrients at optimal times and get enough food in to fuel your body’s individual basal metabolic and activity level caloric needs. I know that’s a lot, but I really am passionate about explaining why my clients’ biggest problem with weight loss in general is them not eating enough!

SNI: What say you to women who lament that they ‘don’t want to get big muscles’ and that’s why they won’t lift weights?

Rachel: I explain first of all that I lift super heavy, and I’m not that huge (wink). But seriously, women don’t naturally have the testosterone necessary to build bulky muscle, and even if you are genetically prone to stacking on more lean mass than ‘Twiggy’ (which, granted, isn’t hard to do), what you’re eating and how much you’re eating plays a much bigger role in what your physique will look like than your weight selection in the gym. If you’re eating in excess of 500-1000 calories more than your maintenance level of calories every day and throwing super heavy iron around during your training sessions, you can almost guarantee you’ll put on some ‘bulk’ somewhere, but even when doing that, as a woman, you’ll put on muscle weight so slowly that if you’re ‘building’ and you wake up one morning and decide it’s getting to be a little much, all you have to do is STOP training and eating like you were. It’s not like you put on muscle overnight. You can accumulate a little fat overnight though. Think about it: muscle takes a lot of time to add and disappears quickly, whereas fat takes no time to accumulate and disappears with much difficulty. Your body would rather be lazy and hold fat to ‘survive’, so fat will stick around until you put some serious effort into losing it. Only challenge will create that change.

When you have it, muscle will need more calories (energy) to maintain it, so it will burn body fat just being there. So, personally, I’d rather build more muscle and stay lean for life. After all, I’m not ever going to be ‘that huge’ without a little help from the ‘juice’ and I don’t. Lastly, it isn’t about the number on the weight, it’s about the rep-range in which your muscles fatigue, the rest between sets, the kind of cardio you’re doing or not doing, that determines your goals. I could keep going, but I’ll leave you with that for now. 😊

SNI: Give your audience your top 10 list of super foods that all of us should eat and why.

Rachel: Great question! I’m not going to list in order because there is still research being done every day that changes order so my 10, in no particular order:
- Kale (Great source of beta carotene, Vitamins K and C, and anti-cancer, free-radical fighting anti-oxidants)
- Blueberries (They have anti-oxidant and inflammation reducing properties…and so delicious in oatmeal)
- Beets (Great source of Folate and are also cancer fighters)
- Squash (Yes, squash. Cancer fighting, low glycemic, low carb. Add fresh tomato sauce and a lean protein like 99% fat free ground turkey to sub your pasta for a low-carb, super food dinner idea!)
- Yams (Three words: Beta, Carotene, and Delicious. Not just for Thanksgiving, folks. I eat these every day!)
- Spinach (Pop-eye had it right all along. Super food that are this nutrient dense are a sure-fire path to strength, energy and vitality. And it’s so versatile! I eat mine as cold salad and steamed as a side with spices!)
- Green Tea (Anti-oxidant powerhouse. Great to get your body more alkaline and fighting free radical damage to your cells post workout quickly. I try to have a cup after every meal and post workout with my SoTru Organic greens and Pink anti-oxidant supplements. Just can’t get enough!)
- Lemons/limes (They’re so refreshing, make fish taste better, and they help create an alkaline environment in your body when you consume them. Did you know that lemon juice mixed with warm water can help relieve heartburn, nausea, and bloating? Lemon water also helps your system get rid of ‘waste’ more quickly, so it also relieves constipation! I add the juice to my tap water daily.)
Rachel: First of all, I would never recommend anyone’s first choice for fuel be something they didn’t make themselves, but if you must, go with as close to ‘clean’ as you can. I’d shoot for a mixed greens salad with mixed veggies (avoid corn, croutons, cheese..) and add a lean protein like grilled chicken. If there is fresh sliced avocado, you can add an ounce or three of that too. Avoid the dressing and ask for lemons instead to squeeze over the salad. If there is olive oil and vinegar (separate) then go ahead and fill a ‘side’ cup with some of each and dip, don’t drown, your bites in it. If you need more calories and carbs, go for a grilled chicken or turkey sandwich option (small) on 100% whole grain or oat bread without oil or cheese or creamy sauces and mayo. Stick to vinegar and spices, and some yellow banana peppers to flavor and don’t forget tons of greens and a giant water with lemon in it!

SNI: What advice would you give to a young college student who wants to work in the fitness/nutrition industry?

Rachel: The first thing I’d say is: love yourself before asking the world to. Confidence in yourself and what you have to offer as an individual is most important. Anybody-related industry is a tough industry to subject yourself too and it requires a tough skin and a killer work-ethic to get anywhere further than your local gym or studio. You need to love helping others; you need to look the part (and get there by practicing healthy eating and training, not pills, starvation and ‘liquid’ diets…). You will hear a lot of “no” and not a lot of ‘yes’ because trainers are a dime-a-dozen. You need to find a niche and do a bit of self-promotion. You are a business. You are an entrepreneur, and despite all of the ‘self’ involved in this industry, you are not about ‘you’ at all! You’re about your clients and their success. They will trust you and respect you if you practice what you preach and constantly strive to keep up with the latest research and keeping your credentials current. My advice? In whatever it is you want to do, ask yourself how bad you want to be successful? If it’s not top priority, get used to settling for less than the best. If you want to make a difference in this industry, work your tail off and network. Do it with genuine compassion and be willing to work hard for little at first. Keep your integrity paramount and put others first. Success, then, is not far off.

