# **Arginine—"The Love Potion"**

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Do you know the difference between worry and panic? Worry is the first time you can't do it a second time. Panic is the second time you can't do it the first time.

Researchers today know that upwards of **80 percent of impotence cases can be linked to purely physical problems**, from cardiovascular and neurological ailments to smoking and prescription drugs.

If you are a male over 40 years old you might be feeling the effects of impotency. At this age our body begins to experience the results of a poor diet and sedentary lifestyle. Science has discovered that high cholesterol, high blood pressure, diabetes, being over weight, and smoking not only are the leading indicators for heart disease, but also are indicators for sexual dysfunction.

In fact, so strong is the link between early impotence and atherosclerotic heart disease that some cardiologists have already begun considering impotence before sixty as an early biomedical marker for future heart problems.

And the prescription drugs used to treat these vascular problems actually in themselves can affect erectile performance.

If you are a baby boomer like me, you got to be asking yourself, "Is there solution for this very personal problem?" The answer to this question my friend is a resounding YES!

But first lets talk about the pharmaceutical companies answer to impotence. Yep, if you are like me your email box is bombarded with messages about sex enhancing type products. But do they work and are they safe? Let's take a look at the leader in vasculogenic drug sales, which is still *Viagra*, but if you have watched any television lately you will see it has been getting stiff competition from the likes of *Levitra* and *Cialis...*no pun intended.

#### What Is *Viagra*?

Viagra is a prescription medicine (sildenafil citrate) taken by mouth for the treatment of erectile dysfunction (ED) in men. ED is a condition where the penis does not harden and expand when a man is sexually excited, or when he cannot keep an erection. Viagra may help a man with ED get and keep an erection when he is sexually excited. Viagra must be used only under a doctor's care.

Pfizer originally clinically studied sildenafil citrate for use with patients with heart disease. Unfortunately, the scientists soon discovered that it was actually

weakening the hearts of the men volunteering for these trials, which was the opposite effect they were hoping for. But during the trials a pleasant side effect popped up (I know, I'm bad). Men were reporting an increase erectile function.

*Pfizer* soon changed the trials to the studying of erectile dysfunction and the rest is history. Once it passed *FDA* approval, *Pfizer* reported sales of 30,000 prescriptions the 1<sup>st</sup> week, 110,00 prescriptions the 2<sup>nd</sup> week and a total of 350,000 prescriptions filled by the end of the very first month. WOW! What a gold mine! What was not so bragged about by *Pfizer* was the report by the *FDA*, which showed during its first year of sales, *Viagra* had 1473 adverse events. Included among those adverse events were:

- 255 serious heart rhythm disturbances
- 53 episodes of congestive heart failure
- 119 strokes
- 517 heart attacks
- 522 deaths

That's right 522 deaths! Remember the *FDA* pulled the natural product ephedra from the market because there were 155 assumed deaths reported over a 10-year period. None of these deaths were actually proven to be caused from taking ephedra. And it's synthetic twin (ephedrine) remains on the market even today. Hmmm? Just whom is the *FDA* protecting?

## How Does Viagra Work?

Once a man is aroused, nerves in his brain begin firing and cause a release of the neurotransmitter acetylcholine in the penis. This acetylcholine, in turn causes the endothelial cells in penile arteries to begin producing nitric oxide from arginine.

Once created, nitric oxide triggers the release of another naturally occurring chemical called "cyclic guanosine monophosphate (cGMP)." As cGMP levels build, the smooth muscles of the penile arteries relax, the vessels dilate, and increased blood flow causes swelling of the corpus cavernosa, producing an erection. Even as nitric oxide continues to build up cGMP, another enzyme begins to break it down. This enzyme, phosphodiesterase, appears to act as a brake on the overall system, preventing erections from becoming excessive or permanent...OUCH!

Following climax or other cessation of the sexual stimulation, the penile nerves stop firing and the nerve endings cease releasing acetylcholine. Without the acetylcholine signal, the endothelial cells cut back on nitric oxide. Without nitric oxide, no more cGMP is produced and what little is left is soon broken down by phosphodiesterase resulting in loss of erection.

You can see that having sex is quite a complicated function in the human body and having an erection might potentially be affected at any number of different stages, none of which have anything to do with a man's manhood!

Let's quickly review:

Brain Stimulation → Acetylcholine Released → Nitric Oxide Converted From Arginine → cGMP Released → Blood Vessels Dilate → Erection → Phosphodiesterase Released → Climax → Acetylcholine Signal Stopped → Penile Shrinkage

Knowing this biochemical chain reaction will better help you understand what role *Viagra* plays in the love making process. *Viagra* works by blocking the enzyme phosphodiesterase. Without this enzyme to put the brakes on cGMP, levels of this potent vasodilator can build unchecked. For impotent men whose ability to create nitric oxide has been impaired by damage to the endothelium, what little nitric oxide they can produce slowly but steadily triggers production of cGMP.

