



MASS UP

THIS IS YOUR REAL SPRING TRAINING By Scott LeCates

Ahh Spring. The flowers are blooming, the weather is heating up, it's swimsuit season (or at least time to start looking at swimsuits and how we look in them), and summer vacations are being planned and mapped out. However, if you are a high school or collegiate football player, it means one thing – spring football and the annual quest for mass and strength! Yep, this is the time that all teams have to prepare to be The Team in the upcoming year. What separates the elite from the middle of the pack is not talent as most teams have their share of talent at all levels. What truly separates the elite is the members' Commitment to the Program. And that Program encompasses much more than your strength workout.

Training and supplementation protocol depends on one's goals and each goal has a different method, but the purpose of this article is to explain the process of gaining an edge for those individuals wanting serious mass and strength gains naturally. Whether you are a football player or other athlete that depends on explosiveness and strength or like me, a bit of a gym rat, the supplementation protocol remains the same. If you are currently preparing for "swimsuit season," tuck this article away for your next bulk cycle as this is Sheer Lean Mass we are seeking today.

Knowing how and when to stimulate our body's own hormones designed for growth (Testosterone, IGF-1, GH, and Insulin) is the key to success. Our focus for the purpose of this article will be on supplementation and macronutrient

timing to maximize these particular hormones naturally without the use of anabolic steroids. Although everyone, no matter their age, will gain noticeable mass and strength with this protocol, I must admit, I envy the high school or college athlete with the absurd hormone levels just waiting for this type of program.

Before we get started, it goes without saying, I do advise consulting with your doctor before starting this program to ensure you are in good health. In addition, anyone who may have high blood sugar or must monitor sugar intake must alter this program to fit your particular limitations.

Let's first touch briefly on the body type factor. Each of us is mainly one of three body types: An Ectomorph is the typical hard gainer. No matter how much they seem to eat, they cannot gain weight. An Endomorph is one who carries higher fat naturally. And then there is the envious Mesomorph. A Mesomorph can work out three months, eat marginally clean and look like they are ready to step on the stage or the field at any time as they gain muscle at a rapid rate. The diet each of these body types require for lean muscle gain is different. The percentage of carbohydrates will be higher in Ectomorphs, and the percentage of fats will be higher in Endomorphs. We will not go into great detail on diet in this article but your local Max Muscle has a Nutrition Specialist who can custom design a diet program based on your body type, activity levels and goals. If you want real results remember that training, diet, rest and supplementation must be working in unison so I highly recommend you get your diet in order if you seek serious lean mass. And for coaches who may be reading this, Max Muscle experts are always willing to come speak to your team regarding this subject. They can even custom design a nutrition plan for each member of the team to maximize the results your team's gains from your strength programs.

When it comes to your workout program, you have to be sure your weight training routine is designed to reach your ultimate goal which is mass gains. To achieve this, we must follow a program that will create an environment for maximum muscle fiber stimulation. There are four different types of muscle fibers – type I, type IIA, type IIB, and recently we have discovered type IIC and they all must be taxed in order to grow at optimal levels. Simply

going to failure is marginal in the quest for monster gains. Once a muscle is fatigued, there is an enormous amount of muscle fibers in reserve that have yet to be used. To fully stress the entire muscle group we have to tap into that reserve to maximize growth. By doing three to four sets of three to four exercises in the same order with the same set types on the same days, it is understandable why someone would see marginal gains. Most teams have a strength coach. For those of us not privy to that, be sure to seek a certified personal trainer who understands this concept and make it known at the consultation what your goals are and ask how they intend to help you reach those goals. Believe me, it's OK to ask your trainer these questions. Individuals can accelerate their progress by working with a personal trainer who is versed on this type of training but for those who do not use a personal trainer or train at home there is a very good book that addresses this subject in depth titled "Building the Perfect Beast, Naturally" by Author L. Rea found at many Max Muscle stores.

Now to the primary purpose of this article – supplement protocol for lean mass growth. When it comes to supplementation for muscle gains, timing is everything. Preparing the body for resistance training, allowing the body to continue to perform under stress for extended periods, and finally recover, repair and build are the three stages of maximum growth.