SNI: If you could ‘do it all over again,’ is there something you would change in terms of educational or work decisions you made in the past?

Rachel: I don’t know if I’d change a thing! I always wish I knew more than I do, but if I had had a different major, I may not have fallen in love with fitness for the abrupt change it caused in my life when I was suddenly introduced to weight training and fueled clean nutrition. I’d rather answer by saying, I am who I am because of where I have been, but because of what I wish I knew then, I can only learn even more now. Meaning: I’d rather ‘add-on’ than ‘re-do’.

SNI: If you could be a Super Hero, who would it be and why?

Rachel: I’m an undercover X-Men freak. I don’t know the details of the comics but I have an undying love and desire to be an X-woman’. If I could be any of them I think it would have to be Raven Darkholme (aka “Mystique”). She’s a shape-changer who doesn’t age! She can be ANYONE she wants while still being ‘herself’. She can use that to be in any room, in any situation, without being found out. Totally legit ‘fly-on-the-wall’ status as she pleases. Do you realize how much I could learn if I could look like the President or even just one of his advisors?! I could find out what guys do on ‘guys night out’! Oh the possibilities! Yes, she has a criminal record, but yes, I would still be Mystique. Plus, her fire-y, strong willed and ‘independent woman’ personality is SO me. Great question.

BIO
I am a master trainer, nutrition/physique coach, athlete, model/actor/host, philanthropist, and motivational speaker. I am also the CEO/Founder of Rachel Elizabeth’s Cause Fitness. I grew up playing sports but got little education in fitness and nutrition for health purposes. Besides a ‘women’s weight training’ gym with my mom in 7th grade, it wasn’t until college that I was introduced to weight training and clean eating. However, when I understood, I immediately adopted the knowledge as my own in passion and lifestyle. After college I moved to Seattle and became a CPT. I started training with a large corporate gym, but a little over a year later I took my clients to a studio to focus on quality over quantity, put the “personal” back into “personal training”, and avoid the pressure to meet certain quotas every month for someone else’s pocket. My training style is tough, but I train with ‘tough-love
empathy'. My clients know I care but they also know I'm going to push them out of their comfort zone. This is a lifestyle, not a quick fix and you have to create challenge to create change. You are the cause of your fitness effect.

Cause Fitness: a movement and a foundational approach to serving a health and fitness goal much bigger than ourselves, while improving ourselves from the inside out with holistic fitness and nutrition. At the same time I started training, I started fitness modeling as an extra part-time job. I soon realized that I could build a name brand for myself that would work hand in hand with my training business as a means to the end I envisioned, my foundation, Cause Fitness: Fitness for Effect. I love people and see everyone's potential. My goal is to bring opportunities and health education to the world.

Check out these links for more info!
www.causefitness.com
www.youtube.com/rachelizabethm
www.twitter.com/rachelizabethm
www.facebook.com/rachelizabethm

Interview – host of Livin’ La Vida Miami, Stella Vidal

SNI: You’ve done a lot of different things: You train in MMA, played in the Lingerie Football League, Host a TV show, and the list goes on and on. What motivates you to? What keeps you going in terms of doing all of these projects?

Stella: Yes I definitely feel that the busier I am, the more productive I become… not sure how, but it seems to work out that way. I am a firm believer that when we are on “idle” that is when we digress to old patterns of behavior that may not be conducive to our wellbeing. I am in a constant quest to better myself and try to achieve what others may consider an impossibility. I get a bit of a kick when I can show you that it CAN be done!

SNI: Let’s talk fitness. What piece of fitness advice would you give that applies universally?

Stella: I am a firm believer that NO ONE knows our bodies better than ourselves. I am also a Certified Personal trainer. I guess that when you are in tune with your body and can see and feel what you need to change, all you need to do is a little research to come up with a plan. It may take an initial session with a trainer, but it is up to YOU to take control and move forward with what you learn. If we empower ourselves with the right tools, NO ONE can stop us. We should never leave our health and our future up to anyone else!

SNI: What’s your least and most favorite part of working in the fitness industry?

Stella: Truthfully, I have chosen not to compete because I have too many projects that require my attention, and I strive to balance out as much as I can. I admire those who can compete and deplete themselves of fun foods and some celebratory cocktails. As for me, I choose to practice fitness as a lifestyle and love to share what I know with others.

SNI: What diet/supplement plan do you follow to stay in shape year-round?

Stella: I have developed an incredible conditioning workout designed for my body. I can do the same for anyone who wants it. I can guarantee results in less than a month. You can do it at home, the park or the gym. To know more about it, you can email me to askstellavidal@yahoo.com The package includes 3 hours of consultation with me and the program engineered for each individual.
SNI: What new cool projects do you have in store for 2012?

**Stella:** I am in full production of my own television show. We are in our second season and we’ll be traveling all over the world! It is called Livin La Vida with Stella and Stuart. It is an exciting and sexy travel inspired lifestyle show where we show you how to live a fulfilling life no matter your age, size or gender. Check out our website at [www.livinlavida.tv](http://www.livinlavida.tv)

SNI: If you could be a superhero, who would it be and why?

