

Supplement Guide

Welcome to the Return to Prime Supplement Guide!

This Supplement Guide has been taken directly from the Return To Prime book. What you'll find in this guide are supplements scientifically proven to support the anti-aging, muscle and strength building workouts from the main manual.

Phase 1 - Angiogenesis.

This phase focuses on the creation of new blood vessels (capillaries) to your muscles to better support the muscle mass you're currently carrying and to better support FUTURE muscle growth.

The supplements you'll find in this section help your body maximize this process (in fact, one of these supplements is basically <u>essential</u> to the process...luckily, it's inexpensive and good for a lot of other things, too).

Phase 2 - Connective Tissue Strength

In this phase, we're looking at supplements that support the strengthening and healing of your connective tissue. These are primarily "raw material" supplements, taken with the goal of providing your body with the structural nutrients it needs to maximize the rebuilding process.

By giving your body these raw materials, you won't limit the RATE and AMOUNT your connective tissue can be strengthened and repaired.

Phase 3 - Hyperplasia (Muscle Fiber Splitting)

There are a number of supplements in this phase that can assist in the process of hyperplasia that we're looking to achieve.

And there is ONE supplement that is AMAZINGLY effective for this process.

Similar to how "raw material" supplements work for supporting connective tissue strengthening, this supplement works for supporting muscle fiber growth via satellite cell proliferation (I'll explain this in detail in that section...it's powerful).

Phase 4 - Nervous System Activation and Efficiency

These supplements are primarily targeted to supporting the nervous system by providing it more materials for neurotransmitter production. There are some that can help with activation as well.

Testosterone Support for Anti-Aging Muscle and Strength

In this final section, you'll find the supplements I recommend for general testosterone support while doing the program. These can help with overall recovery and energy levels, which will help you get more out of the training done in the program... and help you build more muscle and strength!

Get Return To Prime Here



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Supplement Guide

In my experience, supplements can be useful but are generally optional. You should always focus on quality nutrition first.

That being said, there ARE some supplements that approach the "must use" threshold for specific phases of the <u>Return to Prime program</u>. These ones are very highly recommended as they can have significant positive effects on the results you get with the program.

Each phase in this program has very different requirements for potential supplementation, depending on the physiological goal of the phase. In many cases, these requirements are completely different...in some cases, there will be some overlapping recommendations.

Keep in mind, I'll be giving you a LOT of options in this guide...you don't have to take all of them. I've shared my recommendations in terms of exactly how important I believe a specific supplement is to the program.

You can purchase these via my recommended links here (these are the supplements I use myself and can vouch for the quality and efficacy of the ingredients) or you can get many of these at your local supplement or health food store.

Three Basic Supplements You Can Use In ALL Phases of the Return to Prime Program

Before I get into each specific phase, I do want to mention a few key supplements that can be taken during all four phases of the program...protein powder, digestive enzymes and creatine monohydrate.

1. Protein

Do you NEED to take a protein supplement? Nope, you don't.



However, it is a convenient and effective way to get extra protein quickly and easily. If you're going to take a protein supplement, get a good quality one. And if budget is an issue, take it only when it'll have the most impact...immediately post-workout.

If you've been training awhile, you likely already have a favorite protein powder. You can absolutely stick with that.

This is the protein supplement I use and recommend.

2. Digestive Enzymes

The old saying "you are what you eat" is not quite on the mark...you are what you ABSORB.

As you get older (especially once you pass 40), your body's production of digestive enzymes starts to decline. This makes it tougher to get nutrients out of the food you're eating, no matter how good the quality is.

Without good digestion, you can be eating a ton of protein and taking the best protein powder and still not be absorbing the protein you need for maximum results with this program.

Because of this, in addition to protein, I also HIGHLY recommend you look at taking a good digestive enzyme product, especially one targeted to help you digest protein.

This is the digestive enzyme product I use and recommend. I take it before every single meal, without fail. I noticed a significant improvement in my digestion the very first time I took it.

Again, do you NEED to take it? Nope. However, it can make a big difference in how well your body makes use of the food you're eating, regardless of whether you're on the Return to Prime program or any other program.

3. Creatine Monohydrate

Creatine is a tried and true supplement. It's one of the most well-researched supplements on the market. It's effective and its safety has been conclusively proven [9]. Creatine is going to be very useful in ALL phases of the program and I would highly recommend taking it for the duration of the entire program.

In the case of Angiogenesis Training, it's very effective for assisting the process indirectly. Creatine will increase total body water levels [10], helping increase the internal pressure being put on the capillaries to force their expansion. In addition, it will give your body more energy supplies for the 2-rep sets done during the protocol, helping you push even further [11].

In Phase 2, it will help with high-threshold strength, especially in the Time-Volume Training and lockout partial training.

In Phase 3, by increasing internal cell volume, it helps with expanding muscle cells [29], which contributes to the process of activating satellite cells for hyperplasia. It has also been shown to have positive effects on satellite cell differentiation *in vitro* (in a test tube) [31,33]. Differentiation in this case is the process of transforming satellite cells into muscle cells.





IMPORTANT!

When taking creatine, mix it in hot water (not boiling, just tap water hot is fine) and stir for a minute or so until it's completely dissolved. This helps ensure optimum absorption. Many people who have issues taking creatine don't allow it to dissolve in this fashion. It's a simple tip and it works well.

<u>You can get Creatine Monohydrate in bulk very inexpensively here.</u> Or you can use your own preferred brand.

I don't recommend anything fancier than regular Creatine Monohydrate. This basic form is inexpensive, readily available and proven to work according to volumes of research studies. It's also the form of creatine used in the study that demonstrated satellite cell differentiation [33] (creatine pyruvate was also tested and shown to be ineffective).

The list of creatine versions that have tried and failed to improve upon the original is long.

As far as loading versus not loading, in other programs, you can do it either way. For the purposes of this program, I DO recommend loading to start with (unless you're already taking creatine, in which case just continue as-is).

The reason I recommend loading is that you want to get your fluid volume up as quickly as possible to take advantange of that "water flooding" effect of creatine. Loading is the way to do this. When you don't load, it takes about 30 days to reach the same creatine levels in your muscles as happens after about 5 days with loading [7].

The in-rush of water into the muscles during the loading phase will dramatically increase your body water levels, which will assist with the mechanisms of Angiogenesis Training.

In order to load, take 4 doses of 5 grams spread over the course of the day. Do this for 5 days straight, then take a 5-10 gram maintenance dose after that. I normally take a 10 gram dose about 30-40 minutes before training.

Phase 1 - Supplementation For Angiogenesis Training

Normally, I don't say supplements are something you MUST take for success in training. However, when it comes to Angiogenesis training, one supplement comes very close for maximum results with the <u>Return to Prime program</u>.

1. L-Citrulline DL-Malate - VERY Important

It's very possible and likely that you've never heard of it before, yet the supplement (and more specifically what it turns into) is actually CRITICAL for the formation of new blood vessels in the human body.

Here's why we want to use it...

- 1. The research shows that the amino acid Arginine must be present in the blood vessel AT THE EXACT TIME that blood vessel formation is occurring [1].
- 2. It is notoriously difficult to get enough Arginine to pass through the intestinal tract and into the bloodstream to have a substantial effect on Arginine levels in your blood...your gut hogs it, basically, just like it does with Glutamine.
- 3. Citrulline is a precursor to Arginine and is converted into it very readily in the body [2]. This will lead to increased nitric oxide levels in your bloodstream quickly.
- 4. Citrulline is NOT taken up by the intestinal tract, meaning MUCH more of it actually gets through the gut and into the bloodstream...upwards of 100 times more than just taking straight Arginine.

5. <u>Citrulline is relatively cheap and can be purchased in bulk (I prefer the 2:1 ratio to DL-Malate version over plain Citrulline due to it's fatigue-preventing effects).</u> I recommend getting the 1 kg size.

Research has shown that 6-8 grams (1-2 teaspoons) is an effective dose of Citrulline.

About 30 minutes before training, mix it into a glass of hot water (just tap water hot is fine), stir until clear then drink.

Now...personally, I've gone as high as 5 teaspoons at once (approximately 25 grams) with no serious adverse effects (the worst I ever got was just a small stomach ache that went away very quickly...nothing that stopped me from doing it again).

I've actually found that level to be VERY effective. That being said, if you decide to use Citrulline, start with the lower dose of 6-8 grams. If you want to work your way up and test higher doses, it can be effective and isn't dangerous. Studies have shown no toxicity even at very high doses [8].

There is no need to cycle on and off Citrulline. In fact, I actually recommend staying on it for the duration of the program. It's an excellent overall supplement.

2. Glycerol - Useful

Glycerol is the molecular backbone of a fatty acid (i.e. triglyceride). It's a water-loving molecule that can also help increase body water volume to assist with the forced expansion of the blood vessels during the Angiogenesis Training protocol.

It has a light, sweet flavor to it and is a relatively inexpensive, yet high-impact, supplement.

Be sure you drink a LOT of water when taking glycerol. It's a very effective hyperhydrating supplement [12], meaning it increases your total body water levels significantly [13].

Take 10-30 grams of glycerol with 20 to 32 ounces of water about 30 minutes before training to achieve maximum fluid volume and expansion.

I would also HIGHLY recommend starting at the low end of the intake guideline as glycerol taken in large quantities can have a laxative effect (which could be very inconvenient). As you determine your tolerance for it, you can work your way up.

Glycerol can be even more effective when taken in conjunction with creatine. In a 2007 study done at the University of Glasgow (Scotland), subjects who took glycerol AND creatine for seven days retained nearly 40% more body fluid than a group that supplemented only creatine, and almost 50% more fluid than a group taking the glycerol on its own [6].

While that research was done to assess hyperhydration and performance in TRAINED subjects in heat, the hyperhydration effect is exactly what we're looking for.

As a bonus, in addition to the increase in water levels in your body, glycerol can actually improve your aerobic endurance (high-reps) and anaerobic (low-reps) performance [14] during training such as you'll find in the Angiogenesis phase.

Get your glycerol here.

3. Vitamin C - Do Not Take Very High Doses

Very high doses of Vitamin C have been shown to inhibit the process of angiogenesis by what appears to be the suppression of nitric oxide generation (the same nitric oxide we're trying to stimulate by taking large doses of citrulline) [15].

Even though this effect has only been demonstrated with extremely high doses (which were achieved through intravenous dosing), because we're trying to stimulate a large degree of angiogenesis in a very short period of time, I would recommend keeping your Vitamin C intake to relatively "normal" levels (e.g. less than 500 mg a day).

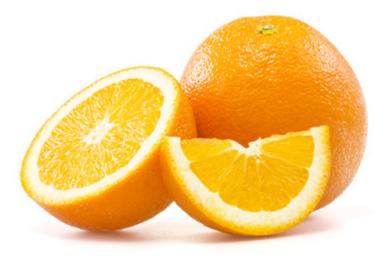
In other words, you can keeping taking Vitamin C...just don't megadose it during this phase so that we can ensure no suppression of angiogenesis.

Phase 2 - Supplementation For Connective Tissue Training

When you're training your connective tissue in <u>Return to Prime</u>, it is HIGHLY recommended you take at least a base level of targeted supplements to assist your body by providing raw materials for repair and rebuilding. It's not a case where you absolutely HAVE to...but you will get more out of this training style if you do take one (or more) of these recommended supplements.

1. Vitamin C - Important

This is the best supplement to take in terms of cost effectiveness during connective tissue training. Vitamin C is CRITICAL for the formation of high-quality collagen in the body [16]. Collagen forms the basic framework of all your connective tissue.



Oranges are the most well-known food source, however during times of extreme connective tissue remodeling, such as during this training phase, it's a good idea to take supplemental Vitamin C [17].

By loading up on Vitamin C (take at least 1000 mg, 3 times a day), you will provide your body with the raw materials needed to build and repair connective tissue. Manganese is also used in this process, however it's not necessary to supplement with it.

To me, this is a very important supplement to take during Connective Tissue Training.

Be sure to take a dose 45 minutes or so before training so that the nutrients are being circulated in your system as you're pushing fluid through the connective tissue. This ensures you get the Vitamin C for collagen formation exactly when and where you need it. Take your pre-workout Vitamin C with gelatin for maximum effect (see below).

Personally, <u>I use a fat-soluble form of Vitamin C (ester) that lasts longer in the body</u> and is, I think, more effective for just about every benefit Vitamin C has to offer.

<u>Liposomal Vitamin C is one of the highest quality Vitamin C products available...it is more easily absorbed and assimilated by the body [18.19].</u>

You can also take a "normal" Vitamin C supplement.

2. Collagen/Gelatin - Very Important

Gelatin is very simply highly processed collagen...and yes, it's the same basic stuff you make Jello with. It provides raw materials for your body to help with rebuilding your own joints and connective tissue. Take a 15 gram dose 45 minutes before the workouts, along with Vitamin C to support your body in the formation of new collagen [5].

This is my preferred source for Collagen and the one I most HIGHLY recommend. This product includes all 5 types of collagen in it...most collagen products only include one or two. This is the most complete collagen product I've found.

I definitely recommend using collagen instead of gelatin, even though the original study used gelatin. Collagen, especially the one I mentioned, is going to be much more effective, in my opinion.

You can get gelatin here.

3. Magnesium + Vitamin D3/K2 + Zinc - Important

This combination of Magnesium, Zinc and Vitamin D3/K2 is important for bone strength and connective tissue repair.

Many people already take a calcium supplement or focus solely on calcium intake. Magnesium must be taken to balance your calcium levels, to prevent cramping and to improve muscle contraction strength. It's critical in hundreds of chemical reactions in the body and many people are deficient in it.

The ratio of calcium to magnesium taken should be 1:2 or 1:1 (e.g. 200 mg of calcium to 400 mg of magnesium or 400 mg of each). This is the opposite of what you normally see recommended for a simple reason...most people already get calcium in their diet (and often their drinking water, to some degree). They DON'T get much, if any, magnesium.

Getting too much calcium and not enough magnesium can lead to calcification of structures in your body other than bones (arteries, for example). Magnesium keeps calcium dissolved in the blood. When you don't have enough magnesium to do that, the excess calcium has to go somewhere and your body will store it where it normally doesn't belong (e.g. calcium plaques in your arteries).

Calcium and magnesium are best not taken at the same time as they compete for absorption. Therefore, I don't recommend you take a "cal/mag" supplement that combines both of these minerals as they're better absorbed taken separately.

This is the single best magnesium supplement I've ever found - it contains 7 different types of magnesium to maximize effectiveness and absorption.



Zinc is critical for connective tissue production. You can get it in food but I prefer to take it via supplementation to ensure I'm getting enough as food sources can be hit or miss. I take 30-50 mg per day, before bed, along with 400 mg of magnesium.

I use Zinc Glycinate as my preferred form.

4. Cissus Quadrangularis - Useful

This is an Ayruvedic herb that has been shown to help regrow and regenerate connective tissue by way of helping your body to mobilize the "blast" cells (such as fibroblasts for connective tissue and osteoblasts for bones) of your body to get those cells to the area of your body that needs them faster [20].

The cissus itself doesn't make the repairs...it helps your own body do it faster and more effectively.

The compounds within cissus have been shown to increase the retention of collagen, calcium, phosporus and mucopolysaccharides [20], helping to ensure your body has the raw materials it needs on hand to repair and strengthen the connective tissue.

It's like a General Contractor for joint and bone repair.

When taken in conjunction with training whose purpose it is to strengthen and regenerate connective tissue, this supplement can have VERY beneficial effects.

In fact, you may find that old injuries that you've had that have never really healed up are suddenly healing up when taking this along with the training you'll be doing.

You can take cissus 2-3 times a day, for a grand total of 3000 mg per day for best results (or follow the manufacturers directions). Take it 30 minutes prior to meals and DO NOT take it

prior to training...it is also purported to have muscle-relaxing properties, which is not what you want before moving heavy weights.

You can get Cissus here.

5. Glucosamine and Chondroitin - Useful

These two supplements are very well associated with joint protection and support. They're effective and very easy to find.

Glucosamine works by providing your body with the raw materials for cartilage repair and synovial fluid generation (the fluid that lubricates your joints).

Chondroitin works via a similar pathway as glucosamine by providing your body with raw materials for cartilage repair.

Follow manufacturers directions for intake.

These nutrients tend to be combined together into joint-protection formulas, often with MSM as well.



6. Citrulline/Arginine, HMB and Glutamine - May Be Useful

Arginine is known as a conditionally essential amino acid. Its downstream product, Nitric Oxide (NO), has been shown to encourage collagen deposition in wounds during healing [21].

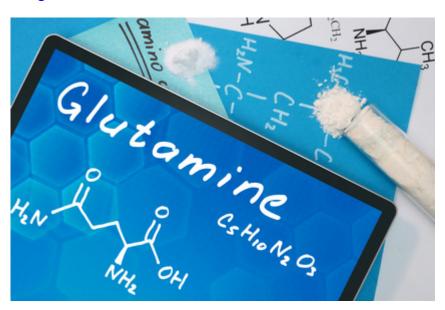
Obviously, we're (hopefully) not causing wounds with this type of training, but based on the research done on collagen deposition and arginine (as well as glutamine and HMB in combination with it), taking citrulline during this phase may help with collagen deposition and recovery from connective tissue training [22, 23].

This is why I actually recommend getting at least 1 kg of citrulline, which should last you through the entire 3 months of the program. It can be taken during every single phase. I didn't list in the first section of this guide as it's not necessaily a "base" supplement, like protein, creatine or digestive enzymes.

Get citrulline in bulk here.

Get HMB (Beta-Hydroxy Beta-Methylbutyrate) here. This one is an optional supplement.

Get glutamine here.



Phase 3 - Supplementation For Hyperplasia Training

The basic supplements we want to use for hyperplasia in <u>Return to Prime</u> are the same as for hypertrophy training (e.g. protein, creatine, etc.).

However, there is one nutrient that shows GREAT promise in terms of being a powerful supporter of the physiological processes that occur as new muscle cells/fibers are being formed.

1. Arachidonic Acid (ARA) - Important

ARA is the primary fatty acid that triggers inflammation in muscle tissue after your muscles are damaged by lifting weights. After this muscle cell damage occurs, ARA gets freed from the cell membrane and sets off a cascade of prostaglandins (which are pro-inflammatory hormones) [3,4,8].

These prostaglandins contribute to post-workout soreness, which, on the surface, doesn't sound like a particularly desirable thing to have happen.

However, most importantly for our purposes in this phase, these pro-inflammatory hormones play a critical role in increasing the number of nuclei in our muscle cells.

And more nuclei may lead to muscle fiber formation via activation of satellite cells that then fuse with muscle fibers. Satellite cells have been shown to be involved in muscle fiber hyperplasia in stretch and exercise [28].

Just like with other Omega fatty acids, ARA levels in the body can get depleted, which would then slow down or stop the process of new muscle cell and fiber formation.

By supplementing with ARA, you can literally FLOOD the muscles with extra ARA so that when it's needed, it's available for use in the formation of new muscle cells via satellite cell activation.

In that respect, using Arachidonic Acid is not 100% critical to success of this program, but it can contribute very strongly to the fiber-increasing process we're looking to set off.

Be aware that because ARA is potentially pro-inflammatory, if you have pre-existing joint issues, you may feel some aching in your joints and you may find increased muscle soreness. This is a perfectly normal reaction to ARA supplementation.

As a supplement, ARA is perfectly safe, as demonstrated in a variety of studies [36,37,38] looking at a variety of health markers after ARA supplementation.

You can continue to take joint support supplements that you were using in the previous phase while you're taking ARA, however stay away from anti-inflammatory supplements and NSAIDS. These will work against the short-term, pro-inflammatory process we're looking to spark.

When I was taking it, I worked up to the full dose of 6 capsules per day. I recommend starting at a lower dose at first to assess your reactions to it, then increase from there if you feel you can.

Take the full dose of ARA about 30-40 minutes before training (instead of at intervals throughout the day) to ensure that it gets taken up into the muscle tissue rather than adipose (fat) tissue. Exercise helps preferentially shuttle ARA (and other lipids) into muscle cells [30], which is exactly where we want it to be to do what it needs to do.

Get Arachidonic Acid here. The product that I've used and recommend is called X-Factor.



Taking ARA during Phase 3 of the program can result in a big jump in lean bodyweight (I gained 10 pounds in the 3 weeks of this phase of the program, each time I used ARA).

For more MUCH more detailed science-based information on Arachidonic Acid and supplementation with it, I would highly recommend a series of articles written by Will Brink and Monica Mollica [42-45] on the topic of Arachidonic Acid supplementation.

These articles will give you a very in-depth rundown on Arachidonic Acid.

2. L-Citrulline - Important

You'll recognize this nutrient from Phase 1. Its role in angiogenesis (blood vessel formation) via arginine production is extremely important.

Here's where it gets even more interesting...research has shown that adequate Nitric Oxide (NO) levels in the body are critical for activating satellite cells [24,25,26]. Arginine increases NO levels...and citrulline is the best way to increase arginine levels.

According to Lee, et al, "adult satellite cells are activated by NO produced in muscle fibers, which may contribute to post-injury regeneration of skeletal muscle" [27].

If you have low NO levels in your muscles, you won't achieve the same level of results with hyperplasia training.

To make Citrulline even more interesting as a support supplement for hyperplasia training, research has shown L-Citrulline directly increases satellite cell proliferation [32] (i.e. a rapid increase in numbers). Ironically enough, in that same study, supplemental L-Arginine did NOT demonstrate any effect, even though it's a downstream metabolite of Citrulline.

Bottom line, make sure you have enough Citrulline left over from Phase 1 and 2 to also take it in Phase 3. This is why I recommend getting the 1 kg size.

Get bulk L-Citrulline here.

3. Taurine - Potentially Useful

In the same study on the effects of nutritional supplements on satellite cells [32] that determined that Citrulline leads to proliferation, it was also demonstrated that Taurine was effective for promoting satellite cell differentiation.

This means Taurine assists the process of turning satellite cells into muscle cells, which is exactly the process we're looking to stimulate with hyperplasia training.

One of the other primary functions of Taurine is to calm the nervous system. With this in mind, I would actually recommend you use it AFTER a hyperplasia workout rather than before, to assist with recovery.

While it can have beneficial effects on endurance and work capacity [53], there is no research to support using it as a pre-workout stimulant, regardless of how many energy drinks it's found in. In fact, research has shown it to have calming effects on anxiety behaviors [54].

Beyond those positive effects, taking 3-5 grams of Taurine per day (based on a 185 lb man) also has the benefit of increasing testosterone production. This increase in testosterone was demonstrated in a study performed on rats [34] and calculated to an equivalent dosage in humans, so take that with a grain of rat chow.

Get taurine here.

4. Glycerol - Useful

Glycerol is also a carryover from Phase 1, Angiogenesis Training.

It's a water-loving molecule that can assist with cell expansion in addition to increases in blood volume. When muscle cell membranes swell, it helps create the conditions for hypertrophy and hyperplasia that we're looking to spark with the training.

Drink a LOT of water when taking glycerol in order to maximize the water-loading effects. Take 10-30 grams of glycerol with 20 to 32 ounces of water about 30 minutes before training to achieve maximum fluid volume and expansion.

Again, start at the low end of the intake guideline and work your way, gauging tolerance, as glycerol taken in large quantities can have a laxative effect (known as Osmotic diarrhea, which occurs when too much water is drawn into the bowel).

Get your glycerol here.

5. Fish Oil - Useful

It may seem counterproductive to be taking an anti-inflammatory such as fish oil, especially when taking ARA, however, the addition of Omega 3 fatty acids can help to balance out the ARA.

Without getting too deeply into the science of cell membranes and lipid metabolism (of which there is a lot and it is very deep), Omegas 3 fatty acids are actually a very good complimentary supplement to take with ARA [39].

A good ratio for this has been shown to 1.25:1 in terms of ARA to Omega 3 [40]. This means if you supplement with 1500 mg of ARA a day, make sure you're getting 1200 mg of DHA to balance it out. This ratio is, coincidentally (or maybe not coincidentally), the same ratio that's found in human milk [41].

My recommended brand of fish oil is Nordic Naturals.

Cheap fish oil supplements can be counterproductive and not provide you with the benefits you're looking for (unless you enjoy fish burps).



6. Anti-Inflammatory Supplements - Do Not Take

This is actually what NOT to take. In general, you want to decrease or cease taking antiinflammatory supplements such as turmeric or medications such as NSAIDS (like aspirin or ibuprofen).

We're actually interested in encouraging some degree of inflammation during this phase. The body doesn't change without a good reason, and sometimes we need to really upset the

balance to make things happen.

This is a case of allowing more damage to happen in order to encourage the body to do something it normally wouldn't do. Your body doesn't want to increase the number of muscle fibers it has. Muscle is an energy-costly tissue and adding more makes it more difficult to survive (from an evolutionary standpoint).

We need to make the stimulus for hyperplasia so strong that is has no choice.

That being said, if you find you NEED these types of supplements or medications in order to actually train without pain that affects your workouts, then by all means, keep taking them.

Phase 4 - Supplementation for Nervous System Training

I divide supplements for this phase of <u>Return to Prime</u> into three primary categories: Nervous System Nutrients, Nervous System Supplements and Nervous System Activation Supplements.

As with all supplements in this program, you can choose to take or not take whatever you like. These supplements can help, but they're not required in order to succeed with the program.

One supplement I would continue to recommend you take during this phase is creatine. It's not specifically nervous-system related but it's very useful for increasing strength by increasing available energy for powerful, short-duration muscle contractions, which are exactly the types of contractions we're focusing on in this phase of training.

Nervous System Nutrients

This class of supplements is focused on vitamins and minerals that help support nervous system function and activation. All of these nutrients can be obtained from food sources, though it can be challenging to get enough for optimal performance from food sources alone.

1. B Vitamins - Useful

These are a group of 8 specific (related) vitamins that are critical for helping your body convert food into usable substrates, for the whole body and for the nervous system in particular. The B vitamins most involved with the nervous system are B1 (thiamine), B3 (niacin), B6 (pyridoxine), and B12 (cobalamin) [46].

Instead of trying to get each one individually, take a B-complex. They usually come in 50 or 100 (which refers to the dosage of B vitamins in the mix). B vitamins are water-soluble and any extra your body doesn't use will get flushed out.

A good B-complex is inexpensive and can be a very good nervous system support supplement to start with.



2. Magnesium and Calcium - Useful

I put magnesium before calcium because in my research and experience, it's actually FAR more important to be aware of your magnesium intake than it is your calcium intake.

Both minerals are necessary and critical for a wide variety of functions and processes in your body, however in our modern society, it's much easier to get plenty of calcium in our food than it is magnesium.

And when you get out of balance with your calcium to magnesium ratios, you can run into some serious health issues (for example hardening of the arteries, i.e. atherosclerosis). The plaques that can build up in the arteries are formed with calcium.

I'm not going to get into all the scientific details of magnesium and calcium (there is a LOT of research being done on both). The full scope of that would fill a book on its own (if you are interested in that book, it's called <u>The Magnesium Miracle by Dr. Carolyn Dean</u>...highly recommended if you want to know more about magnesium and what it can do for you).

Bottom line, magnesium supplementation can help your nervous system function more effectively and help you be stronger.

Take 400 - 600 mg per day, ideally right before bed on an empty stomach (I like to combine it with 50 mg of zinc for the hormone-supporting effects).

As previously mentioned, this is the single best magnesium supplement I've ever found - it contains 7 different types of magnesium to maximize effectiveness and absorption.



I would recommend not taking calcium at the same time as magnesium, as they compete for intestinal absorption [47,48]. I take my calcium in the morning.

In other words, calcium/magnesium combo supplements should generally be avoided. It's not going to be a dealbreaker situation if you do take one...just know that you may not be getting what you think you're getting when you take one.

3. Essential Fatty Acids/Fish Oil - Useful

There is a reason fish is called "brain food." The Essential Fatty Acids found in fish oil (EPA and DHA) are important for nervous system functioning [49,50].

Fish oil is a supplement you should be taking every day anyway. Beyond just for nervous system training, fish oil offers a host of other health benefits. Aim for a minimum of 2,000 mg per day.

My recommended brand of fish oil is Nordic Naturals

4. Lecithin - May Be Useful

Lecithin is an excellent source of choline, which is a useful nutrient for improving the signaling capacity of nerves [51].

Supplemental lecithin is cheap and readily available in the form of soy lecithin, though there could be potential issues with estrogenic isoflavones and genetically modified soy. You can also get plenty of choline in egg yolks, so if you eat eggs regularly, supplementation wouldn't likely be necessary.

The supplemental version I recommend is soy-free and is derived from sunflowers.



Nervous System Support Supplements - Nootropics

These are supplements that support and enhance the function of the nervous system without specifically targeting heightened activation of the nervous system.

In other word, these supplements aren't designed to give you a buzz...they're designed to provide more fuel and better recovery for the nervous system.

I'm going to cover a few general supplements as well as a few specific products from manufacturers that I'm familiar with. There are products available that contain multiple ingredients as well.

1. Taurine and Tyrosine - Useful

These are two amino acids that can have very beneficial effects on the nervous system. Tyrosine specifically is a neurotransmitter precursor, meaning that it can help provide your brain with more "fuel" for brain activity. It's also very useful for coping with environmental stress [52].

Get tyrosine here.

Taurine works to calm the brain, and can help with relieving stress, anxiety and improve sleep. Taking taurine is very useful if you're also taking a nervous system stimulant like caffeine as it can help the brain "come down" from the stimulation and help reduce anxiety behaviors [54]. It does this by facilitating the production of the calming neurotransmitter GABA in the brain.

Get taurine here.

2. Herbal and Mushroom Nooptropics - Useful

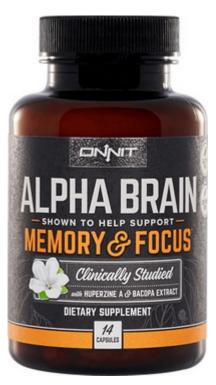
Here are several nootropics that have shown beneficial effects.

- Bacopa Monnieri [55]
- Gotu Kola [56] This herb, (Centell Asiatica) in addition to nootropic effects also has the potential to assist with collagen production and may be a good option to take in Phase 2 Connective Tissue Training as well [57].
- <u>Lions Mane Mushroom [58]</u>

3. Alpha Brain - Useful

This is a combination formula consisting of a variety of proven individual nootropic nutrients. This product has been the subject of a clinical "proof of concept" study [59] that showed significant improvements in brain function and memory.

Get your Alpha Brain here



Nervous System Activation Supplements

These are supplements that are nervous system stimulants. These supplements are taken right before training to "wake up" the nervous system.

1. Caffeine

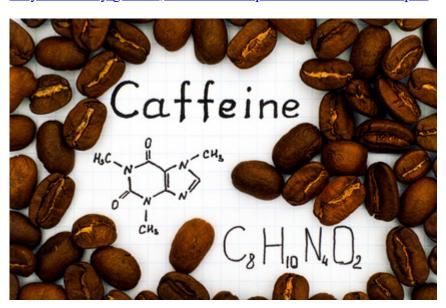
Caffeine is the most common and obviously well-known stimulant and, because of it's effectiveness [60], is the only stimulant supplement I'm going to address here (especially because it's one of the only legal ones). Ephedrine, which is also an effective stimulant, is no longer legal in the United States.

Taking 200 mg of caffeine prior to training can elevate nervous system activation and increase energy levels substantially, without significant side effects [61]. Response to dosages at this level may vary between individuals, so if you do decide to use caffeine, it may take some experimentation with serving size to determine what your best dosage is.

Caffeine is the base ingredient in pretty much all stimulant-based pre-workout supplements. Many of these formulas contain other ingredients but, in truth, it primarily comes down to how much caffeine they put in them.

If you want to save money, you can simply buy some caffeine pills at the drug store for a lot less money than you'll pay for a full-on pre-workout supplement with a cocktail of other ingredients thrown in (often at too low of a dose to accomplish anything).

Or you can buy generic, bulk caffeine pills here for even cheaper.



2. Non-Stimulant Herbal Pre-Workout Formula

Now, I fully understand the irony of including a non-stimulant pre-workout supplement in the stimulant section of this guide. The reason I'm doing so is simple...most people associate pre-workout formulas with stimulants, so this is where they would go to read about something like that.

With that in mind, I wanted to give you an alternative option to a caffeine-based pre-workout product.

This product is called "Hercules Pre-Workout Formula," and it's made by Lost Empire Herbs, with a combination of multiple ingredients that boost energy, focus and strength WITHOUT

stimulant effects.

- Polyrhachis Ant Extract
- Cistanche
- Maral Root
- Rhodiola
- Cordyceps
- Shilajit

I've used this formula and it absolutely works. You will notice increased energy, focus and strength without the jitteriness and hopped-up feeling that you might get with caffeinated preworkout supplements.



This is actually a product you could take before any and all workouts in this program. It won't interfere with anything we're trying to accomplish in the other phases, and could potentially help by improving your strength and focus.

Bottom line, if you're looking for an effective pre-workout formula that still allows you to get to sleep at night, I would highly recommend trying this one.

Just so you know up front, though, the taste is not great...but that's because there are no additives or flavorings put in. It's nothing but active ingredients.

Testosterone Support For Anti-Aging, Muscle and Strength - Very Helpful

Testosterone is a vital hormone for men, playing a significant role in muscle growth, strength, and overall physical performance. As men age, our testosterone levels naturally

decline, typically beginning in the early 30s and dropping about 1% each year.

Testosterone is critical for protein synthesis, the process by which the body repairs and builds muscle tissue.

As well, one of the other key benefits of testosterone support supplements for our purposes is their ability to increase strength. Higher testosterone levels lead to greater muscle fiber activation, enabling men to lift heavier weights and perform more intense workouts (like the ones in this program).

Additionally, testosterone boosters can improve recovery times. Elevated testosterone levels help reduce muscle soreness and repair tissue damage more efficiently, enabling men to train more frequently and with higher intensity.

I've got 3 primary Testosterone support supplements that I recommend to use with <u>Return To Prime</u>.

1. T20 from JayLabPro

JAYLAB PRO T20 is one of the best science-based testosterone-boosting supplements I've found, especially for men over 30 experiencing a natural decline in testosterone levels.

Its primary ingredient, Long Jack PE 100:1 (also known as Tongkat Ali), is clinically proven to increase testosterone by 15.4% and reduce cortisol levels by 32.3%.

This creates an ideal hormonal balance for enhanced muscle growth, reduced stress, and improved energy and libido.

Click here to buy one and get THREE more free!



2. Pine Pollen from Lost Empire Herbs

Pine Pollen has been used as a healthful herb in Traditional Chinese Medicine for thousands of years.

It's fairly unique in the herbal world in that it actually contains "human" hormones like testosterone, androstenedione, DHEA and more. These are only trace amounts, but clue the body into the "signal" to promote more testosterone.

In addition, it contains novel phyto-androgens like gibberellins and brassinosteroids. These plant hormones have testosterone-like effects on the human body.

These hormonal compounds, plus the 200+ bioactive vitamins, minerals, antioxidants, polyphenols and other compounds found inside Pine Pollen, also appear to help protect and detox the human body from all those endocrine disrupting chemicals.

In other words, Pine Pollen appears to be the perfect testosterone-supporting herb for today's day and age.

You can get TWO bags of Pine Pollen here for 2 cents (plus shipping).



3. Shilajit

Shilajit, a mineral-rich resin found in Himalayan rocks, has been prized for centuries in traditional medicine for its wide range of health benefits, including its ability to enhance testosterone levels.

Rich in fulvic acid and trace minerals, shilajit helps stimulate the body's natural testosterone production, improving muscle growth, strength, and energy levels.

Studies show that regular use of purified shilajit can increase total and free testosterone, essential for building muscle and maintaining vitality.

Additionally, shilajit supports overall health by improving mitochondrial function, boosting stamina, and aiding recovery.

The taste does take some getting used to, but the company that I recommend offers capsules and shilajit-infused honey sticks. Personally, I've developed a taste for the raw resin.

You do need to be careful about the source of Shilajit as it has a strong affinity for heavy metals. While this allows it to pull heavy metals from your body, it also means it can bind to them before you even get it, potentially leading to ingestion.

The source I recommend does regular heavy metal testing to ensure it's "clean."

You can get my recommended brand of Shilajit here. Use coupon code **MAD10** to get 10% off your order.

Ageless Muscle

This is an interesting combination supplement for preserving and building muscle containing 4 specific ingredients.

- HMB promotes muscle protein synthesis and inhibits muscle breakdown
- Creatine works with HMB to unlock greater muscle size, strength, and performance than either ingredient alone...
- Betaine draws water into the muscles to prevent muscle dehydration
- Vitamin D3 also works with HMB to promote muscle size and strength, even without exercise.

Click to learn more about Ageless Muscle here...



References

- [1] <u>L-arginine supplementation causes additional effects on exercise-induced angiogenesis and VEGF expression in the heart and hind-leg muscles of middle-aged rats</u>. Suzuki J., J Physiol Sci. 2006 Feb;56(1):39-44.
- [2] http://www.life-enhancement.com/magazine/article/1975-arginine-promotes-angiogenesis
- [3] The Effects of Arachidonic Acid (ARA) On Strength & Muscle Mass
- [4] Effects of Arachidonic Acid Supplementation on Skeletal Muscle Mass, Strength, and Power, Ormes J, Wilson, J, Matthew H. Sharp, Jordan M. et al. PLoS One. 2016; 11(5): e0155153.
- [5] <u>Vitamin C-enriched gelatin supplementation before intermittent activity augments collagen synthesis</u>. Shaw G, Lee-Barthel A, Ross ML, Wang B, Baar K. Am J Clin Nutr. 2017 Jan;105(1):136-143.
- [6] <u>Creatine and glycerol hyperhydration in trained subjects before exercise in the heat</u>. Easton C, Turner S, Pitsiladis YP., Int J Sport Nutr Exerc Metab. 2007 Feb;17(1):70-91.
- [7] <u>Muscle creatine loading in men</u>, Hultman, E., Soderlund, K., Timmons, J. A., Cederblad, G., & Greenhaff, P. L. (1996).. *Journal of Applied Physiology*, 81(1), 232-237.
- [8] <u>Arachidonic acid supplementation transiently augments the acute inflammatory response to resistance exercise in trained men</u>. Markworth JF, D'Souza RF, Aasen KMM, Mitchell SM, Durainayagam BR, Sinclair AJ, Peake JM, Egner I, Raastad T, Cameron-Smith D, Mitchell CJ., J Appl Physiol (1985). 2018 Apr 26
- [9] <u>Safety of creatine supplementation</u>., Persky AM, Rawson ES., Subcell Biochem. 2007;46:275-89.
- [10] <u>Creatine Supplementation Increases Total Body Water Without Altering Fluid Distribution.</u>, Powers ME, Arnold BL, Weltman AL, Perrin DH, Mistry D, Kahler DM, Kraemer W, Volek J., J Athl Train. 2003 Mar;38(1):44-50.
- [11] <u>Creatine supplementation enhances muscular performance during high-intensity resistance exercise.</u>, Volek JS, Kraemer WJ, Bush JA, Boetes M, Incledon T, Clark KL, Lynch JM., J Am Diet Assoc. 1997 Jul;97(7):765-70.
- [12] <u>Comparison of glycerol and water hyperhydration regimens on tennisrelated performance</u>. Magal M, Webster MJ, Sistrunk LE, Whitehead MT, Evans RK, Boyd JC. Med Sci Sports Exer. 2003;35:150–156.
- [13] Effectiveness of glycerol as a rehydrating agent. Scheett TP, Webster MJ, Wagoner KD, Int J Sport Nutr Exerc Metab. 2001 Mar; 11(1):63-71.
- [14] <u>The Effect of Glycerol Supplements on Aerobic and Anaerobic Performance of Athletes and Sedentary Subjects</u>, Suleyman Patlar, Hasan Yalçin, and Ekrem Boyali, J Hum Kinet. 2012 Oct; 34: 69–79.

- [15] <u>Anti-angiogenic effect of high doses of ascorbic acid</u>, Nina A Mikirova, Thomas E Ichim, and Neil H Riordan, J Transl Med. 2008; 6: 50.
- [16] The effect of ascorbic acid on the nature and production of collagen and elastin by rat smooth-muscle cells. Y A de Clerck and P A Jones, Biochem J. 1980 Jan 15; 186(1): 217–225.
- [17] <u>Regulation of collagen synthesis by ascorbic acid</u>. S Murad, D Grove, K A Lindberg, G Reynolds, A Sivarajah, and S R Pinnell, Proc Natl Acad Sci U S A. 1981 May; 78(5): 2879–2882.
- [18] The Remarkable Health Benefits of Liposomal Vitamin C, Dr. David Jockers
- [19] <u>Microencapsulation-protected l-ascorbic acid for the application of human epithelial HaCaT cell proliferation</u>. Lam PL, Kok SH, Bian ZX, Lam KH, Gambari R, Lee KK, Chui CH. J Microencapsul. 2014;31(8):754-8.
- [20] <u>Further Studies On The Effect Of Cissus Quadrangularis In Accelerating Fracture Healing.</u> Udupa, KN, and Guru Charan Prasad, The Indian journal of medical research 52 (1964): 26-35.
- [21] Role of nitric oxide in wound repair. Witte MB, Barbul A., Am J Surg. 2002 Apr;183(4):406-12.
- [22] Effect of a specialized amino acid mixture on human collagen deposition. Williams JZ, Abumrad N, Barbul A., Ann Surg. 2002 Sep;236(3):369-74;
- [23] <u>Mixture of Arginine, Glutamine, and β-hydroxy-β-methyl Butyrate Enhances the Healing of Ischemic Wounds in Rats</u>. Gündoğdu RH, Temel H, Bozkırlı BO, Ersoy E, Yazgan A, Yıldırım Z., JPEN J Parenter Enteral Nutr. 2017 Aug;41(6):1045-1050.
- [24] <u>Satellite cell activation in stretched skeletal muscle and the role of nitric oxide and hepatocyte growth factor</u>. Tatsumi R, Liu X, Pulido A, Morales M, Sakata T, Dial S, Hattori A, Ikeuchi Y, Allen RE, Am J Physiol Cell Physiol. 2006 Jun;290(6):C1487-94.
- [25] <u>Satellite cell activation on fibers: modeling events in vivo--an invited review</u>. Anderson JE, Wozniak AC. Can J Physiol Pharmacol. 2004 May;82(5):300-10.
- [26] <u>Satellite cells are increasingly refractory to activation by nitric oxide and stretch in aged mouse-muscle cultures</u>. Leiter JR, Anderson JE. Int J Biochem Cell Biol. 2010 Jan;42(1):132-6.
- [27] Nitric oxide as a messenger molecule for myoblast fusion. Lee KH, Back MY, Moon KY, Song WK, Chung CH, Ha DB, Kang MS. J Biol Chem. 1994 May 20;269(20):14371-4.
- [28] <u>Skeletal muscle fiber hyperplasia</u>,. Antonio J, Gonyea WJ., Med Sci Sports Exerc. 1993 Dec;25(12):1333-45.
- [29] <u>Creatine as a compatible osmolyte in muscle cells exposed to hypertonic stress</u> Alfieri RR, Bonelli MA, Cavazzoni A, Brigotti M, Fumarola C, Sestili P, et al. J Physiol 2006;576:391-401.
- [30] Exercise induces human lipoprotein lipase gene expression in skeletal muscle but not adipose tissue. R. L. Seip, T. J. Angelopoulos, and C. F. Semenkovich, Am J Physiol. 1995 Feb;268(2 Pt 1):E229-36.

