

- SAFE L-ARGININE M2



Dr. Ann de Wees Allen licensed L-ArginineM2 to Agel, April 20, 2007. **Synergy WorldWide no longer has Dr. Allen's patented formula.**

L-Arginine M2 contains 5,000 mg (5 grams) of elemental pharmaceutical grade L-Arginine in the most easily metabolized form. L-Arginine M2 does not contain the inferior forms of L-Arginine, such as HCL. The unique, proprietary flavor system in L-Arginine M2 negates the very unpleasant taste of L-Arginine, thus providing the first "great-tasting" L-Arginine product.

L-Arginine M2 is the patented L-Arginine formula developed by Dr. Ann de Wees Allen. Dr. Allen is one of the world's most recognized researchers of the amino acid, L-Arginine.

L-Arginine M2 provides a safe and delicious way to incorporate five elemental grams of L-Arginine into our daily health-supplementation routine.

Arginine research has caught the attention of the Nobel Prize committee, and L-Arginine has been called "the magic bullet" for cardiovascular health by Columbia University. Scientific studies on L-Arginine have found cardiovascular benefits, weight-loss benefits, and other anti-aging properties. The L-Arginine patent, which is the foundation of the formula, is Dr. Allen's brainchild. After 20 years of research on L-Arginine, it was assumed that Dr. Allen would license her patent to a large pharmaceutical company. Corporate and pharmaceutical negotiations for the rights to the patent came to an abrupt halt when the decision was announced that **Agel** had been granted the rights to the L-Arginine patent.

L-ARGININE PRODUCTS

L-Arginine M2 contains 5,000 mg (5 grams) of elemental pharmaceutical grade L-Arginine in the form best metabolized by humans. **L-Arginine M2** does not contain the inferior forms of L-Arginine such as HCL. The unique, proprietary flavor system in **L-Arginine M2** negates the very unpleasant taste of L-Arginine, thus providing the first "great-tasting" L-Arginine product.

The exclusive patented **L-Arginine M2** formula was developed by leading L-Arginine researcher, Dr. Ann de Wees Allen. It has been safely used in humans since 1983. Dr. Allen received the first glycemic patent ever awarded for her development of the low glycemic delivery system in **L-Arginine M2**. The methodology developed exclusively for **L-Arginine M2** is proprietary, and involves a complex 32-step process to extract the non-competing properties from organic fruits.

L-Arginine M2 is used and promoted by famous world-class athletes who use it to bolster their nutritional intake and enhance their athletic performance. Some have even won Gold Medals. L-Arginine is legal for use in Olympic Games, IFBB World Body-building competitions, WPF Powerlifting events, Fitness pageants and NFL events.

Arginine is the most potent nutraceutical ever discovered and has more benefits than any other nutraceutical. Columbia University refers to L-Arginine as the "magic bullet" for the cardiovascular system. The government has said that **L-Arginine M2** is safer than any other L-Arginine product available.

Dr. Allen is a distinguished Board Certified Doctor of Naturopathy with 20 years of in-depth research in the field of Glycemic Index, Thermogenesis, Arginine Bio-Chemistry, Growth Hormone, Orthomolecular Nutrition, Sports Nutrition, Glycosides and Nutritional Anthropology.

One of the hottest products on the nutraceutical and the pharmaceutical shelves these days is the amazing product known as arginine. On the one hand arginine is nothing more than an amino acid found in milk, cheese, yogurt, meat and other proteins. But it really is not just "another amino acid". Arginine has some pretty astounding properties. Once it is separated from all of its sister amino acids and ingested into the body it takes on the ability to produce some remarkable results. In fact, in the scientific community, arginine is referred to as the "miracle molecule".

Its properties have been validated by the scientific community starting with the Nobel Prize in Medicine in 1998. Columbia University refers to it as the "magic bullet" in human health. In an effort to document its many properties, Columbia's researchers have compiled over 10,000 citations. A study of this phenomenon is even included in the course material at the Columbia University of Medical Physicians and Surgeons.

Aging and L-Arginine

As part of the aging process the human body begins to slow down in its production of youth hormones. One of the clinical definitions of aging involves the reduction of youth hormones. Growth hormone, testosterone and IGF factors are the primary anti-aging hormones and they are directly involved in the aging process. We love

these hormones because in our youth they account for the muscle building, bone and skin growth, elasticity, reduced stored body fat, and the energy and sexual stamina that we all take for granted when we are 16, 17, and up to the age of 23. They help to keep us beautiful, lean and strong. However, once we reach the age of 23 the levels of these hormones begin to go down. As the level of these anti-aging hormones is reduced we begin the natural process of aging – we look and feel older. One of the amazing properties of L-Arginine is it's capacity to stimulate the body's production of growth hormone, testosterone, and IGF back to the same level as it did in it's youth. This product is a dream come true for the "baby boomer's" just now stepping into old age.

The Specific Benefits of L-Arginine

One of the most promising benefits of L-Arginine is it's capacity to reduce the risk of and improve the effects of cardiovascular heart disease. This is only one of many, many benefits. Dr. Allen's L-Arginine formulation called **L-Arginine M2**, produces more benefits than any other pharmaceutical or nutraceutical agent ever discovered. Nitric oxide production is another benefit. Other benefits of L-Arginine include:

- Arginine reduces the risk of vascular and heart disease
- Reduces body fat
- Promotes body fat burning
- Improves immune function
- Natural alternative for Viagra and also works for women
- Builds muscle mass
- Increases bone density
- Reduces healing time of injuries particularly bones when they break as in Osteoporosis
- Anti-oxidant properties
- Increases energy levels
- Reduces blood pressure
- Reduces risk of heart disease, stroke and cholesterol
- Reduces clogged arteries
- Reduces the risk of cardio-vascular heart disease
- Achieves and maintains erections
- Improves cardio-vascular disease that is already prevalent

Has there been any research to confirm the effectiveness of L-Arginine?

Dr. Allen has been actively involved in the research and ongoing study of arginine for over 20 years. In 1983 she made a breakthrough discovery in determining how to get arginine to cross the blood brain barrier in order to signal the hypothalamus to trigger the pituitary to produce youth hormones. In simple terms this signaled the aging human body to start producing growth hormones at the same level it was producing them when that body was 16 – 23 years of age. This means that you can administer L-Arginine to an 80 or 90 year old person and they will begin to produce youth hormones that help keep the skin tight, the body healthy and lean, that increase muscle mass, and improve immune function – all of which typically decline after the age of 23.

How is L-Arginine effectively formulated?

L-Arginine has to be carefully treated in order to trigger its powerful potential. If it is ingested in its pure form it will simply go into the stomach, move into the intestinal tract and then into the gut. The arginine molecule is referred to as a blind amino acid and must be attached to a rider or another type of molecule that will direct it to the place in the body where it will have an impact. By itself it is just an amino acid that has no idea where to go. It will not cross the blood brain barrier, it will not trigger the production of anti-aging hormones, it will not produce anti-aging benefits. After many studies and a lot of research it was determined that an arginine molecule attached to a kiwi glycoside, from the kiwi plant, will create the formulation that allows the arginine to cross the blood brain barrier and produce its remarkable anti-aging results.

Another point to keep in mind is that the daily protocol for taking L-Arginine is different from the evening protocol. Daily doses of L-Arginine will provide cardiovascular benefit, Nitric oxide, sperm motility and count. You will not get the anti-aging benefits from taking L-Arginine during the day. That requires a much different protocol. You take the same L-Arginine formulation but in a much different way. Anti-aging occurs only when L-Arginine is present 30-40 minutes into the sleep cycle, during delta sleep. Then the Kiwi rider will effectively take the arginine molecule across the blood brain barrier and do its amazing work of anti-aging in humans. One formulation, taken in two different ways provides two different groups of benefits.

You can see that this is a complicated molecule. It is important to realize that while other companies have produced arginine formulations they lack the scientific research that has resulted in Dr. Allen's L-Arginine formulation. Other arginine products do not have the anti-aging capacity of L-Arginine M2. In fact they can actually be dangerous to use.

What is the relationship between obesity and L-Arginine?