**Stella:** This is a funny one! LOL. I have been compared to Wonder Woman. I would probably create my own costume and call myself Wonder Mujer and somehow incorporate both the American Flag and Colombian flags, as I consider myself both Colombian and American. I would dedicate myself to saving the planet and helping underprivileged children 😊

**BIO**

**Stella Vidal**
Television host, actress, model, spokeswoman, Social Media phenomenon and Master’s degree holder in the Counseling sciences, Stella Vidal is the Colombian Goddess that electrifies the screen as host of Livin' La Vida Miami. Not your 'average girl,' Stella is dynamo kick boxer former captain of the Lingerie Football League’s Miami Caliente. Her dynamic camera presence, candid and sensitive interview style, adventurous spirit and wry sense of humor all merge on set to create a one-of-a-kind persona the likes of which Spanish television has never seen before. Stella is beautiful, energetic and charismatic; embodying the Latin flavor that has come to be Miami’s signature. Watch as she transitions between Spanish and English while hosting Livin' La Vida with Stella and Stuart, leaving a lasting impression on viewers all over the country, and ushering in a new era for Latin television programming.

This entry was posted in Fitness, Interviews on November 11, 2011 by SNI.

**Interview – Fighter, Christopher Algieri, CISSN**

SNI: What is the most important nutritional component when training for BOXING/MMA?

**Chris:** My answer may come as a surprise, but I think carbohydrate ingestion is vital for any combat sport. There is no low-carb boxing! The energy requirements are incredibly high and I know from my own experience if my CHO intake is not continually moderate-high throughout the day, my performance suffers a great deal. The majority of my carbs come from complex sources like steel-cut oatmeal, quinoa and legumes. Combat sports are conducted in specific weight divisions so monitoring your CHO intake becomes a vital part of training camp in order to perform at the highest level while “making weight”. Keep a tight control on CHO intake is so important for success in any combat sport.

SNI: List the top 3 weight training exercises for BOXING/MMA and why are they your top 3?

**Chris:** There is a long standing myth that weight training makes a boxer stiff and slow and is a hindrance to training. This idea is archaic (and ignorant!). I really think that Strength and Conditioning is behind the times for combat sports—but is slowly catching up to other sports. My strength and conditioning coach, Dr. Michael Camp CSCS, says that any exercises involving rotational movements and those that target the hips and glutes are vital for increasing punching power and explosiveness. Personally I would have to say my top 3 would have to be 1) Rotational Medicine Ball Throws 2) Box Jumps and 3) Side-step squats with resistance tubing. The med ball throws simulate the movements involved in punching and the box jumps are great for explosiveness and lower body power (where the power of a punch is generated); the side-steps are great for strengthening to the whole lower body,
especially the hips, where I believe many athletes forget to train.

**SNI: What supplements would you recommend for BOXING/MMA fighters?**

**Chris:** I definitely recommend a fast-digesting protein such as Whey Isolate for immediate consumption post-workout. Glutamine is literally my favorite supplement and an essential nutrient for any athlete/active individual! A good omega-3 supplement is so important for recovery from the constant battering of the body that combat athletes experience. Lastly, I think creatine is also important for improving gains during training and for increasing explosiveness and power generation.

**SNI: What is the biggest myth that folks have regarding BOXING/MMA fighters?**

**Chris:** I would have to say that fighters are “stupid” and like getting punched in the face. Boxing is the fastest chess game in the world. You are constantly trying to read your opponent’s next move while hiding your own intent. Watching a fighter who really knows what he is doing in there is a real sight to see—they know what is going to happen before it even happens and they always work towards the “checkmate” (KO). Next time you watch a fight, try to look beyond the punches and kicks and watch the rhythms and trends of what is going on inside the ring/cage— you may be surprised about how much is really going on in there.

**SNI: What’s the harder sport to train for? Boxing or MMA and why?**

**Chris:** I would have to say MMA, for sure. There is so many aspects to the MMA athlete— boxing, muay thai, wrestling, jui-jitsu. The time commitment alone is unbelievable and I definitely tip my hat to those guys who really do train the right way. Even from a technical standpoint— to train to defend so many techniques is daunting to think about. You have to worry about so many weapons— punches, kicks, elbows, knees, takedowns, slams, submissions. You can be the best standup guy in the world, but if you don’t train for the ground, it may be all for naught!

Christopher Algieri graduated from Stony Brook University with a Bachelors of Science (B.S.) degree in Health Care Science. After earning is undergraduate degree, he went on to receive his Masters in Clinical Nutrition (M.S.) at New York Institute of Technology. He currently is finishing up his Pre-Medical prerequisite coursework while studying for the MCAT. Christopher is a Certified Sports Nutritionist (CISSN) by the International Society of Sports Nutrition (ISSN) and a NESTA Certified Fitness Nutrition Coach. He has worked closely with many top combat athletes in Boxing, MMA, and Kickboxing. While completing his undergraduate study, Christopher competed in Full-Contact Kickboxing and went on to close an undefeated professional kickboxing career of 20 wins with no losses. During his kickboxing career he accumulated many regional and international titles that culminated with two World Championship Titles (ISKA and WKA) in two different weight divisions. After retiring from the sport of Kickboxing at the age of 23, Christopher decided to turn to professional boxing. He is currently undefeated (11-0) and is looking to vie for the Junior Welterweight World Title. For more info: [http://www.chrisalgieri.com/](http://www.chrisalgieri.com/)  [http://competitiveedgephysicaltherapy.com/](http://competitiveedgephysicaltherapy.com/)
Let's face it; when you think of yoga, many of you think of old skinny men from India getting in bizarrely twisted postures humming to the sounds of nature and breathing like it’s an art form. Okay, that’s a bit tongue-in-cheek, but yoga is actually a bit more complex than that. In fact, there is a form of yoga that is ‘new’ to many of you. That’s right, aerial yoga.