THE ORDER OF THE S'S

When preparing the body for a full on assault in the gym, we must nourish the body with the proper building blocks for full muscle stimulation. One often overlooked aspect is we should not be performing anaerobic (weight training) activity on an empty stomach. If you work out first thing in the morning, have a prepared shake with a quick acting protein and a high glycemic carbohydrate mix (such as 2 scoops **Max Iso-Extreme** and 1 scoop **Carbo Max**). Note: although Maltodextrin (**Carbo Max**) is listed in many Glycemic Indexes as a low glycemic food source, it has a very rapid impact on insulin levels and is a good source, along with waxy maize (vitargo) and dextrose, for a quick loading carbohydrate. Have this ready when you wake – this is especially important for morning weight trainers because you will be taking additional supplements in a bit that need to be

taken on an empty stomach as much as possible. Remember the Order of the S's – Shake, Shower, Shave and ... well you get the picture. By the time you are halfway through your shower, your muscles are receiving a much needed bath of aminos and glycogen allowing the catabolic (muscle breakdown) process that occurs after an extended period of not feeding the muscle to come to a screeching halt. The insulin spike from the carbohydrates will also decrease cortisol levels that rise when we sleep. Cortisol, when left to run amok, is muscle tissue's enemy No. 1 and loves to get cozy with the hated fat tissue. Another aspect of the carbohydrate ingestion is liver glycogen must be present to maximize IGF-1 (insulin-like growth factor) that will increase during resistance training leading to greater size gains and leaner physique. Yep, knowing when to ingest high glycemic carbs is one of the keys to muscle growth and fat reduction. Low carb diets do not work when building lean mass – save that for your physique defining cycle.

OUT OF HIBERNATION

When it's time to train, most of us have spent the past 24 to 48 hours recovering from our last workout. It's now time to switch to preparing the muscle for complete stimulation and this requires different supplements than the recovery and repair process. I like to call this the Out of Hibernation period. The body has been minding it's own business the past day or two just focusing on recovery from the damage you did to it last time and now you want it to perform at optimal levels in a few minutes. Hmm, much like being woken in the middle of the night with a blinding flashlight and asked to recite the alphabet – backwards.

Some of the most widely used pre-workout supplements are drinks such as **Full Blown Extreme**, **NO-Xplode**, and **SuperPump**, among others. Although most of us like (who am I kidding – need) additional energy before the workout, the one thing I see happen way too often is more is better. If one scoop gives me a good workout, three will be even better! Here is a major draw back of the stimulants, they kill appetite. Remember in an hour your workout will be completed and you will have a 2 hour anabolic window where you need to eat as much clean food as possible and anything that kills your appetite for a prolonged period hinders your growth and strength potential. Some of these drinks have

more than 300 mg of caffeine in a couple scoops, some are comprised of even more caffeine than actual growth based ingredients – be careful with undisclosed caffeine amounts. A \$50 bottle of caffeine is pricey, even in New York! There are definite advantages to these drinks but use moderation for best results.

The three supplements that prepare the body for prolonged activity and maximum muscle fiber stimulation are creatine, Nitric Oxide stimulators and carnosine.

Carnosine is an amino acid comprised of the amino acids Alanine and Histidine. Although not widely used in the past, the subject studies done in the last few years involving carnosine show tremendous value to lean muscle and strength gains as well as improved athletic performance. When we work out intensely, hydrogen ion production increases causing early onset fatigue (lactic acid). Carnosine buffers this allowing more intense workouts for longer periods of time. Imagine performing set 10 with the same intensity as set 1. Or imagine the game going into overtime and still having high energy levels, leaving the other team in your wake. This is very challenging if we are truly giving it all and performing at maximum levels. However, carnosine helps us achieve just that. This is why Max Muscle currently has a very cutting-edge carnosine product in development as we speak. Although we are discussing strength and size gains in this article, the reduction in lactic acid can provide major benefits to endurance athletes as well. Look for Max Xtinguisher to hit Max Muscle shelves in the near future.

Now add creatine which we should all know by now is extremely safe and effective at increasing production of ATP (adenosine tri-phosphate) levels. The muscle needs ATP every time it performs as it serves as the fuel for the movement. Supplementing with creatine allows the body to manufacture ATP at a faster rate thus reducing the rest period for the muscles. I would hope everyone wishing to gain lean mass is currently taking some form of creatine. However, I usually recommend taking creatine after a workout for recovery as opposed to pre-workout for reasons explained below.