Today, 60% of Americans are overweight. That is a huge number that is on the rise. One of the problems with obesity is that when we get fatter the size of our fat cells increases. Increasing the size of our fat cells increases the risk of hormonal cancers such as breast and prostate cancer. Americans are so overweight that we have the highest rate of these cancers. Americans are at a high risk for obesity, diabetes and cancer. This is largely due to an abundant supply of food and the wealth to acquire it.

Eating is so much a part of American life and culture that it is extremely difficult to change. We have a lot of unhealthy eating habits in America. Add this fact to the reality that over the age of 23 our bodies generally start to get fatter and fatter due to the natural loss of anti-aging hormones. Anti-aging hormones keep our bodies thin by keeping our metabolism higher. Therefore as humans age their body fat levels increase. L-Arginine taken orally is the only proven method of reinstating the main anti-aging factors responsible for the increase of hormones that affect age related body fat. In other words, the L-Arginine molecule can reverse the fat burning process and increase it, instead of slowing it down. And it is the only product around that is able to safely make that claim.

How do carbohydrates and the Glycemic Index work together and with L-Arginine?

While one of the hottest diet related issues right now is certainly L-Arginine, another is the glycemic index. Thanks to ongoing research our understanding of diets and dieting is constantly under revision. We have come to understand that contrary to what was believed before, the fat in our diets is not what is making us fat. Furthermore, protein will not make us fat either unless we resort to a very high protein regimen in which the protein tells the body to increase the size of the fat cell. Research is showing us that it is actually certain carbohydrates that are making us fat. For example, rice cakes, which contain no fat are actually more fattening than a bowl of ice cream. Rice cakes are 600 times more fattening than a bowl of sugar. Rice cakes stimulate the fat storing in human cells. Ice cream and sugar have a lower glycemic index than rice cakes. (Glycemic index is a measurement of how much a particular food increases our blood sugar level resulting in increased body weight.) It is clear that we have been wrong about our notion of what it is that is making us fat. No wonder a lot of diets do not work.

Can a low glycemic diet be enhanced by the presence of L-Arginine supplementation?

Dietary induced thermogenesis is a dietary approach involving eating low glycemic foods that readily burn as energy and are not stored in fat cells. This is an effective way to lose body fat. This also promotes the loss of body fat around the heart and organs, which can prevent disease and slow down the aging process. Restricting your dietary intake to low glycemic foods and drinks is external. But fat in the body can also be attacked on an internal level as well. Increasing your body's internal thermogenesis, through the supplementation of L-Arginine definitely enhances the fat burning process on an internal thermogenic level. This process of attacking fat burning on two different levels, internally and externally is a synergistic approach that is a powerful way to reduce body fat, reduce the incidence of disease and slow down the aging process.

Obesity is related to an increase in the insulin levels in the blood. How does this relate to diabetes?

Type-II diabetes, or adult onset diabetes, develops as adults get older and become fatter. The levels of insulin in your blood become elevated, resulting in hypoglycemia and the diabetes. Type-I diabetes is the opposite situation. In this case you do not produce enough insulin. The disease of obesity is diabetes. In America we have the highest rate of diabetes because we are the fattest country in the world. As we increase fat cells and body weight we increase the risk of developing diabetes. Eating fat-storing carbohydrates such as rice cakes, potatoes, bananas and rice stimulate blood glucose levels to increase which results in higher levels of insulin. This is very unhealthy for the human body. It can lead to cardio-vascular disease, hormonal cancers, diabetes and all sorts of diseases of aging. To stop eating foods that stimulate insulin production will prevent those diseases (including cancer and diabetes), will allow the body to grow old gracefully and stay young longer.

A low glycemic diet or one that does not stimulate the production of high blood sugar levels followed by the production of too much insulin, can be achieved by eating low glycemic foods. It is not a matter of giving up food and obsessively counting calories. It is all about becoming familiar with the glycemic levels of particular foods and drinks and then making better choices. For example, potatoes have a high glycemic

index while sweet potatoes do not. Bananas are high but cherries, berries and grapes are low.

How is cardiovascular health related to arginine?

In hundreds of clinical tests L-Arginine has been shown to have a dramatic effect on cardio-vascular health. Oral administration of L-Arginine produces a 24% decrease in plasma cholesterol levels within hours and without negative side effects. There is no drug that can give these kinds of results. A 6 gram dose of elemental arginine is required in order to affect this decrease. L-Arginine therapy results in a decrease in platelet activity and an increase in vassal dilation thus reducing cholesterol. Arginine prevents the increase in blood pressure in cases of high-risk hypertension. In healthy humans with essential hypertension, L-Arginine quickly reduces systolic and diastolic pressure. This is more effective than any drug and also without negative side effects. The Nobel Prize in Physiology or Medicine for 1998 was awarded to Robert F. Furchgott, Louis J. Ignarro and Ferid Murad for their discoveries concerning "the nitric oxide as a signaling molecule in the cardiovascular system". Since then, arginine and cardio-vascular research in the scientific community and especially cardio-vascular surgeons have been very focused on finding out how to unleash L-Arginines's powerful capacity and utilize it in everyday medicine.

Dr. Allen is a consultant to professional and world-class athletes. Why is it that L-Arginine when properly formulated offers such benefits?

They use the Human Maximum Performance Program for athletes and that includes having them take L-Arginine at bedtime to reinstate growth hormone and testosterone levels, because if an athlete has low GH and low testosterone they're not going to be able to perform. Professional athletes take from 15 to 30 grams of arginine/day to produce huge amounts of muscle mass. They give them 30 grams but no more than 30 grams of protein every 3-4 hours with some low glycemic carbohydrates because high protein diets decrease muscle mass. HIGH PROTEIN DIETS DECREASE MUSCLE MASS! For 20 years Dr. Allen has been giving thousands and thousands of athletes, L-Arginine to get them off of steroids. If you take L-Arginine, you get better results of muscle mass than you do taking steroids. She has worked directly with Mr. Olympia, Mr. Universe, Ms. Galaxy, The World Power-Lifting, the Olympic Team and some of the biggest athletes in the world. They get the best results using L-Arginine and not steroids. There is no reason for any athlete to use steroids and that is why Arnold Schwarzenegger has Dr. Allen lecture at the Arnold Schwarzenegger Classic. Dr. Allen teaches athletes how to get off steroids and just use L-Arginine. When Ron Coleman won Mr. Universe, he was only using L-Arginine they had made for him in Dr. Allen's laboratory based on her patented research and so did Ms. Galaxy who was voted the most beautiful woman in the world. We know these things work.

What are the benefits for increasing testosterone, especially in older men?

One of the biggest complaints is in the area of sexual dysfunction. Even testosterone is related to high blood pressure, heart attacks, colds and things of that nature. When men get older and their testosterone starts declining. They are overall not as happy as they were in their teenage years. You can reinstate testosterone naturally without any side effects by increasing L-Arginine serum levels.

Are there any other safe ways other than L-Arginine to increase testosterone?

No, there are no other safe ways to increase testosterone. There are side effects with everything else. L-Arginine is not testosterone it is not a hormone. L-Arginine is a natural amino acid that goes in the body and if it is connected to a rider, it will tell the pituitary gland to make it's own natural testosterone. It will shoot it out in a pulsatory release out of the pituitary gland and give it the same testosterone levels that they had when they were young. L-Arginine is not testosterone, it is simply triggering the body to produce it's own natural testosterone and that is the key to not having any side effects.

There is also a correlation with both sexual function as well fertility in regards to both male and females.

Erectile dysfunction effects 50% of the male population over 40. The reason is that aging decreases arterial blood flow to the sexual area. Many of the reproductive clinics and reproductive endocrinologists are using L-Arginine in their practices to enhance testosterone availability, to increase blood flow to the genital area in both males and females, increase sperm count, heighten sensitivity in both males and females and increase sexual desire. When you have a product that effects sperm count, and motility as well as sexual desire without any side effects, you can see why reproductive endocrinologists are starting to use this in their practices. They aren't seeing any side effects, they are only seeing benefits.

Thousands of couples around the world are frustrated with the difficulty of trying to have families. There are implications of having properly formulated L-Arginine to have these couples conceive. What are they?

In a fertility study of L-Arginine, which was a double blind placebo controlled clinical study, showed that oral ingestion of L-Arginine increases fertility in woman and increases incidence of pregnancies in woman attempting to conceive. The study only included woman that had failed to conceive after trying for 6 to 36 months. After the end of the clinical study utilizing arginine, 33% of the woman who had failed to conceive actually became pregnant. This is a phenomenal reaction for a simple amino acid. As opposed to all the drugs and fertility drugs that woman are taking. When you take fertility drugs you aren't going to be able to control how many eggs pop-up. That's why woman are having 3, 4, 5 and 6 pregnancies. If you just take L-Arginine, it increases the fertility of that one egg and that is much safer and much more beneficial for that one little fetus who wants to make it's way through that 9 months of pregnancy and be born healthy.

How do you take L-Arginine

The interesting thing about L-Arginine is that there are 2 protocols, and they are very different in their application and the benefits derived. L-Arginine is what is called dose dependent and timing dependent. That means the amount of L-Arginine ingested is relative to the benefits received. Additionally, L-Arginine is timing dependent. That means that the time of day that you take L-Arginine affects the benefits received. The Nitric Oxide protocol is comprised of ingesting 5 grams, which is 5,000 milligrams of elemental arginine, 1-3 times during the day.

The anti-aging protocol is comprised of ingesting 10 grams of elemental L-Arginine only at bedtime on a totally empty stomach, which accesses the delta sleep cycle. If you take L-Arginine during the night you will get all of the benefits of Nitric Oxide and anti-aging. If you take L-Arginine during the day you won't get any anti-aging benefits. It really just depends on what people are looking for. If you want cardiovascular, Nitric Oxide and sexual function, you can take it during the day. If you are looking for testosterone, anti-aging GH and IGF factors, you have got to take it 30-40 minutes prior to sleep on a totally empty stomach and it has to contain a rider. That's why you can't take capsules of L-Arginine, or just plain L-Arginine, it just won't work.

What is the proper formulation to get all the benefits?

There is only one way that is effective and safe and that is in a powder. The reason is for every 25 grams of material, that only nets you 10 grams of elemental L-Arginine. Only 1 gram of L-Arginine will fit in a capsule so you would have to take 25 grams at one time. That would cause an esophageal collapse. These people who are putting L-Arginine in capsules don't know what they are doing. It is also very dangerous to do so.

How does L-Arginine taste?

Dr. Allen has personally been taking L-Arginine for many many years. Arginine tastes like dead fish on a pier. It is the most fowl tasting agent known to man. Chemists like Dr. Allen know that its taste profile is legendary. If you try to put arginine in your mouth you really will spit it out and gag.

Covering up the taste of L-Arginine is one of the most difficult problems in formulating a palatable product. Specific flavor systems have to be designed for L-Arginine that negates the very unpleasant taste.

Technology is now available for tricking the taste buds in the mouth and this is utilized in the design of arginine products. You can't cover up the taste of arginine but you can trick the taste buds not to recognize this. When you successfully do this, L-Arginine formulas can actually taste quite pleasant.

There is a very delicate balance in product formulation.

Everyone wants L-Arginine and there is a rush to go out and get L-Arginine. L-Arginine actually has some serious side effects.

1. It increases free-radical brain damage.
2. It reinstates the herpes simplex virus so you get mouth and genital sores and can also replicate other viruses.
3. It can actually render a male infertile.

The specific danger related to improper pathways for NO involves that reduction of sperm motility in males, which isn't a really good idea. In a significant study conducted in 2004, researchers investigated the role of sperm cell patho-physiology and NO. The result of this study showed problems in the over production and over expression of free- radical NO caused by arginine, which can actually reduce sperm motility in humans, thereby impairing fertility and ability to reproduce. L-Arginine

formulas can either increase sperm motility or actually kill and reduce sperm motility and it has to do with how the arginine is formulated. So you cannot go out and go to a health food store or drug store and just buy arginine over the counter. It is quite dangerous.

When properly formulated arginine can offer all of these benefits, but when improperly formulated, L-Arginine actually can be dangerous.

That is why L-Arginine is called the "double-edge sword." Nitric Oxide which arginine produces is an extremely unstable molecule that converts to Nitrate and Nitrite within 10 seconds in the human body. NO is a potentially dangerous free radical and is a highly reactive molecule that can be harmful to all living tissues and cause that brain-related free-radical damage.

The key is to create arginine without sparking that free-radical damage. A biologically essential oxidant that is the most toxic free-radical product to the body is NO and arginine, that it is improperly formulated. Which means that the isoform pathway is essential in the formulation of safe Nitric Oxide and L-Arginine products. That is the most important information that you can have.

Is it accurate that technologies do exist to get a properly formulated product?

Yes, if they have been doing research for 10 –20 years on arginine and they understand what they are doing. If the bio-chemist who produced the product understands arginine bio-chemistry that's fine.

How many arginine biochemists are there?

Dr. Allen only knows of three in the entire world. One is a Nobel Prize winner, one is Dr. Allen, and then the third is MIOT Bio-Chem.

High glycemic formulas are also not acceptable.

You can't combine arginine with a high-glycemic formula. L-Arginine and NO formulas have to be low-glycemic to be effective. Research has shown that high-glycemic ingredients, actually block arginine from crossing that blood brain barrier and prevent any anti-aging benefits from occurring. High glycemic sugars and carbohydrates like Malta dextrin's, sucrose, table sugars, dextrose, glucose, polymers, honey, high fructose corn syrup, corn syrup and fruit juice, will blunt the benefit of any L-Arginine formula. Synthetic sweeteners, like nutra-sweet will also not allow L-Arginine to cross the blood brain barrier. When combined with a high glycemic ingredient, L-Arginine will not produce appreciable amounts of NO. In addition, people who don't want to get obese and have blood sugar disorders, which is everybody in America can't use high glycemic formulas.

What other ingredients impede the utilization of L-Arginine?

There are a lot of L-Arginine blockers that are known antagonists. Those antagonists are known as agents that directly compete with L-Arginine to block its health benefits, prevent its metabolism and negate its ability to cross that blood brain

barrier. It is well established in the scientific literature that L-Arginine antagonists include lysine, ornithine, proteins, amino acids, high glycemic sugars, synthetic sweeteners, ingredients and flavor systems made with high glycemic ingredients which means any flavor that was not specifically engineered to be low glycemic. Many of the formulas in the drug stores contain lysine. Lysine is a direct antagonist of L-Arginine and is frequently used in L-Arginine formulas. The reason they put it in there is because lysine mitigates the reaction of the herpes simplex virus so if you have an arginine product and it doesn't have lysine in it, it is going to cause a reaction of body sores if you have the latent simplex virus. This is something that you may not even know that you have and it is important to know that a good portion of people do have this virus.

You have to create a lysine formula and use it separately from L-Arginine – 4 or 5 hours away if you do have herpes simplex virus. What we did in our research is to make sure that the arginine molecule didn't deplete the lysine and cause the body sores and herpes reaction. We are the only ones that have that technology. Do not choose an arginine formula that has lysine in it.

Crossing the blood brain barrier is essential for arginine to be effective. Can it do itself?

Not in the nighttime protocol. In the daytime protocol where you take 5 grams of elemental L-Arginine, it doesn't cross the blood brain barrier. What you are trying to get arginine to do is to cross the blood brain barrier at night during delta sleep and produce those anti-aging hormones. If you are looking for testosterone, GH and IGF factors and any anti-aging mechanisms, you must cross the blood brain barrier and that will only take place a night, during delta sleep. If there is something high glycemic, or food in the system for 2 hours before you go to sleep, it isn't going to work and will not cross the blood brain barrier.

Being a blind amino acid, if it doesn't have a rider to connect to, that will take it and transport it across the blood brain barrier, it also is not going to cross the blood brain barrier. That's why you can't use arginine in capsules. Another reason you can't use it in a plain formula, is because it has to be connected to a rider and in Dr. Allen's research, the efficacious rider that they discovered was a kiwi organic glycoside molecule called Trutina Dolcem. They take the arginine and bind it on to Trutina Dolcem. If you are interested in reading about this technology, visit: www.thermosweet.com. If there isn't a rider, you won't get any anti-aging benefits. It is only effective in, Delta sleep, attached to a rider, in the low glycemic formulation and if you haven't eaten for 2 hours. That is a complicated protocol, but that is the only way that it works.

Why is there so much sugar in L-Arginine M2?

There is none. If you look on the label under sugars, it states there are sugars because the FDA has decided that any extract of fruit has to be regarded as a sugar. They may not call it kiwi fruit, or the extract of kiwi fruit. Every gram of kiwi in the **L-Arginine M2** is considered a sugar because it originated from a fruit and that is the law and we comply with the law.

The method to get the glycosides, is to take the organic kiwis over a three week process, through a 32 step water extraction. Little by little they extract the kiwi glycosides out of the kiwi and the phytochemicals, leaving behind the glucose and

the sucrose. The very things that blunt the metabolization of the larginine. It is because of this process, that Synergy WorldWide is the only larginine product in the world that can claim to be low glyceimic. The fruit extracts that we take from the organic kiwi, are all low glyceimic, meaning they don't stimulate blood glucose, or insulin levels and they do not go into the fat cells.

At the University of Florida, Dr. Allen has led the research for Proctor & Gamble, Hershey and Cargill where they take all of their foods, feed them into the human body and then track the progression of food through the body to see where it goes and what it does. From her studies, she developed the method to create organic kiwi extracts that will not elevate blood glucose, or insulin and are low glyceimic. It is important to note, that no one else knows how to do this. This is specifically why **L-Arginine M2** and all the other Larginine products that Synergy WorldWide will be coming out with cannot be reverse engineered or copied. Synergy WorldWide has the only authentic version.

There are technologies that allow the creation of formulations that actually do work and mitigate the negative aspects of everything we have discussed here. Is that accurate?

Yes, however they are very rare and scientists who designed L-Arginine formulas have to be proficient in the field of arginine bio-chemistry and they have to have experience in the metabolic pathways taken by L-Arginine, NO, GH, and anti-aging hormones.

Consumers have a right to know who formulated the product they are taking and what is the research and science behind it. If they cannot name a scientist who is a noted arginine researcher, who created the formula, and 10 years of safe use in humans, then don't take the product.

DIRECTIONS FOR USE



4 Protocols:

1. Daytime
2. Night-time
3. Fat Burning
4. Athletes

Benefits following the Daytime Protocol:

1. Anti-oxidant
2. Is Rejuvenative
3. Is An Adaptogen
4. Boosts energy level
5. Helps maintain healthy blood sugar levels
6. Helps produce Nitric Oxide
7. Helps in promoting healthy Sexual Performance
8. Larginine M2 is more tolerable than taking Larginine alone

Directions for taking Larginine M2 for Daytime Use: (General Health Benefits)

Suggested Serving: Mix one serving (1 scoop providing 5 g elemental L-Arginine) with 4-8 oz. water (depending on individual taste). Stir to dissolve. If water is very cold, mixture will take about 1 minute to dissolve. Add 3-4 cubes of ice to activate the flavor system (if desired). One serving (1 scoop) may be taken one to three times per day. Do not take within ½ hour of other meals or drinks. Do not mix with high glycemic drinks, flavored water, or juices.

Women – 10 grams/day

Men – 12 grams/day

Do not use L-Lysine with or near this product.

Benefits following the Night-time Protocol:

- Increases Muscle Mass
- Supports Growth
- Stimulates Muscle Development
- Supports Hypothalamic Response
- Helps decrease Body Fat
- Anti-oxidant properties
- Helps maintain Healthy Blood Sugar Levels
- Larginine M2 is more tolerable than taking Larginine alone
- Boosts energy levels

- Is Rejuvenative
- Helps in promoting Healthy Sexual Performance
- Is an Adaptogen
- Growth Hormone: Helps provide necessary building blocks for the body to maintain healthy growth hormone levels
- Helps produce Nitric Oxide
- Stimulates production of Human Anti-Aging mechanisms for those over 23 years.

Directions for taking Larginine M2 for Night-time Use: (Anti-Aging Benefits)

Anti-aging benefits of L-Arginine M2 only occurs when 10 grams of pure elemental L-Arginine is ingested in a low glycemic format with no competing proteins, amino acids, maltodextrins, or sugars. Mix 2 servings (2 scoops) in desired amount of water, 30 minutes prior to sleep on an empty stomach. Do not ingest food, including protein drinks, L-Citrulline (an ingredient in Herbalife's L-Arginine product), high glycemic drinks, or supplements containing any other amino acids with or within 2 hours of taking this product at bedtime. Ingesting food, amino acids, or high glycemic ingredients with or near this product is not in any way harmful, it simply will negate the benefits.

Example: If you are planning to sleep at 11:00 pm – the last time you eat will be 8:30 pm. Take L-ArginineM2 at 10:20 – 10:30 pm. L-ArginineM2 will not work unless you follow this protocol. If you don't go to sleep within that time frame or if there is a presence of food, the L-Arginine will not cross the blood brain-barrier. The L-ArginineM2 benefits for the night-time protocol will be wasted. You need to sleep for a minimum of 4 hours. Ideally you should sleep 8 hours for your body to repair itself. You will still get the Cardio-vascular benefits, but not the anti-aging benefits.

Benefits following the Fat-Burning Protocol:

- Helps decrease body fat
- Is and Antioxidant
- Helps boost energy levels
- Is an adaptogen
- Larginine M2 is more tolerable than taking Larginine alone

Directions for taking Larginine M2 to Burn Fat:

Mix one serving (1 scoop providing 5 g elemental L-Arginine) with 8-12 oz. water (depending on individual taste). Stir to dissolve. If water is very cold, mixture will take about 1 minute to dissolve. Add 3-4 cubes of ice to activate the flavor system (if desired). You may also combine the Larginine M2, water and ice in a sports bottle for convenience. Drink the entire contents prior to and during the workout.

Do not take with other protein, or high glycemic drinks 2 hours before or after drinking Larginine M2. Do not take Larginine M2 with any meal or within 30 minutes of a meal or snack. May be taken 1-2 times per day prior to exercise.

Benefits following the Athletes Protocol:

- Increases Muscle Mass
- Supports growth
- Stimulates Muscle Development
- Supports Hypothalamic Response
- Helps decrease Body Fat
- Anti-oxidant properties
- Helps maintain healthy blood sugar levels
- Larginine M2 is more tolerable than taking Larginine alone
- Boosts energy levels
- Is Rejuvenative
- Helps in promoting healthy Sexual Performance
- Is an Adaptogen
- Growth Hormone: Helops provide necessary building blocks for the body to maintain healthy growth hormone levels
- Helps produce Nitric Oxide
- Stimulates production of Human Anti-Aging mechanisms for those over 23 years

This protocol is designed specifically for professional, competing, world-class or serious athletes.

This is not intended for use by anyone under the age of 23 years.

Directions for taking Larginine M2 Athletes Protocol:

The only other time you release growth hormones is when you do some very intense exercise. If you are a professional or competitive athlete you should take L-Arginine on an empty stomach (2 hours no food ingested), 30-45 minutes before a workout. It is recommended to start the first dose at night with 5 grams of L-ArginineM2 . For 2-3 nights take one scoop. Then increase the amount to 2 scoops – which is 10 grams of elemental L-Arginine. For 3-4 weeks continue with 10 grams of L-ArginineM2 . For maximum benefits – you will take 30 grams/day – 15 grams before workouts – following the daytime protocol and 15 grams at night – following the nighttime protocol.

Men – start taking 15 grams at bedtime. Maintain that schedule for a month. Evaluate the results with 15 grams compared to 10 grams. If you aren't seeing better results, decrease the amount back to 10 grams.

Women – stay at 10 grams.

Optional Instructions for Athletes: On non-exercise days, athletes should take ProArgi9 only at bedtime. Larginine M2 should not be cycled. Most sports drinks interfere with GH release, so only drink water near desired GH release times.

L-ArginineM2 is used by professional athletes to:

- improve muscle tone
- increase ratios of muscle-to-fat
- improve muscle co-ordination and bone density
- increase healing time from injury
- use as a healthy alternative to steroids

Factors directly tied to an athlete's ability and success are:

- Age
- Genetics
- Individual Biochemistry
- Diet
- Nutritional Supplements
- Physical and Mental Drive
- Training
- Somatotype
- Performance Hormone Levels

UNACCEPTABLE L-ARGININE FORMULAS

Dr. Ann de Wees Allen is one of only three arginine biochemists in the world that has actually researched Larginine for 10-20 years. A safe Larginine product must be formulated by an arginine biochemist to prevent unacceptable Larginine formulations. The scientist who designed L-Arginine formulas must be proficient in the field of bio-chemistry and the study of metabolic pathways taken by larginine, NO, GH and anti-aging hormones.

If you are considering purchasing a Larginine formula other than LarginineM2, we suggest you research the product and find out if it has had 10 years of safe use in humans. Inappropriate forms of arginine can not only block the benefits of Larginine, but can also cause serious side effects.

Unacceptable L-Arginine Formulas

1. **Larginine that is formulated in capsules, tablets, sprays, or liquids .**
 2. **Larginine formulas that contain protein or any competing amino acid.**
- **High glycemic formulas of arginine can prevent the benefit of any Larginine formula.** These formulas that contain high glycemic sugars and carbohydrates block the arginine from crossing the blood brain barrier and will prevent any anti-aging benefits from occurring.
 - **Formulations that do not have a blind amino acid rider attached.** A blind amino acid rider must be connected to the arginine or it will not cross the blood brain barrier and you will not getting any anti-aging benefits.
 - **Arginine HCL.**
 - **Arginine Pyroglutamate**
 - **Arginine Ketoglutarate and Alpha-Ketoglutarate**
 - **L-lysine and Aspirin are known antagonists to arginine.** If Aspirin has been recommended by your physician, it should only be taken at least 2 hours away from LArginineM2. L-lysine is frequently seen in Larginine formulas because it mitigates the reaction of the herpes simplex virus. These types of formulas do not work and can actually activate the herpes simplex virus. Dr. Allen's formula is the only product that has the technology that will not activate the herpes virus.
 - **L-Ornithine** in an arginine formula is considered an antagonist and will also prevent any benefits of Larginine in the body.
 - **L-Citrulline**

According to independent studies, L-citrulline is not an appropriate ingredient in an L-Arginine formulation:

"Conversion of citrulline to arginine occurs primarily within the kidney. Increased mortality (death) risk ratio observed after citrulline is included in the Cox regression analysis reflects the effects of renal dysfunction on arginine bioavailability."

"Citrulline levels trended higher in Sickle Cell Disease (SCD) patients with pulmonary hypertension and correlated with rising creatinine levels (Spearman = 0.51; P<.001)."

Dysregulated Arginine Metabolism, Hemolysis-Associated Pulmonary Hypertension, and Mortality in Sickle Cell Disease. JAMA.2005;294:81-90

The use of Citrulline in an L-Arginine formulation causes inherent problems, including depletion of L-Arginine.

According to *The Arginine Paradox (Folia Pharmacol. Japan Vol. 119 7-14:2002 Department of Pharmacology, Teikyo University School of Medicine)* :

L-Arginine has attracted major interest because it has been identified as the natural substrate of nitric oxide synthase and is now recognized as a major player in the regulation of biological function.

The arginine paradox refers to the phenomenon that exogenous L-Arginine causes NO-mediated biological effects despite the fact that nitric oxide synthases (NOS) are theoretically saturated with the substrate L-Arginine.

There have been several explanations for this phenomenon, although none of them can explain the arginine paradox fully:

1. L-Arginine-induced insulin, which has vasodilatory actions.
2. Neither extracellular nor intracellular concentration determines the NOS activity but rather the L-Arginine amount transported across the plasma membrane may do so.
3. Endogenous NOS inhibitors reduce the enzyme sensitivity to L-Arginine. These inhibitors include, NG, NG-dimethyl-L-Arginine, L-citrulline, argininosuccinic acid and agmatine.
4. Intracellular L-citrulline, an NOS product, is a potent inhibitor of NOS so that *the cells may need extra L-Arginine to compete with L-citrulline inhibition* .

Further evidence against the use of L-citrulline is the the 2005 *Alternative Medicine Review* reported that L-Arginine, and *not* L-citrulline is the appropriate amino acid for oral supplementation:

"The amino acid L-Arginine is the preferred substance for oral supplementation to enhance nitric oxide synthesis."

"The mechanism by which L-Arginine works is by providing the substrate for nitric oxide synthesis in vascular endothelial cells, which in turn creates cyclic GMP in the underlying vascular smooth muscle cells."

"L-Arginine overcomes ADMA's nitric oxide inhibition."

"Some supplement companies are marketing L-citrulline – a by-product of the arginine-to-nitric oxide pathway – as a substance to increase nitric oxide synthesis in vascular endothelial cells."

"Citrulline does not directly convert to nitric oxide, but instead is recycled to L-Arginine (an ATP-dependent process), which then converts to nitric oxide."

The Nobel Prize in Physiology/Medicine 1998 was awarded to doctors Robert F. Furchgott, Louis J. Ignarro, and Ferid Murad for their discoveries concerning "the nitric oxide as a signalling molecule in the cardiovascular system".

As reported in the 2005 *Alternative Medicine Review* , "Ferid Murad, MD, PhD, Nobel-prize winner for his research on nitric oxide, has said the use of L-citrulline to increase nitric oxide is only *marginally effective* ."

The *Alternative Medicine Review* conclusion is . . .toss out the citrulline, and utilize L-Arginine. "Change bad medicine to good medicine and ignore the hype."

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FREQUENTLY ASKED QUESTIONS

1. Who can use L-ArginineM2?

L-ArginineM2 was designed for use by adults (persons over the age of 23) who have declining levels of the natural anti-aging hormone.

2. What is the difference between LArginineM2 and ProArgi9?

Dr. Ann de Wees Allen licensed LArginineM2 to Agel, April 20, 2007.

Prior to April 20, 2007 Dr. Ann de Wees Allen had licensed ProArgi9 to Synergy WorldWide. Synergy WorldWide will no longer have Dr. Allen's patented formula.

Synergy WorldWide owns only the name ProArgi9, not Dr. Allen's LArginine formulation. If you are interested in Dr. Allen's product and her patented formulation, you will need to purchase LArginineM2.

3. Has L-ArginineM2 been proven to be safe for humans to use?

Yes. L-ArginineM2 has been used safely in humans for the past 20 years (since 1983) and has the longest history of use in humans of any L-Arginine product. Thousands of professional athletes, as well as non-athletes, have used L-ArginineM2 with no adverse side effects.

4. Is L-ArginineM2 accepted for use by athletes by the Olympic Committee?

Yes. Athletes using L-ArginineM2 have won Gold medals. L-ArginineM2 is used and promoted by famous world-class athletes who have used L-ArginineM2 during their careers and in their competition events. L-ArginineM2 is legal for use in Olympic games, IFBB world body building competitions, WPF powerlifting events, fitness pageants, NFL events, NBA events, the Ironman competition, and any other sports event.

5. Is there any age limit for an elderly person to see benefits?

There is no age limit if you are over the age of 23. An elderly person can benefit more from this product with the night time protocol.

6. Does L-ArginineM2 contain any hormones?

No. Hormones can only be prescribed safely by a physician. The human body produces its own growth hormone naturally.

7. Can L-ArginineM2 be mixed with protein drinks?

No. Other amino acids may not be ingested simultaneously with L-ArginineM2, and that includes protein and amino acid supplements and foods or drinks containing protein and/or amino acids. However, you can ingest it two hours before or after taking L-ArginineM2. Other amino acids compete with L-Arginine, particularly Lysine, and can render the formula inert. You can take your protein supplement, shake or

bar, following your workout. Make sure the product or meal is also low glycemic unless you have depleted muscle glycogen during your workout or training regimen.

8. L-Arginine is an ingredient in my protein shake. Can't I take a double dose, say 50 grams of protein, to get sufficient arginine?

No. Very little of the arginine in the protein shake will be able to cross the blood-brain barrier. These are amino acids that compete for the same pathway. The stomach should not contain amino acids that compete with L-Arginine. Athletes that take their protein shakes with their arginine supplements are wasting their time and money.

9. How much L-Arginine is in a serving of L-ArginineM2?

One serving (1 scoop) of L-ArginineM2 contains 5,000 milligrams (5 grams) of pure free form L-Arginine.

10. How do I know how much L-ArginineM2 I should be taking each day?

The average person doesn't need to take any more than 1 scoop during the day and 2 scoops in the evening. A night-time dose of 2 scoops will give you the necessary 10 grams of L-Arginine to release anti-aging hormones.

Women need 8 grams, while men need 10 grams. Keep in mind that L-ArginineM2 does not stop the aging process, but it does help to slow it down.

Pro-athletes have large muscular physiques and weigh 200-400 lbs. The recommended protocol is 30 grams/day. Three scoops (15 grams) 30-40 minutes before lifting weights. Lifting weights builds muscle and that's when they need additional L-Arginine.

11. What if you have trouble falling asleep right away?

Occasionally, some people become more energetic after taking L-ArginineM2 at bedtime and can't fall asleep. They find themselves in a panic because they aren't falling asleep. Relax. Try cutting back to a smaller amount and work back to the desired level, or take 1-2 Tylenol PM tablets. Gradually your body will adjust.

12. What if I experience "extreme dreams" or my dreams are in color?

This can occur when the Arginine crosses the blood brain barrier. The change in dreams is normal and not anything to worry about. Sometimes they subside and sometimes they don't.

13. How should L-ArginineM2 be used?

For General Health Benefits:

Mix one serving with 4-8 oz. water (depending on individual taste). Stir to dissolve. If water is very cold, mixture will take about 1 minute to dissolve. Add ice to activate the flavor system if desired. One serving may be taken twice per day. Food and drinks may be taken with daytime servings, but high glycemic food and drinks should

be avoided. Do not use L-lysine within 2 hours of taking this product. For more information [click here](#).

For Anti-Aging Benefits:

Take 2 servings in desired amount of water, 30 minutes prior to sleep on an empty stomach. Do not ingest food, including protein drinks, L-Citrulline, high glycemic drinks, or supplements containing any other amino acids with or within 2 hours of taking this product at bedtime.

Example: If you are planning to be a sleep at 11:00 pm - the last time you eat will be 8:30 pm. Take the L-ArginineM2 at 10:20 - 10:30 pm. The L-ArginineM2 will not work unless you follow this protocol. If you don't go to sleep within that time frame or if there is a presence of food, the L-Arginine will not cross the blood brain-barrier. The L-ArginineM2 will be wasted. You need to sleep for a minimum of 4 hours. Ideally you should sleep 8 hours for your body to repair itself.

14. If someone is not using the L-ArginineM2 for anti-aging benefits, but rather for pre-training, should he/she still not take anything else within 2 hours of using it? For example; other amino acids such as protein supplements?

Those wishing to use L-ArginineM2 for pre-training should do so on an empty stomach (no food, supplements or drinks other than water should be ingested for two hours prior to taking L-ArginineM2) and ingest L-ArginineM2, 30 to 45 minutes prior to exercise.

Example for Daytime Proathlete:

Use L-ArginineM2 - 30 minutes prior to exercise - 2 scoops on an empty stomach. No proteins for 2 hours before or after L-ArginineM2.

In regards to daytime protocol - Lysine needs to be 2 hours away from the L-ArginineM2. It could be a capsule form, in food, a protein supplement, whatever, but anything with Llysine needs to be 2 hours away.

If you take 2 scoops of L-ArginineM2 at 10:30 am - wait 30 minutes - (11:00) then workout - if the workout lasts till 12:00 noon - wait 30 minutes before introducing any protein or anything containing Llysine, even the smallest amount. If your workout is 90 minutes - then at 12:30 pm - you can introduce your protein.

15. Do you recommend L-ArginineM2 for someone who has herpes?

The amino acid L-Arginine may reactivate the herpes simplex virus (HSV) in individuals with a latent herpes infection due to its competition for absorption with L-lysine, an amino acid which suppresses the HSV in the body. Therefore, L-Arginine may block the L-lysine and render it less effective in suppressing the HSV.

16. What are the negative effects of taking L-Arginine?

L-ArginineM2 is not specifically contraindicated for people with oral or genital herpes because the L-Arginine delivery system in L-ArginineM2 is formulated to reduce the

likelihood of this type of a reaction. However, some individuals may experience a reactivation of the herpes simplex virus due to L-Arginine use.

1. What can happen if you take L-lysine with plain L-Arginine together?
2. What can happen if you take L-lysine with L-ArginineM2 together?

Taking nutritional supplements that contain L-Arginine, including L-ArginineM2, together with L-lysine is not recommended because L-lysine may prevent the absorption and utilization of L-Arginine. L-lysine may still be included in the daily supplementation regimen; however, it should be taken as far away from the L-ArginineM2 as possible.

17. I was taking L-ArginineM2 and have genital herpes as well as some other serious health issues, someone recommended that I take L-Arginine as treatment. What is your recommendation?

All forms of L-Arginine are capable of reactivating herpes virus's. Taking L-Arginine as a treatment for herpes is wrong.

Dr. Allen's patented L-Arginine is the only L-Arginine that has reduced capacity for activating herpes (including genital). But in a substrate of the population, any form of L-Arginine can activate the virus if the person is under stress, whether physical or mental.

If the L-ArginineM2 is activating your herpes, then do not take it.

18. "I have a sleeping disorder and sleep with a breathing machine. I have been following the night-time protocol however with my 'Sleep Apnea' I usually will wake up at least every hour during the night. Are there any benefits for me to continue following the night-time protocol other than cardiovascular with this sleeping disorder?"

Try taking the L-ArginineM2 at night, and then on different days, in the daytime, to see if the night-time dose is effective, given your sleep problems. When sleep is disrupted, the daytime L-ArginineM2 protocol should be followed for optimal L-ArginineM2 benefits.

19. I have had several people look at this product including nurses and they say that it contains ingredients that may cause cancer. Is this true, and if it is then why is it prescribed to us?

This is simply not the case with L-ArginineM2. L-ArginineM2 is an L-Arginine product whose safety and efficacy have been proven over a 20-year period in over 250,000 people.

L-ArginineM2 was formulated by our research scientist, Dr. Ann de Wees Allen with an extensive experience in the field of arginine research and bio-chemistry.

L-ArginineM2 holds a Federal patent and the FDA has determined that the claims made by L-ArginineM2 in regard to safety and efficacy are valid and supported by clinical studies.

20. I have an allergy to chocolate and wonder whether or not that would prevent me from using L-ArginineM2?

An allergy to chocolate should not prevent you from using L-ArginineM2. L-ArginineM2 does not contain chocolate or chocolate derived ingredients.

21. I was wondering if Dr. Allen has considered an alternative for sucralose (Splenda), as there are some early warning signs that this may be even a worse product than aspartane. Do you know if they have looked at stevia?

Research has shown that sucralose does not pose any abnormal risk for the user. We utilize the smallest amount we can, as with any additive. There have been studies done in humans, which showed no toxicity or propensity towards cancer when consuming large amounts of sucralose over extended time periods.

In the United States, Stevia is a substance that is prohibited from use in human food, according to the FDA. Stevia may be sold as a stand-alone dietary supplement, or an herb, but not as a sweetener.

If you have concerns about using artificial sweetening, try the L-ArginineM2 Mixed Berry flavor that uses only the natural berries for sweetening.

22. I recently saw a protein product that had L-Arginine as one of the ingredients in it. Would I get the same benefits from taking L-Arginine in this form?

L-ArginineM2 is a product formulated with an ingredient called Trutina Dulcem which is proprietary to L-ArginineM2. The active ingredient in L-ArginineM2 is the amino acid L-Arginine. L-Arginine is a blind amino acid, and does not follow a preset path once it gets into the body. The positive benefits it is able to provide cannot be achieved if it follows the wrong path. Trutina Dulcem is intended to guide the L-Arginine to ensure that it follows a path that provides the body with the most benefits without the negative side effects associated with some other Arginine formulations.