Aerial Yoga is a unique type of Hatha Yoga that combines the traditional yoga poses with the physical training of aerial acrobatics. Aerial Yoga is an unique hybrid of dance, gymnastics, acrobatics, pilates and of course yoga. Aerial Yoga uses a low hanging fabric hammock to partially or fully support the weight of the body that increases flexibility, relieves tension in the spine and neck, and develops core muscles. During an Aerial Class, the instructors work to assist the students to translate the sensation they feel on the mat into the hammock. While the body is being supported students learn how to achieve proper alignment through relaxation versus effort while increasing a peaceful mentally, spiritually and physically state.

**Most frequently asked questions about aerial yoga**

**What is Aerial Yoga & What are the benefits?**

There are many forms of Aerial Yoga out there right now but to me Aerial yoga is traditional yoga using a prop such as the hammock to assist the practitioners in achieving proper alignment, relieving tension and stress on the body, elongating the spine and moving each joint through its full range of movement.

**Is it only for advanced yoga practitioners?**

No, anyone can do yoga, you are never too old to begin a yoga practice. If your breathing you are doing yoga. So therefore, in Aerial Yoga we are taking our floor practice into the hammock either partial or fully supported. If you sit in aerial child pose, you are doing yoga.

**What are the contraindications?**

Who should not practice aerial yoga? Even with a traditional yoga practice the practitioner should adjust their practice based on their own physical limitations. It is the same within an aerial yoga practice.

**How often should someone practice?**

That is a tough question…for me, incorporating yoga into my daily routine provides the balance that I need in my life.

**What is required to wear?**

Wear loose, stretchy comfortable clothing. It is recommended that participants of Aerial Yoga wear leggings that cover the back of your knees and shirts that cover your armpits. Do not wear clothing that has metal, buttons or zippers and no jewelry of any kind should be worn on the hammocks.

**Is aerial yoga also for guys?**

Yes, absolutely. Guys are more muscular and because of that tend to have less range of motion. Aerial yoga allows men to get into poses in the hammock that they would not be able to in their mat practice. I love when I see men come to class.
BIO – Vita LoFria has been a certified yoga instructor for more than a decade and most recently, licensed as an Unnata® Aerial Yoga Instructor. Vita grew up in Queens, NY where she spent a lot of her time studying dance and gymnastics. In 1996, she took her first yoga class and knew she found the mind body connection she was searching for. In 2001 she became a registered teacher through the Yoga Alliance after completing her 200 hour training through Yoga & Inner Peace and began teaching at the center. She extended her studies to become certified in Restorative Yoga, Breathing and Meditation and most recently a Licensed Unnata® Aerial Yoga Instructor. Vita holds a degree in Alternative Medicine with a minor in Exercise Physiology. This background has helped her promote healthy living through education, nutrition and physical fitness.Vita’s mission is to empower others to find balance within one’s self and to discover their life force. Please go to www.vita-prana.com for more information on Aerial Yoga.

This entry was posted in Fitness and tagged Aerial Yoga, Yoga on October 31, 2011 by SNI.

Interview – Dana Cavalea CSCS, The NY Yankees S & C Coach

SNI: Baseball is a sport that uses the ATP-PCr energy system. Is there a role for long distance running or any other form of ‘cardio’ training in baseball (or softball)?

Dana: A few years back we focused on just training the ATP-Pcr system and we actually saw a rise in lower extremity injuries. What we concluded from this practical research study is that the overall volume was to low- and creating protocols focused strictly on ATP-PCr without building an aerobic base- and an interval base was leading to our athletes being less conditioned and susceptible to breakdown. Now- we spend a training block we call BASE Building- from there we begin to become more ATP-PCr focused.

SNI: What is your view of ‘functional training’ for baseball players?

Dana: All our training is functional- there is always a purpose to what we are doing and a goal in mind based around achieving some type of functional outcome- ex. For players with tight psoas and hip flexor complexes- we focus on using exercises that create length through this region and then become to use activation and strength based exercises to re-activate inhibited muscle. Using protocols that force increases stabilization and transitioning to strength and power is our goal.

SNI: We see baseball players swinging a ‘weighted bat’ prior to batting. Does using a weighted bat for warm ups help, hurt or have a neutral effect on batting performance.

Dana: This question can be answered several ways- but I am going to answer it from a practical standpoint. The most talented players in the game use it to “GET LOOSE” and not increase bat speed- so the answer is it has a positive effect on players – making them feel unrestricted when they swing. From personal experience it helped me keep my swing plane. The science junkies would argue that it slows the bat down- but our guys continue to set records in regards to home runs.

SNI: What are the most important exercises that baseball/softball players should perform in the weight room?

Dana: Any exercise that creates length through the hip flexors- lunge with reverse reaches- and length through hamstrings- dumbbell RDL

SNI: What are the most common myths regarding training baseball/softball athletes.

Dana: One myth that I feel holds players back is: you can’t lift heavy- our players lift very heavy during...
certain times of the year. There is no maintenance phase- we are always making gains.

Dana Cavalea is the Founder of ML Strength and currently serves as the Director of Strength and Conditioning for the New York Yankees. He has also spent time with the Pittsburgh Pirates and Toronto Blue Jays. Dana founded ML Strength, a company that works to provide athletes with first class professional training that simulates a professional training atmosphere. Dana is certified by the CSCS, NASM-PES and the USAW. Coach of the 2009 World Champion Yankees. In addition- he consults with Under Armour and is on the Under Armour Performance Council. He is a graduate of the University of South Florida with a degree in Exercise Science. He currently resides in White Plains, NY.

www.mlstrength.com “Train Like A Pro”

This entry was posted in Fitness, Interviews on October 26, 2011 by SNI.

Yes or No? The Final Answer on Nitric Oxide (NO) Supplements.

By: Eddie Jo, MS, CSCS, NSCA-CPT and Michael J. Ormsbee, PhD, CSCS, CISSN

Date Published: October 2011

Aggressive marketing and anecdotal claims about nitric oxide (NO)-supplements result in an abundance of reports about the incredible impact of NO on muscle mass and performance. For example, this excerpt about NO-supplements is typical in the world of sports nutrition:

“... the first of an exciting new category of muscle-enhancers known as hemodilators. [NO supplement] has the unique ability to perpetually sustain the flow of muscle-building agents to skeletal muscle... By increasing nitric oxide production, [NO supplement] increases your maximum contractile velocity – in all muscle types. The results are immediate and consequential, and include increasing your load capacity, boosting your power output, and quickening your muscle contraction.” – Anonymous

These very “sciency” claims quoted from a not so “sciency” source have resulted in an explosion of NO product sales in recent years. Nonetheless, claims as such, or at least some close variation of it, often decorate product labels of commercialized NO-supplements and frequently succeed in selling consumers of its proposed benefits. However, rarely (or perhaps never) do these products back these claims with supporting scientific evidence. Why? Simply put, no supporting evidence actually exists, at least at this point in healthy individuals. Regardless, NO-supplements or complexes that include an NO “enhancing” proprietary blend remain extremely marketable and continues to advance as a popular sport supplement amongst those seeking to improve muscle growth and performance.

I will say, however, that select supplement complexes implicated as NO and muscle blood flow enhancers, have shown through limited research to improve markers associated with muscular growth. However, be mindful that these particular NO-supplements eliciting these positive results additionally include ergogenic ingredients, namely, creatine, BCAAs, beta-alanine, and caffeine, all of which are supported by research to possess muscle enhancing properties- more on this later. This
What is nitric oxide and what role does it play during exercise?

Before delving into a discussion on the proposed effects of NO-supplements, it might be best to highlight the physiology behind muscle blood flow during exercise. In the normal vascular response to exercise, the cardiovascular system is neurally stimulated in such a way that elevates heart rate and constricts blood vessels (i.e. vasoconstriction). Vasoconstriction decreases the diameter of vessels and reduces tissue blood flow. However, given that contracting muscles exists as the most metabolically active tissue during exercise, increasing blood flow to these muscles remains essential to ensure adequate supply of important nutrients and substrates (e.g. oxygen, glucose, etc). Thus during exercise, contracting muscles produce metabolites, such as lactic acid, that help counteract vasoconstriction and stimulate vasodilation exclusively in the surrounding vessels. This process is primarily mediated by the actions of NO, a potent vasodilatory stimulator naturally produced in specialized tissue within blood vessels called endothelium. Such vascular behavior during exercise, thereby, shunts or redistributes blood flow away from inactive tissue (e.g. GI tract) and towards active tissue (e.g. muscles), to ensure sufficient blood supply for oxygen delivery and metabolic waste removal. In a nutshell, the contracting muscles need blood and the body adapts and modifies the vascular system to deliver blood where it is needed.

With that as a background, NO supplements claim to enhance this process during exercise by increasing NO bioavailability in muscle blood vessels through the metabolism of two amino acids, arginine and citrulline. The endothelium generates NO from these two amino acids through the following conversion process: citrulline —> arginine —> NO. Thus, the term "NO-supplement" is essentially referring to supplementation with arginine, citrulline, or a both amino acids. It is claimed that supplementing these amino acids, pre-workout, will enhance NO production, vasodilation, muscle blood flow, and exercise performance, sequentially. As a result, gains in muscle mass and strength will be improved during training. While this idea is innovative hypothetically and sounds great on a label, it is evidentially unsupported (despite what the bodybuilders are telling you). Here enters the scientific evidence.

The Research

The current body of evidence shows mixed results regarding the effects of arginine supplementation on exercise performance, strength, and muscle growth. Yet, it cannot be ascertained whether any positive gains were due to elevated NO production since no studies actually demonstrated such a correlation. More commonly, however, research indicates that arginine supplementation (usually in a 3g dose) affects neither muscle blood flow nor muscle protein synthesis before, during, and after resistance exercise (3, 10). In line with these findings, other studies reported that arginine supplementation fails to increase the bioavailability of NO during exercise (10). Essentially, supplementing arginine offers no additional benefit to just resistance exercise alone in regards to muscle growth. What about endurance exercise? It can be reasonably hypothesized that through the proposed blood flow enhancing benefits of arginine, oxygen delivery to active muscles will be enhanced. Given that oxygen consumption is a key determinant of endurance performance, arginine supplementation may be advantageous. However, again, the research investigating these effects indicates no benefits to endurance or aerobic performance (5, 9). Citrulline recently became an alternative to potentially enhance NO and muscle blood flow as it was shown to raise plasma arginine levels greater than supplementing arginine itself (as counter-intuitive as it may seem) (2, 7). Consumed arginine, unlike citrulline, is largely degraded through the digestive system thus minimizing its likelihood to enter blood circulation (possibly explaining its ineffectiveness) (7). Although the effects of citrulline on muscle growth have yet to be investigated, evidence indicates significant improvements in aerobic capacity (1). However the question still remains whether these effects were due to an increase in NO and muscle blood flow during exercise.

