

## Alternative Medicine and Therapies - Men

### Nutritional Therapy

A balanced diet is essential for the body to function properly. Supplements help improve fertility. Lack of protein and calories from malnourishment is a cause of infertility, so adequate nutrition should be the basis for treatment of any illness, including infertility.

The supplements most important in enhancing fertility in men are vitamin C, E, zinc and L-arginine. Vitamin C helps prevent sperm from clumping or sticking together, thus improving the chances for fertility. Vitamin E is the fertility vitamin because it corrects the functioning of the endocrine glands. Zinc increases both sperm count and sperm motility. It is important for the health of reproductive organs and the prostate gland. Found in high amounts in the head of the sperm, L-arginine also improves sperm count and motility. L-arginine also improves sexual desire and ejaculation.

Essential fatty acids, chromium, selenium, copper, vitamin E, coenzyme Q10 and vitamin B complex are also useful. Since sperm formation takes almost three months, it will take at least this amount of time before reaping the benefits of a nutrient supplementation program.

Royal jelly is rich in hormonal factors that help optimize hormone balance in both sexes. It has been found to increase sperm count, and many believe it also enhances sexual performance. Take 20 milligrams of royal jelly daily.

The B vitamins are required for a healthy nervous system and help maintain muscle tone in the intestinal tract. Take a good B-complex supplement that supplies 25 to 50 milligrams of each of the major B vitamins daily.

Eat pumpkin seeds for zinc. Avoid coffee, tea and colas since caffeine promotes infertility. Green, leafy vegetables, especially watercress, contain vitamin E. Drink one tablespoon of watercress juice daily or add a few fresh sprigs to a salad. Wheat germ is an excellent source of vitamin E.

Essential fatty acids, found in black currant seed oil, borage oil, evening primrose oil, and flaxseed oil, are required for normal glandular activity in both men and women. Take 500 to 1,000 milligrams of any of these oils two or three times daily.

Vitamin C

Vitamin E

Vitamin B12 Selenium

Zinc Arginine

Carnitine

Suggested Daily dosages

Dietary and Lifestyle Recommendations

## Vitamin C

According to practitioners, Vitamin C decreases sperm abnormalities and increases sperm number and quality.

Antioxidants such as vitamin C, beta- carotene, selenium, and vitamin E, have been shown to be very important in protecting the sperm against damage. