

## ERECTILE DYSFUNCTION EXPECTATIONS AND CONSIDERATIONS

Compiled by Charles (Chuck) Maack – Prostate Cancer Advocate/Mentor

When asked my opinion by patients/caregivers regarding when they should expect a return of normal erectile function, I provide <http://tinyurl.com/3rtah63>. For those interested in knowing more regarding erectile dysfunction (ED), I provide <http://tinyurl.com/3oz7u8l>.

The trigger for penile erection is sexual stimulation reaching the brain. The brain responds to the stimulation by signaling the heart to pump more blood into the penile arteries. These arteries promptly dilate to twice normal size. Blood-flow jumps sixteen times normal. As blood-flow increases in the arteries, it partly blocks the veins and traps the arterial blood. The two channels of the penis called “Corpus cavernosa” become so full of blood the penis lengthens and can double its cubic size. All of this can take place in a normal man within 60 seconds!

This marvelously elaborate system happens, or it doesn't, depending on the flow of blood. If any part of the process breaks down, getting or keeping an erection becomes impossible. The system can break down from many causes; surgical removal of or radiation to the prostate gland, mental/emotional problems, a new partner, stress, anxiousness, fear of sexual failure, disease involving the blood vessels, hypertension, diabetes, elevated cholesterol, some medications for high blood pressure, diffuse arterial disease (blockages in the small penile arteries), venous leak (though blood flows properly into the corpus cavernosa, the veins are not compressed to hold it where it is needed). Age plays a role since as men get older, the corpus cavernosa can lose their ability to stretch. When this happens, the chambers do not enlarge to accept an increase in blood sufficient to squeeze the veins and hold the blood in place. Other causes: low testosterone, damage to the nerves, muscles, or bones in the groin area, and even tobacco. Alcohol's impact on the libido and sexual capability is well put in the saying “As whiskey make desire go up, ability goes down.” The methods to counter some of these problems are nearly the same today as they were those several years ago. PDE-5 inhibitors were not yet available. Trazadone and Ginseng were sometimes considered as aphrodisiacs that might dilate the penile arteries to an indefinite, varying extent. L'Arginine is another form of aphrodisiac but read my review below.

The current primary “aids” to hopefully still enable an erection and hopefully bring about natural erections are now PDE5 inhibitors (sildenafil as Viagra, vardenafil as Levitra, or tadalafil as Cialis – the most common names we are used to – as well as vardenafil HCl as Staxyn, and avanafil as Stendra) and penile injections (usually

bimix or trimix), since both enhance arterial blood flow as well as necessary oxygenation of penile tissue.

A suggestion in the event venous leak may be the culprit is to take a ring from a Vacuum Erection Device (VED) and with penile injection move the ring to the base of the penis to hopefully hold the blood in for sufficient time for intercourse.

My opinion regarding L-arginine:

A man taking this product also asked what I thought of L-Citrulline, since he had read that it is found in various fruits and supposedly is another form of aphrodisiac. Since Citrulline is a precursor to Arginine I felt an explanation of both the good as well as (and I think more importantly) the dangerous effects that could come from taking L-Arginine. Though many have apparently fared without problems with use of this product, there is much evidence of the harm that can come from side effects and drug interactions to those making use of the product without studying the product and having a physician participating in overseeing its use who is, himself/herself, reasonably knowledgeable in the product.

My advice when it comes to L-Arginine: Every so often L-arginine is recommended to those experiencing Erectile Dysfunction (ED). All well and good IF the side effects AND drug interactions are known before consuming. Use by those with heart issues and/or those already experiencing heartburn or ulcers should be avoided. Pay particular attention to the "Possible Drug Interactions" identified below. L-Arginine is not an herb appropriate to everyone.

What to know about L-Arginine before consuming:

Erectile Dysfunction•

L-arginine has been used for erectile dysfunction. Like the drug sildenafil citrate (Viagra), L-arginine is thought to enhance the action of nitric oxide, which relaxes muscles surrounding blood vessels supplying the penis. As a result, blood vessels in the penis dilate, increasing blood flow, which helps maintain an erection. The difference in how they work is that Viagra blocks an enzyme called PDE5 which destroys nitric oxide and L-arginine is used to make nitric oxide.

In one study, 50 men with erectile dysfunction took either 5 grams of L-arginine per day or a placebo. After six weeks, more men in the L-arginine group had an improvement compared to those taking the placebo. Unlike Viagra, L-arginine must be taken daily.

## Wound healing

L-arginine's possible activity in wound repair may be due to its role in the formation of L-proline, an important amino acid that is essential for the synthesis of collagen.

## Other Conditions

L-arginine is also used for high blood pressure, migraines, sexual dysfunction in women, intermittent claudication, and interstitial cystitis.

## Sources of L-Arginine

L-arginine is conditionally essential, which means that the body normally has enough. It's produced in the kidney and to a lesser extent, in the liver.

Food sources of L-arginine include plant and animal proteins, such as dairy products, meat, poultry, fish, and nuts. The ratio of L-arginine to lysine is also important - soy and other plant proteins have more L-arginine than animal sources of protein.

Severe burns, infections, and injuries can deplete the body's supply of arginine. Under these conditions, L-arginine becomes essential and it is necessary to ensure proper intake to meet the increased demands.

L-arginine is also essential for children with rare genetic disorders that impair the formation of L-arginine.

Side Effects of L-Arginine (MY NOTE: This is the important stuff to be aware)  
L-arginine may lower blood pressure because it is involved in the formation of nitric oxide. It may also result in indigestion, nausea, and headache.

L-arginine should not be used following a heart attack. If you have a history of heart disease, consult your doctor before taking L-arginine.

Higher doses of arginine can increase stomach acid, so it may worsen heartburn, ulcers, or digestive upset caused by medications. Arginine appears to increase stomach acid by stimulating the production of gastrin, a hormone that increases stomach acid.

L-arginine may also alter potassium levels, especially in people with liver disease. People with kidney disease and those who take ACE inhibitors or potassium sparing diuretics should not use supplemental L-arginine unless they are under

professional supervision. It may also alter the levels of other chemicals and electrolytes in the body, such as chloride, sodium, and phosphate.

Arginine may increase blood sugar levels, so it shouldn't be used by people with diabetes unless under a doctor's supervision.

People with genital herpes should not take L-arginine because it may aggravate their symptoms.

#### Possible Drug Interactions

L-arginine may counteract the benefits of lysine to treat herpes.

NSAIDS (non-steroidal anti-inflammatories) or other drugs that are hard on the stomach should not be combined with L-arginine.

Drugs that alter potassium levels in the body, such as ACE inhibitors and potassium sparing diuretics.

In closing, A check of the internet can find both pros and cons regarding the use of L-arginine. I listed some of the areas of concern, and here is a comment regarding this product and cancer:

"Administration of large amounts of arginine to animals has been found both to promote and to interfere with cancer growth. In preliminary research, high intake (30 grams per day) of arginine has increased cancer cell growth in humans. On the other hand, in people with cancer, arginine has been found to stimulate the immune system. At this time it remains unclear whether arginine is dangerous or helpful for people with cancer."

That comment still makes me wary. Possibly lower intake would have much less effect, but, personally, I opt for safety. I would encourage those interested in supplementing to do so only under the oversight of a physician who is knowledgeable regarding L-arginine AND its side effects, and even then, be certain to have regular diagnostics to insure this product is not effecting vital organs.

I also doubt that nowadays any physician would prescribe Trazadone for erectile dysfunction issues; somewhat a "bad news" anti-depressant.