23. Is there a difference between L-Arginine and Arginine?

In nature amino acids are found in two forms, the L form and the D form, the chemical structure of one being the mirror image of the other. The L form of amino acids as in L-Arginine is more compatible with the human body.

24. What is HCL, and why is it a bad thing in other L-Arginine products?

L-Arginine hydrochloride (HCL) is one form of L-Arginine used in commercial preparations. L-Arginine HCL is considered to be an inferior form of L-Arginine.

Unlike oral ingestion of large amounts of arginine hydrochloride (HCL), which may increase the production of free radicals such as superoxide and peroxynitrite, the patented L-Arginine formula in L-ArginineM2 utilizes a low glycemic base of Trutina Dulcem which allows the L-Arginine to follow a correct pathway within the body in order to achieve the most beneficial results.

25. Is the dosage the same for someone that may be heavy?

The optimal amount of L-ArginineM2 is not dependent upon a person's weight. Both the daytime and the night-time L-ArginineM2 protocols are the same for both sexes and should be followed according to the directions regardless of weight.

26. I suffer with Rheumatoid Arthritis. Would it help me to take more than 2 scoops of L-ArginineM2?

It is not necessary to take more than 10 grams or L-Arginine or 2 scoops of L-ArginineM2 at night. However, a scoop of L-ArginineM2 may also be taken twice during the day for a total of 4 scoops. Results are typically seen anywhere from a week to a month of continuous use.

27. I would like to take L-ArginineM2 but am concerned by the fact that I had breast cancer in 2003.

L-ArginineM2 is not recommended when there are cancers of an endocrine origin (cancer sensitive to hormonal levels - examples of these types of cancer would include prostate, breast, endometrial, cervical, thyroid, etc).

L-ArginineM2 use is not recommended for persons who have had breast cancer as a precaution.

It is recommended to avoid L-Arginine if you have been diagnosed with cancer. Though L-Arginine has been shown to help successfully combat many cancers, very high doses (30-50 grams of L-Arginine) per day stimulates growth hormone, which primarily stimulates growth of muscle mass. Certain tumor cells may thrive on human growth hormone, which may stimulate growth of breast cancer cells. As far back as 1981, the National Cancer Institute reported that arginine-derived nitric oxide inhibits [blocks] breast-cancer-cell replication in a test tube, and L-Arginine has never been shown to cause breast or any other type of cancer. The research shows the pros and cons of using L-Arginine at high doses. Doses of 6 grams a day or less of L-Arginine is not considered a potential problem for cancer patients, but, as a precautionary decision, use of L-Arginine in the presence of any cancer is contraindicated without a doctor's specific permission. A person in cancer remission should also consult with a health care provider before taking L-Arginine.

28. Could you please tell me why L-ArginineM2 is not recommended for nursing women?

Most things ingested by the mother while lactating can be secreted in breast milk. This includes dietary supplements. Because of this it is our policy to not recommend any products to pregnant or nursing women. Any decision regarding supplementation must be made a physician.

29. If you are taking Coumadin for a blood clot can you still take L-ArginineM2?

The ingredients in L-ArginineM2 are not known to interfere with Coumadin. However, it is best to separate nutritional product use from prescription medications by 1-2 hours and discuss product use with a physician.

30. I am currently on hormone therapy (Livial) and have started taking L-ArginineM2 (4 grams) every morning. Can I continue taking my Livial tablets in the evening? Will this combination cause any problems?

According to our pharmacist, L-ArginineM2 is not known to interfere with hormone replacement therapy.

31. I have problems sleeping and I understand that Tylenol PM can be taken. If one is taking the L-ArginineM2 at night, how soon can one take Tylenol?

Tylenol PM may be taken 1 hour before or after L-ArginineM2.

32. Will L-ArginineM2 have negative effects for someone with Epstein-Barr?

L-ArginineM2 is not known to adversely affect persons with the Epstein-Barr virus. However, as individual conditions may vary, it should be discussed with a physician.

33. Why is Viagra not recommended with L-ArginineM2 use?

Viagra stimulates Nitric Oxide production and therefore should not be used with L-ArginineM2 because there is such thing as too much Nitric Oxide.

34. I work 3 jobs and am only able to get 3 hours of sleep at night. Will I still benefit from taking the L-ArginineM2 following the nighttime protocol?

Delta sleep is typically achieved in the first 45 minutes to 75 minutes of sleep and is characterized by very deep sleep. If you get up in the night at least 1.5 to 2 hours after falling asleep then this should not interfere with the efficacy of L-ArginineM2 nighttime regimen. (Delta sleep is the only time period when the L-Arginine can cross the blood brain barrier.)

35. I would like to take L-Arginine, however also take a statin. I have asked my doctor and while he knows of no adverse interactions, he has not heard of many people taking L-Arginine either. I take Advicor.

At this time there are no well-known drug interactions with L-Arginine and statin drugs. It should be fine to use the L-ArginineM2. However, it is a good idea to separate any medications from the time one takes supplements by 1-2 hours. If L-ArginineM2 is used at bedtime, one should take the statin drug at least 2 hours before using the L-ArginineM2.

36. What is "HCL," and why is it a bad thing in other L-Arginine products?

L-Arginine hydrochloride (HCL) is one form of L-Arginine used in commercial preparations. L-Arginine HCL is considered to be an inferior form of L-Arginine.

Unlike oral ingestion of large amounts of arginine hydrochloride (HCL), which may increase the production of free radicals such as super oxide and peroxy nitrite, the patented L-Arginine formula in L-ArginineM2 utilizes a low glycemic base of Trutina Dulcem which allows the L-Arginine to follow a correct pathway within the body in order to achieve the most beneficial results.

37. I've been considering taking Arginine Pyroglutamate (as an alternative to L-ArginineM2) supposedly it does not compete with L-lysine?

Arginine Pyroglutamate absolutely DOES compete with Lysine.

NO form of L-Arginine can cross the blood-brain-barrier if it is taken within 2 hours of Lysine.

After 23 years of L-Arginine research, Dr. Allen will tell you that the rules of arginine biochemistry do not change because companies marketing arginine pyroglutamate make up ridiculous statements.

38. Is it okay if I take Aspirin with LArginineM2?

No, Aspirin is an antagonist to arginine and should not be taken within 2 hours of taking LArginine. If your physician has recommended the aspirin, then you should take it at least 2 hours away from LArginineM2. Aspirin can be beneficial to ones health and is often recommended by physicians.

39. Does LArginineM2 contain ferulic acid?

Yes. LArginineM2 contains ferulic acid. In fact, "Ferulic acid, and other phenolic acids may prevent damage to DNA in cells."

(source: Johns Hopkins Medical Institution, Baltimore, Maryland; The Johns Hopkins White Papers, Nutrition and Weight Control for Longevity, 2000, pg 40.)

Phenolic acids are found in strawberries, raspberries, tomatoes, citrus fruits, whole grains, and nuts.

40. I'm 21 years old and I'm interested in taking the supplement for increasing muscle mass. I haven't taken any yet by any other company because there are still a few blank spaces. I was reading that arginine products may induce the herpes simplex virus to appear in the mouth and genital area. I have the virus and I was wondering if there is a way to still take arginine without that nasty side effect. I'm unsure if ocular herpes is the same as the cold strand of herpes though, because I have the cold strand. I was also reading that Lysine has the potential to blunt the virus from becoming active. And why is it that you have to be at least 23 years old to take your supplements?

When the herpes viral proteins have a high ratio of L-Arginine to L-lysine, the virus can successfully replicate and cause herpes symptoms. This is likely seen with L-Arginine supplementation. On the other hand, when the ratio of L-lysine to L-Arginine is high, replication of the virus tends to be suppressed. LArginineM2 has

been developed with certain cofactors that may direct the L-Arginine away from the viral proteins. Studies indicate that one to three grams of supplemental L-lysine daily will combat herpes symptoms. Lysine intake should be spread out through the day, and at least 2-4 hours apart from L-Arginine and L-Arginine containing products. These two amino acids compete for absorption when consumed together.