Nitric Oxide (NO) stimulating products force the body's tissue and vessels to expand. These products

typically contain Citrulline and Arginine. Some may even contain creatine but few are really effective as the arginine has to be a time released form so the creatine can be absorbed efficiently. This is why I usually suggest taking creatine after the workout unless one is using an effective blend of creatine/NO. By expanding the tissue and vessels, the stage is set for two things – deeper muscle stimulation and more recovery nutrient absorption. The more the tissue is stretched, the more damage can be done much like it's easier to pop an inflated balloon than a non inflated one. As for recovery, consider this analogy: The larger the drain, the faster water clears the sink. Think of the drain as a gateway to the muscle and the water as your recovery nutrients. Then consider the drain size can be controlled by the NO levels in your body. High NO, bigger drain! Low NO, clogged drain!

PUT ANOTHER LOG ON THE FIRE!

OK, we have nourished the body for mass gains and we are into our work-out. Oh, by the way, you did perform warm up sets didn't you? Always perform two to three warm-up sets before beginning the heavy weight portion of your program. If not, you will soon hear the nauseating sound of a muscle tear. OK, back to the workout. You are now halfway through your program and just ripping it up today. The weights seem to be moving on their own and you are in the rarified air of a personal record day. When the endorphins are popping, the joints are feeling good and the weights seem light, you know you must take advantage of this environment. This feeling must be what Michael Jordan felt on most nights, you know there is nothing that can stop you today. You want this workout intensity to last as long as possible to get the absolute most out of the workout but the body holds only so much energy and endurance in reserve, so what can we do?

My suggestion for all workouts is to begin the recovery process halfway through to re-energize and re-fuel the muscle. Before that fire has a chance to go out, throw another log on it! For the first stage of recovery, the body needs branch chain amino acids (BCAA's), glutamine, and ideally some form of fast carbohydrate (20 grams or so should suffice for this drink) with a glycogen storing supporter such as ALA, Vanadyl, Tamarindus Indica or other supplement. The muscle has

been estimated to be between 30 and 40 percent BCAA's so obviously supplementing with these can make or break mass gains. Start drinking this formula halfway through and finish by the time your workout is complete.

There are a couple things here to note. First, amino acids do tend to compete for the same receptors, thus they are absorbed at different speeds. However, BCAA's and glutamine do not compete and are absorbed very quickly. Combine that with another insulin spike from the carbs and it's like taking a bus full of recovery and endurance and doing 120 MPH on the Audubon straight to the muscle (am I the only one envisioning a nice little cartoon drawing here?). The muscle get its refill of fuel within minutes of ingesting this combination and allow your body to continue when others have hit the wall. Second note of importance is the carbohydrate in this mix. Remember what we said at the beginning, a muscle with good glycogen levels has better protein synthesis properties and liver glycogen needs to be present to induce as much IGF-1 as possible during the workout. This is key in the next two hours as you want to turn over as much protein and release as much IGF-1 as possible for growth during our anabolic window of opportunity. Third note of importance is the fact that BCAA's and glutamine ingestion will result in less DOMS as we discussed earlier. Yeah, that means less agony when going to the bathroom the day or two after a hard leg workout. Max XTR was designed for just this purpose. Not only will it deliver the BCAA's and glutamine but also deliver another boost of NO stimulators. Remember that balloon?

You have already separated yourself from your competitors but you desire to be The Team this year so you need to distance yourself at this time. This is where the rubber meets the road. Are you ready?

T MINUS AND COUNTING

You have just had the most incredible workout of your life, endorphins are popping so fast you don't want this workout to end and you can't wait to hit the gym tomorrow. Well, hold it there; it's time to let those muscles recover. Yeah, I know, many of us are just starting our day but it's time to just let the muscle heal. We all know we will feel this in a day or two, but not as bad as your competition who did not take their mid-workout recovery/re-fuel drink. Most importantly, the countdown

has begun. You now have 120 minutes to consume as much good clean food as possible to maximize the incredible anabolic window you just created for yourself.

Let's start with another blast of a fast protein and carb mix. This time we want more protein – 50 grams for men, 30 grams for ladies, and roughly the same amount of carbs as pre-workout (30 grams or 1 scoop **Carbo Max**). This time we are going to add vitamins to neutralize those nasty little critters known as free radicals we just released into the body. I like **Max Vit-Acell** for this as it mixes well with most of the MMSN **ISO-Extreme** flavors but **Max Green Synergy** is also a good choice for this and the flavor goes a bit better with **Blue Ice** than **Vit-Acell**. In addition, I add my creatine for ATP replenishment. This shake is best taken 20 minutes after you finish the mid-workout drink to allow complete absorption of the BCAA's and glutamine. This will be the last fast carbohydrate you will be taking today.