Like most pharmaceutical drugs, *Viagra* just covers up the problem, which is an unhealthy endothelium and lack of nitric oxide and helps the symptom of ED. Later we will look at how by increasing nitric oxide from arginine, not only is a man's ED challenge solved but the endothelium is also repaired.

## Viagra does not:

- Cure ED
- Increase a man's sexual desire
- Protect a man or his partner from sexually transmitted diseases, including HIV. Speak to your healthcare professional about ways to guard against sexually transmitted diseases.
- Serve as a male form of birth control
- Viagra is only for men with ED. Viagra is not for women or children.
- Viagra must be used only under a healthcare professional's care.

#### Who Should Not Take *Viagra*?

Do not take *Viagra* if you:

- Take any medicines called "nitrates"
- Use recreational drugs called "poppers" like amyl nitrate and butyl nitrate
- Have been told by your healthcare professional to not have sexual activity because of health problems

#### What are The Risks?

The following are the major possible risks and side effects of *Viagra* therapy. This list is not complete.

Viagra can cause your blood pressure to drop suddenly to an unsafe level if it is taken with certain other medicines such as nitrates and alpha-blockers, and recreational drugs that contain nitrates called "poppers." A sudden drop in your blood pressure could cause you to become dizzy, faint, or have a heart attack or stroke.

Tell all your healthcare professionals that you take *Viagra*. If you need emergency medical care for a heart problem, it will be important for your healthcare professionals to know when you last took *Viagra*.

## Viagra may uncommonly cause:

- An erection that won't go away (priapism)
- Vision changes, such as seeing a blue tinge to objects or having difficulty telling the difference between the colors blue and green
- Permanent vision loss called nonarteritic ischemic optic neuropathy (NAION), described as "stroke of the eye (FDA has approved new labels for Viagra, Cialis, and Levitra to include information on possible eyesight loss (NAION). Stop using Viagra, Cialis, or Levitra if you have a loss in your eyesight. Get medical help right away).

## Some common side effects with *Viagra* include:

- Headache
- Flushing
- Upset stomach
- Stuffy or runny nose
- Urinary tract infection
- Diarrhea

## What Should I Tell My Healthcare Professional?

Tell your healthcare professional if you:

- Have or had heart problems
- Have low blood pressure or have high blood pressure that is not controlled
- Have had a stroke
- Have liver problems
- Have ever had severe vision loss.

- Have kidney problems or require dialysis
- Have retinitis pigmentosa, a rare genetic (runs in families) eye disease
- Have stomach ulcers
- Have a bleeding problem
- Have a deformed penis shape or Peyronie's disease
- Have had an erection that lasted more than 4 hours
- Have blood cell problems such as sickle cell anemia, multiple myeloma, or leukemia
- Are taking a medicine called a protease inhibitor for the treatment of HIV
- Are taking medicines called alpha blockers (alpha blockers are sometimes prescribed for prostate problems or high blood pressure)

## A Natural Alternative

According to a ruling by our very own *Federal Drug Administration (FDA)*, foods do not heal...only drugs can heal. Yet, as we look, as in the case of *Viagra*, drugs clearly do not heal, they merely cover up the real problem by altering a symptom of that original problem.

Hippocrates, who is referred to as "The Father of Medicine," said this in 365 AD:

"Let food be your medicine and medicine be your food."

"The only science of medicine is the intelligent use of natures only real medicinal remedies...herbs."

Well, I am here to tell you that the nutritional supplement arginine is a real medicine. As researchers across the globe have affirmed in leading journals, arginine is not some mild placebo with only marginal effects on penile blood flow. Rather, it has been shown time and again to provide your body with the one critical item it most requires to function optimally: nitric oxide.

"The amount of nitric oxide produced in the penis, and thus the ability to have an erection, is directly related to the availability of arginine." The Harvard Health Letter

"This year scientists proved definitively that nitric oxide translates sexual excitement into potency by causing erections. The pelvic nerves get a message from the brain and make nitric oxide in response. Nitric oxide dilates the blood vessels throughout the crucial areas of the penis, blood rushes in and the penis rises to the occasion."

**Science Magazine** 

"80% of sexual dysfunction in men and women is directly attributable to some form of nitric oxide failure brought on by smoking, prescription drugs, diabetes, high blood pressure, high LDL cholesterol and obesity (35 pounds overweight). Ironically, these are the same risk factors for heart disease and stroke."