- [31] Extrinsic regulation of domestic animal-derived satellite cells. Dodson MV, McFarland DC, Grant AL, Doumit ME, Velleman SG., Domest Anim Endocrinol. 1996 Mar;13(2):107-26.
- [32] <u>The Effect of Nutritional Supplements on Muscle-Derived Stem Cells in vitro</u>. Melinda E. Fernyhough, Luke R. Bucci, Jeff Feliciano, and Michael V. Dodson, Int J Stem Cells. 2010 May; 3(1): 63–67.
- [33] <u>The effects of ergogenic compounds on myogenic satellite cells</u>. Vierck JL, Icenoggle DL, Bucci L, Dodson MV.Med Sci Sports Exerc. 2003;35:769–776.
- [34] <u>CSD mRNA expression in rat testis and the effect of taurine on testosterone secretion</u>. Yang J, Wu G, Feng Y, Sun C, Lin S, Hu J. Amino Acids. 2010 Jun;39(1):155-60.
- [36] The effect of dietary arachidonic acid on plasma lipoprotein distributions, apoproteins, blood lipid levels, and tissue fatty acid composition in humans. Nelson, G.J., et al., Lipids, 1997. 32(4): p. 427-33.
- [37] The effect of dietary arachidonic acid on platelet function, platelet fatty acid composition, and blood coagulation in humans, Nelson, G.J., et al., . Lipids, 1997. 32(4): p. 421-5.
- [38] <u>Effects of dietary arachidonic acid on human immune response</u>, Kelley, D.S., et al., . Lipids, 1997. 32(4): p. 449-56.
- [39] <u>Eicosapentaenoic acid and arachidonic acid: collaboration and not antagonism is the key to biological understanding</u>. Horrobin DF, Jenkins K, Bennett CN, Christie WW. Prostaglandins Leukot Essent Fatty Acids. 2002 Jan;66(1):83-90.
- [40] <u>Plasma fatty acid responses, metabolic effects, and safety of microalgal and fungal oils rich in arachidonic and docosahexaenoic acids in healthy adults</u>. Innis SM, Hansen JW. Am J Clin Nutr. 1996 Aug;64(2):159-67.
- [41] Human milk and formula fatty acids. Innis SM, J Pediatr. 1992 Apr;120(4 Pt 2):S56-61.
- [42] <u>The Effects of Arachidonic Acid (ARA) On Strength & Muscle Mass</u> http://www.brinkzone.com/bodybuilding/the-effects-of-arachidonic-acid-ara-on-strength-muscle-mass/
- [43] <u>Arachidonic Acid (ARA) part 1 A "bad" Fatty Acid?</u> http://www.brinkzone.com/bodybuilding/arachidonic-acid-ara-part-1-a-bad-fatty-acid/
- [44] <u>Arachidonic Acid (ARA) part 2 -Is ARA supplementation safe? Can it even be beneficial?</u> http://www.brinkzone.com/articles/arachidonic-acid-ara-part-2-is-ara-supplementation-safe-can-it-even-be-beneficial/
- [45] <u>Arachidonic Acid (ARA) Part 3 -Effects On Muscle Growth, Strength & Performance</u> http://www.brinkzone.com/articles/arachidonic-acid-ara-does-it-increase-muscle-growth-and-strength-gains-in-humans/
- [46] <u>B Vitamins and the Brain: Mechanisms, Dose and Efficacy—A Review</u>. David O. Kennedy, Nutrients. 2016 Feb; 8(2): 68.
- [47] <u>Magnesium absorption: mechanisms and the influence of vitamin D, calcium and phosphate</u>. Hardwick LL, Jones MR, Brautbar N, Lee DB, J Nutr. 1991 Jan; 121(1):13-23.

- [48] The relation of magnesium and calcium intakes and a genetic polymorphism in the magnesium transporter to colorectal neoplasia risk. Qi Dai, Martha J Shrubsole, Reid M Ness, David Schlundt, Qiuyin Cai, Walter E Smalley, Ming Li, Yu Shyr, and Wei Zheng, Am J Clin Nutr. 2007 Sep; 86(3): 743–751.
- [49] New study links DHA type of omega-3 to better nervous-system function, Science Daily, December 19, 2009
- [50] <u>Deficit in prepulse inhibition in mice caused by dietary n-3 fatty acid deficiency</u>. Fedorova et al, *Behavioral Neuroscience*, 2009; 123 (6): 1218
- [51] <u>The relation of dietary choline to cognitive performance and white-matter hyperintensity in the Framingham Offspring Cohort</u>. Poly C, Massaro JM, Seshadri S, Wolf PA, Cho E, Krall E, Jacques PF, Au R.
- [52] <u>Treatment with tyrosine</u>, a neurotransmitter precursor, reduces environmental stress in humans. Banderet LE, Lieberman HR. Brain Res Bull. 1989 Apr;22(4):759-62.
- [53] Effect of taurine supplementation on exercise capacity of patients with heart failure. Beyranvand MR, Khalafi MK, Roshan VD, Choobineh S, Parsa SA, Piranfar MA. J Cardiol. 2011 May;57(3):333-7.
- [54] Effects of taurine on rat behaviors in three anxiety models. Kong WX, Chen SW, Li YL, Zhang YJ, Wang R, Min L, Mi X. Pharmacol Biochem Behav. 2006 Feb;83(2):271-6.
- [55] <u>Alteration in 5-HT2C, NMDA Receptor and IP3 in Cerebral Cortex of Epileptic Rats:</u> <u>Restorative Role of Bacopa monnieri</u>, Amee Krishnakumar, T. Anju, Pretty Abraham, C. Paulose, Neurochem Res. 2015 Jan;40(1):216-25.
- [56] <u>Centella asiatica (L.) Urban: From Traditional Medicine to Modern Medicine with Neuroprotective Potentia</u>l. Ilkay Erdogan Orhan, Evid Based Complement Alternat Med. 2012; 2012: 946259.
- [57] <u>Asiaticoside induces human collagen I synthesis through TGFbeta receptor I kinase</u> (<u>TbetaRI kinase</u>)-independent <u>Smad signaling</u>. Lee J, Jung E, Kim Y, Park J, Park J, Hong S, Kim J, Hyun C, Kim YS, Park D. Planta Med. 2006 Mar;72(4):324-8.
- [58] <u>Neuroregenerative potential of lion's mane mushroom, Hericium erinaceus (Bull.: Fr.)</u> <u>Pers. (higher Basidiomycetes), in the treatment of peripheral nerve injury (review)</u>. Wong KH, Naidu M, David RP, Bakar R, Sabaratnam V. Int J Med Mushrooms. 2012;14(5):427-46.
- [59] <u>A Proof of Concept for a Randomized, Double Blind, Placebo Controlled, Parallel Group, Efficacy Study of Alpha BrainTM Administered Orally, Solomon et al. International Neuropsychological Society Meeting, 2014</u>
- [60] <u>Caffeine and the central nervous system: mechanisms of action, biochemical, metabolic and psychostimulant effects</u>. Nehlig A, Daval JL, Debry G. Brain Res Brain Res Rev. 1992 May-Aug;17(2):139-70.
- [61] Exercise and Sport Performance with Low Doses of Caffeine, Lawrence L. Spriet, Sports Med. 2014; 44(Suppl 2): 175–184.