To date, there has been one study that demonstrated positive gains in muscle mass, protein synthesis, and genetic markers of muscle growth following supplementation of a commercial NO-supplement complex (8). However, this particular blend additionally includes creatine, beta-alanine, and BCAAs,
all of which have shown, through research, to positively affect muscle growth and strength in combination with resistance training. Therefore, it can be assumed that these positive training outcomes were likely independent of NO production and muscle blood flow and not attributable to the “NO enhancing” amino acids.

Explaining the ineffectiveness of NO supplements in enhancing muscle blood flow and performance

Without a doubt a majority of the “muscle enhancing” supplements currently out on the market include some “proprietary” blend trademarked as NO enhancers. Again, the ingredients in this blend typically include arginine and citrulline or some biochemical variant, e.g. arginine-alpha-ketoglutarate (AAKG). If you examine the supplement facts label of these complexes, you will often see that a healthy dose of caffeine is also included. Caffeine, a well-established stimulant, physiologically affects the neural and vascular system in such a way that opposes the effects of NO. That is, caffeine indeed serves as a potent vasoconstrictor in most areas of the body. Therefore, when purchasing a supplement containing both “NO enhancers” and caffeine, you are essentially buying ingredients that produce opposite effects. Consumers often report a sense of “rush” or “pump” following NO-supplementation and often believe that this is due to an increase in muscle blood flow. However, in reality it is most likely due to the stimulatory effects of caffeine (which by the way typically comes in large dosages) or from the exercise itself. Also, any indications of improved workout performance are also most likely attributable to the ergogenic effects of caffeine, other included ingredients, e.g. creatine and/or beta-alanine, or even to the placebo effect itself. Another explanation might involve the efficacy by which NO-supplements raises NO levels in the vessels specifically surrounding muscle tissue. Vasodilation in these particular vessels is critical for increased blood flow to muscle during exercise. However, it could be the case that the arginine/citrulline when consumed failed to exert its effects exclusively in those specific vessels, but rather increase NO in vessels all throughout the body, even in those delivering blood to inactive tissues during exercise. Granted, this problem may be addressed by properly timing NO-supplement intake in respects to your workout session, but this has yet to be researched.

Note to consumers

Several cautions must be observed when purchasing a sports supplement implicated as a muscle mass enhancer. First, you must understand what a “proprietary blend” represents. Often manufacturers list a number of ingredients under a proprietary blend category and the dosage of each individual ingredient is not indicated. Thus, consumers have no idea how much of each ingredient they are ingesting. For example, a muscle growth supplement may consist of 5000mg of a proprietary blend specified as a mix of BCAAs, creatine, beta-alanine, and arginine. However, such a blend may contain insufficient and ineffective amounts of key ingredients for muscle growth, such as BCAAs. As you can see, this imposes a problem because the individual dosage is imperative to the efficacy of a supplement, especially for select ingredients like BCAAs and creatine, which have shown to dose-dependently produce positive effects. Unfortunately, manufacturers often use the “proprietary blend” label as a strategic marketing scheme, often misleading consumers to believe that the supplement contains some specialized and exclusive formula. Therefore, practically speaking, it is recommended to purchase supplements that are backed up by research or purchase each ingredient of interest as a stand-alone supplement instead as a part of a proprietary blend. This way you can modify and optimize the dosage of each ingredient to meet your individual needs. Second, be watchful of supplements that include a blend labeled as “NO enhancers” or some variation. Provided that the supplement complex includes other known ergogenic aids, it is most likely that the efficacy of the complex will not be compromised if the NO enhancers were excluded. Although, seeing that some dosage of arginine and/or citrulline exists in almost all sport supplement complexes today, it would be harmless (at least in small dosages of about 3g or less) if these amino acids happen to be included in your favorite complex. In any case, be mindful not to define the effectiveness of a sport supplement complex by its inclusion of a “NO enhancer” blend. If these ingredients are included in your favorite pre- or post-workout supplement along with other well-supported active ingredients (mentioned above), then you are probably still reaping benefits from your supplement of choice. Just understand that the “NO-enhancing” component is most likely not doing anything but driving sales.
It’s a NO for NO-supplements

As for NO-supplements, the current scientific evidence fails to support the claims of enhanced muscle growth and exercise performance. However, on a more positive note, research does indeed support the remedial effects of arginine and citrulline on high blood pressure or hypertension (4, 6). Therefore, those who are hypertensive and especially pre-hypertensive might want to look into supplementing these amino acids regularly. Besides these clinical benefits, again, these amino acids seem to have no implications, positive or negative, on muscle growth and exercise performance. However, scientist will continue to test these claims and perhaps delineate any possible conditions in which NO-supplements would be of benefit. Stay tuned.