41. I have an enlarged prostate and take Flowmax for the problem. Can I take LArginineM2?

Yes, you can take LArginineM2 but I would not recommend that you take the night time dose with the prostate problem. Make sure you separate the prescription drugs from the supplement by at least two hours. I would also recommend that anyone with a preexisting medical condition should discuss the use of any nutritional products with their physician to make sure the products won't be harmful or interfere with a current condition or medication.

42. What is the correct protocol for taking Larginine if you have had genital herpes?

Plain L-Arginine (not formulated with essential co-factors) can increase replication of the herpes simplex virus in persons with herpes (cold sores, genital herpes). LArginineM2 contains the essential co-factors designed to avoid the negative herpes side-effects associated with taking L-Arginine, but persons with active herpes simplex or brain and ocular herpes should not use the product. Some people may be sensitive to the ingredients in LArginineM2 and if a herpes outbreak develops following LArginineM2 use, it may be advisable to discontinue LArginineM2.

43. L-Arginine is an ingredient in my protein shake. Can't I take a double dose, say 50 grams of protein, to get sufficient arginine?

No. Very little of the arginine in the protein shake will be able to cross the blood-brain barrier. Again, we're dealing with amino acids that compete for the same pathway. The stomach should not contain amino acids that compete with L-Arginine. Athletes that take their protein shakes with their arginine supplements are wasting their time and money. The arginine formulas should be taken before the workout, and the protein shake or meal replacement taken after the workout. As for taking 50 grams of protein at one time, that is also a waste of time, and is not healthy. The body cannot absorb more than 30 grams of protein at one time, and that is the case whether you are a power lifter who weighs 300 pounds or a runner who weighs 150 pounds.

44. What are some of the benefits of LArginineM2 for menopause?

The nighttime dose of LArginineM2 (or LArginineM2 taken prior to sleep) stimulates the production of GH or Growth Hormone in the body. Growth hormone production declines as we age and increasing its production provides the body with rejuvenate benefits. Therefore, increased levels of GH enhance muscle mass, aid in decreasing body fat, help boost energy, promote healthy sexual performance and stimulate the production of anti-aging mechanisms. The benefits associated with menopause symptoms may be related to the increased production of anti-aging mechanisms and growth hormone.

45. How do I take lysine to prevent any outbreak of viral symptoms?

For Herpes Simplex, L-Lysine capsules (not tablets) containing ONLY L-Lysine and no other amino acids, can be taken three times per day with meals. Never take L-Lysine within 2 hours of taking LArginineM2 or any L-Arginine product.

46. Will LarginineM2 help with women or men who are experiencing hair loss?

Hair loss may be attributed to a number of different factors such as heredity, stress, illness, poor nutrition, and hormones. Because LArginineM2 affects hormone production, and elevates the levels of Growth Hormone as well as testosterone, it may have a negative effect upon hormone related hair loss. It is impossible to know whether or not LArginineM2 will be beneficial until the exact cause of the hair loss is determined.

LArginineM2 holds a Federal patent and the FDA have determined that the claims made by LArginineM2 in regard to safety and efficacy are valid and supported by clinical studies.

47. Does the LArginineM2 conflict with coconut oil and xylitol?

There should not be a problem with using LArginineM2 with xylitol as it is a low glycemic sweetener. However, it is best to follow the LArginineM2 instructions and not take it at the same time as the coconut oil.

48. Has L-ArginineM2 been proven to be safe for humans to use?

LArginineM2 Safety in Humans

LArginineM2 is backed by a full Patent and has a 100% safety record of use in humans. LArginineM2 was invented by one of the leading world specialists in L-Arginine biochemistry, Dr. Ann de Wees Allen.

CONTRAINDICATIONS

DO NOT use plain L-Arginine without the appropriate co-factors, as it may stimulate replication of the herpes-simplex viruses and other negative side effects. Safe L-Arginine contains the essential co-factors designed (Patent –Pending) to avoid the negative herpes side-effects associated with taking L-Arginine, but persons with active herpes simplex or brain and ocular herpes should avoid:

- Eating foods that contain high levels of L-Arginine, such as chocolate, beer, meats, nuts, sesame and other seeds, onions, garlic, grapes, peanut butter, coconut, grape juice, orange juice, grain cereals, and beans.
- Using any L-Arginine supplements.

The herpes virus (herpes virus hominis) typically lays dormant in humans until activated by stress, colds, lack of sleep, and nutritional factors. Plain L-Arginine (not formulated with essential co-factors) can increase replication of the virus. L-lysine-rich foods that help combat herpes viruses include whole boiled eggs, yogurt, cheese, fish, and turkey.

DO NOT take L-Arginine with L-lysine. These two aminos compete with each other to cross the blood-brain barrier.

DO NOT use L-Arginine if you have been diagnosed with cancer. Though L-Arginine has been shown to help successfully combat many cancers, very high doses (30-50 grams of L-Arginine) per day stimulates growth hormone, which primarily stimulates growth of muscle mass. Certain tumor cells may thrive on human growth hormone, which may stimulate growth of breast cancer cells. As far back as 1981, the National Cancer Institute reported that arginine-derived nitric oxide inhibits (blocks) breast-cancer-cell replication in a test tube, and L-Arginine has never been shown to cause breast or any other type of cancer. The research shows the pros and cons of using L-Arginine at high doses. Doses of 6 grams a day or less of L-Arginine is not considered a potential problem for cancer patients, but, as a precautionary decision, use of L-Arginine in the presence of any cancer is contraindicated without a doctor's specific permission.

DO NOT take L-Arginine with Viagra.

L-Arginine is **NOT** for use by pregnant or lactating women, males with prostate disorders or high PSA values.

L-Arginine should not be used by diabetics or borderline diabetics unless under close medical supervision because growth hormones can sometimes block the effects of insulin. L-Arginine may be beneficial to some persons with Type II diabetes or sub-diabetic insulin resistance: Physicians and clinicians may request the "L-Arginine/Diabetes Report" .

Persons under the age of 23 and/or persons who have not completed their long-bone growth phase should **NOT** take L-Arginine.

At this time (January, 2004) there are no well-known drug interactions with L-Arginine.

If you are considering using L-Arginine, please read the documents also at www.argm2.com before using this product. If you have a medical condition or health concerns, please consult your physician first.

LEGAL CLAIMS

“Legal Claims” herein stated (1-15) are solely related to the L-ArginineM² Patent, as awarded to Dr. Ann de Wees Allen, the exclusive inventor and Patent-holder of L-ArginineM².

Each of the fifteen (15) claims for L-ArginineM² have been submitted and analyzed by FDA and FTC regulatory attorneys and are allowed under the Dietary Supplement Health and Education Act of 1994.

Said claims have been determined to meet the legal requirements of “Dietary Supplement Structure/Function” claims per government regulations, as related to Dr. Allen’s Patent for L-Arginine, and upon review of the Patent’s documentary evidence and clinical substantiation spanning a two-decade period of more than 23 years, including broad use of safety in humans.

The following claims are unique to the L-ArginineM² Patent and evidential documents submitted since 1983, and may not be used for any other product or patent, under penalty of law.

Basis for Claims

- 2 Decades of L-Arginine Research
- Safe Use by Over 250,000 Human Subjects
- Safe Use in Humans Over A Longer Period Than Any Other L-Arginine Product (Since 1983)
- Over 100,000 Pages of Documentation
- Only L-Arginine That Contains a Rider for Blind Amino Acids
- Only Certified Low Glycemic L-Arginine Product:

LEGAL CLAIMS

As related to L-ArginineM² Patent

1. Enhances Muscle Mass
2. Supports Muscle Growth
3. Stimulates Muscle Development
4. Supports Hypothalamic Response

5. Aids In Decreasing Body Fat
6. Is An Antioxidant
7. Helps Maintain Healthy Blood Sugar Levels
8. Is More Well Tolerated Than L-Arginine Alone
9. Helps Boost Energy
10. Is Rejuvenative
11. Helps Promote Healthy Sexual Performance
12. Is An Adaptogen
13. Growth Hormone: Helps Provide The Building Blocks Necessary For The Body To Maintain Its Own Healthy Growth Hormone Levels
14. Helps Produce Nitric Oxide (NO)

15. Stimulates Production Of Human Anti-Aging Mechanisms In Persons Over 23