Thirty minutes after your recovery shake, it's time to get a moderate sized whole food meal in your system to allow a more steady supply of macronutrients. Since insulin spikes eventually lead to insulin drops that leave us craving more sugar and feeling extremely lethargic, we must nip that in the bud. Part of this meal will consist of a whole grain carbohydrate of choice such as ½ cup oatmeal, 2 slices whole wheat bread, ½ cup brown rice, ½ yam, or even 2 oz. whole wheat pasta. By consuming this before we get the full onslaught of the insulin drop, we should notice a steady energy supply while our muscles are continuing to be fed the much needed supply of food. In addition to the carbohydrate, we need to consume a clean, low fat, source of protein to go along with it. Good choices would be six egg whites, 4 oz. chicken breast, turkey breast, fish or ½ cup cottage cheese.

Are you full yet? I hope not, you are seeking mass, are you not? We have one more meal to go before our 120 minutes is up. Remember when I mentioned you do not want to kill your appetite with stimulants? The third postworkout meal will be eaten 1½ - 2 hours postworkout and will consist of

proteins, carbohydrates and fats. Yep, it's time to introduce fats back into the diet. This would be a full meal as designed by your Nutrition Specialist as the amounts of carbohydrates and fats will be based on your body type.

For those who train late in the evening followed by bed soon thereafter, this protocol will be difficult. If you want the absolute best possible gains, try to reschedule your workout for a bit earlier to accommodate the necessary meals your body needs for growth. If your schedule absolutely does not allow this, my recommendation would be to move the large meal up eliminating the moderate sized meal.

GOOD NIGHT NOW!

By now, we all know real growth and recovery occurs when we sleep. When we sleep, we release growth hormone (GH) and produce testosterone although this slows as we age. Don't

For GH stimulation, there are a number of products on the market that make some outrageous claims concerning a special blend of amino acids or some special herb found wild in the Amazon, but the reality is this, arginine, glutamine, ornithine and GABA can all stimulate GH production when taken on an empty stomach.

worry ladies, you will never have enough testosterone naturally to become manly in your appearance or voice, but it is nice to know testosterone controls sex drive in men and women. Many of us like to supplement to help defy Father Time or just to increase our base levels of these hormones naturally.

So, to top off the workout and put your competition in another zip code here are a few suggestions: For GH stimulation, there are a number of products on the market that make some outrageous claims concerning a special blend of amino acids or some special herb found wild in the Amazon, but the reality is this, arginine, glutamine, ornithine and GABA can all stimulate GH production when taken

on an empty stomach. An empty stomach is crucial for the amino acids to pass the blood brain barrier. There is one other product that I think works remarkably well for this and it's Macuna Pruriens Extract. The issue with this extract is it has to be standardized to deliver as much L-Dopa as possible. Most products are standardized to 10 percent L-Dopa with some at 20 percent L-Dopa. There is one product I know that is standardized to 99 percent L-Dopa: LG Science's **I-GH-1**.

As far as testosterone support, the selection is even more vast and confusing. Although most testosterone support products are either Tribulus based or aromatase inhibitors, the purity of the ingredients is the key to product effectiveness. As far as men's supplementation, I have my favorites that have worked incredibly well for me including **Max Anabol** and ALRI's **Jungle Warfare**. However, there are many quality products (unfortunately, even more that are not) and you simply cannot try them all. So, speaking with your local Max Muscle owner or manager about what they have found to work for them and their clients is your best bet.

As far as a basic overnight recovery product, I must say **Max ITRX** is my favorite. Although not designed to substantially increase testosterone or be a powerful GH releaser, the recovery benefits from this product are phenomenal. You will not believe the rest your body gets on this leading to more energy, better recovery and more focus. This product is designed to destress the body from a hard day at the gym, a hard day at work, school or even just a long day in general. If you have trouble sleeping, recovering or even under a bit of stress, I highly recommend this one.

Hope this helped you understand more of what it takes to get the most mass possible as fast as possible. I do not claim to have a doctorate in physiology or other fields. This advice has come from countless hours of research and application on myself and clients. Over the years I have found this to be the best possible protocol for the best possible gains in mass. So, good luck in getting the mass gains you seek! **MS&F**