New England Journal of Medicine

In the genital tissue, nitric oxide triggers the release of c-GMP, which is a molecule that causes engorgement of this tissue. Arginine releases nitric oxide to make sure there is plenty of c-GMP. *Viagra* on the other hand, just blocks the enzyme phosphodiesterase, which protects the body from producing too much c-GMP. I hope I am explaining this well enough for you to see there is a big difference between these two actions.

Oral arginine supplements seem to boost erections in the full spectrum of men, from the completely healthy to those suffering from advanced cardiovascular disease. In men without erectile problems, for example, arginine seems to strengthen and prolong erections. In those with occasional failure, it can reduce the frequency of such occurrences. In men with more serious so-called vascular impotence due to advanced atheroscerosis, hypertension, or diabetes, supplemental arginine can gradually begin to reverse damage and rejuvenate penile function.

Comparable to *Viagra*, oral arginine may take up to an hour before it enters your system. But once the arginine begins to convert over to nitric oxide in the endothelium of your blood vessels, the miracles begin to happen. And the best part is, not only does the sexual dysfunction become a problem of the past, but the nitric oxide is also repairing your endothelium, which translates to solving the problem of the lowered nitric oxide levels to begin with. Soon blood pressure is normal, diabetes is under control, LDL cholesterol is normal, and best of all...no more prescription drugs, which also contribute to sexual dysfunction by lowering nitric oxide levels.

You can think of arginine as a "chronic tonic" for your entire cardiovascular system, which includes your penile plumbing.

#### What about women?

It is estimated that over 40% of women experience some form of sexual dysfunction making it, like heart disease, not just a "man problem."

Sleep researchers recently discovered that it's not just men who undergo nightly changes in their sex-organ blood flow pattern. Sleeping women undergo nearly identical changes as well. To be sure, blood engourgement of the vaginal tissues may be harder to see than the changes in a penis as it becomes erect, but more and more doctors now believe that a healthy sexual response in women

is as dependent on a well-functioning vasculature as it is in men. Vaginal lubrication, for instance, is just one example of a process that's highly dependent on ample blood flow in the urogenital arteries.

Researchers at *Stanford University School of Medicine* discovered that arginine works to increase levels of nitric oxide in the body and is potentially a signal molecule for sexual arousal. Their research showed arginine did significantly improve women's sexual desire and overall satisfaction.

#### The Definitive Proof

The following are just a sampling of studies proving the benefits of supplementing with arginine (minimum of 5 grams per day) for men and women:

- Arginine alleviates male impotence (by stimulating the production of nitric oxide, the endogenous chemical that stimulates erections in males) (1).
- Arginine alleviates male infertility by improving sperm count and sperm motility (due to its involvement in the manufacture of endogenous spermidine) (2).
- Arginine enhances (male and female) sexual desire (libido) (3).
- Arginine enhances (female) sexual performance due to its role in the production of nitric oxide in the clitoris (nitric oxide facilitates female orgasm in the clitoris) (4).
- Arginine improves (male) sexual performance by providing nitrogen to the nitric oxide (NO) molecule that is integral to the achievement of erections - Arginine produces erections that are bigger, harder and more frequent. It also increases male sexual endurance, i.e. erections that last for a longer period of time (5).
- Arginine improves sperm count and sperm motility (6).
- Arginine may improve prostate function (7).
- Arginine deficiency can cause atrophy of the testicles of the testes.

## Safety of Arginine

The recommended dosage for a healthy person is 5 grams of supplemental arginine per day. For people with cardiovascular problems including sexual dysfunction, a divided dose of 5 grams taken first thing in the morning and 5 grams taken last thing before bed time will give the best results. Unlike *Viagra* arginine has been shown to be safe in the above listed studies as well as thousands of others with as high of doses as 50 grams with no known side effects (8).

### Don't Be Ripped Off

I recently saw an informercial selling a product called *Vazomyne*. They were making huge claims about increasing a man's sexual performance. What I found

truly interesting was they were claiming these powerful results by taking just 500 mg per day of their arginine tablets, when the recommended dose for sexual enhancement is a minimum of 5000 mg per day. Now at \$39.99 per bottle of thirty 500 mg tablets, that would last you 3 days if you wanted to take the appropriate amount of 5000 mg or it would cost you \$399.99 for a 30-day supply. Ouch! I like sex as much as the next guy, but this would be a little too pricey for me, so I guess I better take a job as a eunuch!

My point is you do not have to sell one of your kidneys to enjoy love making into your twilight years. Find an arginine product that is a liquid formulation, which will give you a faster and better absorption, one that has at least 5000 of arginine per dose and one that is reasonably priced. Especially for all the men who are reading this report and will be running out to buy a case of arginine for their wives!

#### Resources

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