Eddie Jo, MS, CSCS is currently a doctorate student in Exercise Physiology at Florida State University. He is also a certified strength and conditioning specialist and has worked extensively with various athletes.

Michael J. Ormsbee, PhD, CSCS, CISSN is an assistant professor in the Department of Nutrition, Food, and Exercise Sciences and a research faculty member of the Institute of Sports Science and Medicine at The Florida State University. He specializes in exercise training and performance nutrition to optimize body composition, performance and overall health. Visit him at www.mikeormsbee.com.

References:


Interview – Dr. Chris Scott, The World’s Metabolism Guru

**SNI**: Okay…is the human body (i.e. skeletal muscle fibers) ever truly ‘anaerobic’ during what we call ‘anaerobic exercise’?

**Dr. Scott**: No. Like many living things we are absolutely dependent on and are continuously consuming oxygen at all times. Anaerobic metabolism serves to supplement aerobic metabolism when needed. For example when feats of strength, speed and power are required of muscle tissue.

**SNI**: If you had to give exercise advice to someone who wanted to lose the most fat mass, would your recommend HIIT or long slow duration endurance training? Why?

**Dr. Scott**: HIIT would be recommended for weight loss for the simple reason that it costs more. High intensity activities associated with strength, speed and power require aerobic and anaerobic energy expenditures to fuel the exercise periods and aerobic energy expenditure to fuel the recovery from those multiple intense exercise periods. Add this all up and the caloric costs can be substantial as compared to long slow endurance exercise.

**SNI**: What is the biggest misconception regarding human metabolism?

**Dr. Scott**: I’m under the impression that aerobic exercise (running or cycling long distances) is being used to explain the physiology of HIIT-types of activity. It is wrong to me that the energy costs of activities that likely contain a large “anaerobic” component are estimated via oxygen uptake measurements. Along these same lines we define an elevated oxygen uptake after aerobic exercise as excess post-exercise oxygen consumption (EPOC). Likewise after a single set of weight lifting a recovery oxygen uptake (EPOC) component is seen. Yet add another set to the previously mentioned weight lifting and the first recovery oxygen uptake component is now considered as part of exercise oxygen uptake, with the second recovery period now assuming the EPOC role (with multiple sets and exercises during resistance training, this format goes on and on and on…).

**SNI**: You go to a state fair and you see more fat people than there are chopsticks in a Chinese restaurant convention. Put in the most simple terms, why are Americans so dang fat?

**Dr. Scott**: My take is our eating habits and many types of behavior associated with eating are the major culprit behind our overweight/obesity problem. Lack of exercise doesn’t help things either.

**SNI**: Does your body process calories consumed in the evening versus the morning?

**Dr. Scott**: Circadium rhythms are real, with the possibility of having a multitude of effects on how different foods are processed over a 24-hr period. It’s also likely to be highly independent, being different among different people.

**SNI’s Bonus fun question**: If you could have superhero powers, what would they be and why?! I was always a fan of Spiderman. But after watching the Green Lantern (which was not that great of a movie) I got to thinking, “man, if I could have a ring that could create anything I could think up in my imagination…well, I’ll take one please”.

Christopher Scott PhD is an Associate Professor at the University of Southern Maine. Burr…sounds cold. Chris has spent considerable time as a working exercise physiologist: as a Research Associate
at the Cooper Institute for Aerobic Research in Dallas, TX and in clinical medicine with two cardiology and pulmonary practices. In his 9 years as a professor Chris has taught 15 classes within the College of Nursing and Exercise, Health and Sports Sciences Department. He is the sole author of a textbook on the subject: "A Primer for the Exercise and Nutrition Sciences: Thermodynamics, Bioenergetics, Metabolism" (Human Press, 2008). In a 5-star ranking this textbook was recommended for "...its exposition of the thermodynamics of living systems and in particular for its renewed emphasis on the idea that matter and energy changes are largely driven by gradients. We found Chapter 10 most instructive due to the quantitative perspectives on both the enthalpy and entropy changes in glycolysis. Most standard texts deal only with Gibbs free energy changes with the result that it is not obvious where the energy for ATP synthesis comes from during this process. Scott makes it clear in Table 10.1 that entropy changes are important. In addition, the concluding deliberations on energy expenditures during different physiological states are thought-provoking." His BS was from Springfield College, MS from the University of Arizona and he holds a PhD in Zoology and Physiology from the University of Wyoming.

http://www.anaerobicenergyexpenditure.com/professorscott.html

This entry was posted in Interviews on October 19, 2011 by SNI.

Interview – Endurance Maniac Michelle Adams, CISSN

SNI: So you’re training for a 40 mile run; are you crazy!? Seriously, what motivates you to take up a challenge that 99.9% of the population would say is borderline insane?

Michelle Adams: I seem to remember a saying we had back in high school- ‘distance runners are a bit off in the head’ but I think my definition of a distance runner was a little different back then. My husband thinks I’m crazy, although he probably thought I was crazy when I told him I wanted to run a marathon as well!

Honestly I didn’t grow up with a desire to run 40 miles, it just kind of snuck up on me. Ok, I can hear you snickering, but really, it did. I wanted to do a half marathon and from there I was goaded into doing a full marathon (that was in 2009), and haven’t looked back since. Last December I ran a 50k- that is a little over 31 miles for those of us still not versed in the metric system. Pretty cool. When one of my running friends said she was running a trail marathon and told me that they also had a 40 mile race, I thought ‘what the heck?!’ I remembered something I had wanted to do to celebrate my birthday last year—run 37 miles. Well, made the 31 and guess I forgot what I had planned so it stopped there. This is my way of scoring for this year and making up for last year as well! An added bonus—the race is on my birthday weekend!!! J

SNI: Obviously, you need to do some long distance running, what nutrition/supplement strategies do you have pre, during, and after a long training run?

Michelle Adams: Yes, a training plan is a MUST. However a solid nutrition and supplementation plan is PARAMOUNT! If I can’t get through one session, recover and get to the next it doesn’t matter how great my training plan is I will not succeed.

Living in Florida and training during the summer means that my runs happen first thing in the morning. Generally speaking for a run of less than 10 miles, I am good with 30-35g whey isolate protein before I head out the door. Mixed with water and taken 35-40 minutes before the run gives those amino acids time to get where they need to go. Two hundred milligrams of caffeine grab my bottle filled with Gatorade and I’m good to go. Runs longer than 10 miles requires a bit more lead-time as I generally need a full breakfast and time to digest.
Full breakfast generally includes old fashioned oats, mixed berries, walnuts/almonds and milk concentrate protein. When it is time to hit the road I’ll grab the Gatorade (mixed with BCAAs) and also some GU chomps for my fuel during the run. Running an Ultra event also means that I must be able to literally eat and run. Running for hours on end with nothing but liquid (and GU) calories is less than optimal, as well as nauseating. With mileages in the upper teens and 20’s adding in salty, solid foods like pretzels will be necessary. Simulating the race in training runs is the best way to gauge tolerance as well as optimal timing.

As soon as I am finished I have my post run shake waiting for me—whey isolate protein and Vitargo—the fastest digesting/absorbing carbohydrate you will find. As I said, the goal of any training run is to recover and make it to the next one…missing out on the post-training window would put me behind the proverbial eight ball for sure. Weighing myself before and after my run helps to guide my rehydration. Taking in 20 oz of fluid (electrolyte containing, not just water) for every pound lost. Recovery is NOT just about the protein and carbohydrates we take in but also the fluid. Miss this point and you’ll find yourself dragging in your next session.

SNI: What is your typical meal like? Lay out the perfect meal for the SNI audience

Michelle Adams: Ha. That’s an easy one Joey—bagels, pasta and bread. Sheesh, I’m a runner after all! Actually that is probably one of the questions I am asked the most, and NO, that is not my final answer. Highly processed, high Glycemic index/Glycemic load carbohydrates like bagels, breads and some pastas don’t as great a job of ‘carb loading’ the muscles as people think as they are usually timed improperly.

A typical meal for me consists of protein and low GI carbs. You will usually find me eating either chicken or ground turkey breast and black beans. Love me some black beans! In fact, I think I probably eat them in every meal-ok, minus my breakfast and post workout shake!

Protein and carbs in all of my meals helps to ensure that I am adequately fueled for my day.

SNI: What are some supplements you need to take to train for an ultraendurance event?

Michelle Adams: First and foremost- whey isolate protein powder. Without a doubt the best for post run (or pre-run for that matter!). I like to mix mine in water with Vitargo.

Of course, I do have a few other supplements in my pantry. The key players are: branched chain amino acids, Beta Alanine, caffeine, GNC’s Amplified Maxertion, GNC’s Amplified Wheybolic Extreme 60, Vitargo , GNC’s Women’s Ultra Mega Active and Triple Strength fish oil.

SNI: What is the hardest athletic endeavor you’ve ever completed?

Michelle Adams: Hmmm, that is a tough question. I guess I would have to say running the Sunrise to Sunset Relay. It is a 200 mile race across the state of Florida done relay style. Most teams run with 12 people, our team had 9 girls. Yes only 9 and yes all girls J This meant we did not get the ‘rest time’ that some other teams did. You are basically running 3 or 4 legs anywhere from 4-9 miles each leg at pretty much max effort, with maybe a few hours rest. Although challenging to do while crammed in a van and not sleeping for over 30 hours, it IS actually a lot of fun!

SNI: Bonus question: If you could be a superhero, who would it be and why?

Michelle Adams: Hmmm..maybe Jean Grey she was strong, intelligent, physically fit AND got to hang
Michelle Adams BS, MPH, CISSN, CSCS. Originally hailing from western Massachusetts, Michelle Adams received both her Bachelor’s degree and Master of Public Health degree from the University of South Carolina. With over 13 years’ experience in personal training, Michelle is a certified strength and conditioning specialist with the National Strength and Conditioning Association (NSCA CSCS), certified Sports Nutritionist with the International Society of Sports Nutrition (CISSN), certified sports performance coach with USA weightlifting as well as a kettlebell instructor. Michelle is a competitive athlete herself having competed as a professional figure athlete in the IFBB with career highlights including a first place finish at the 2006 IFBB Toronto Figure Championships. More recent endeavors have included marathon and ultra-marathon running. Michelle currently lives in Florida but may also be seen throughout the United States serving as a spokesperson for General Nutrition Centers.

http://adamsadmonitions.blogspot.com/

http://www.runwithtfk.org/

This entry was posted in Fitness, Interviews on October 14, 2011 by SNI.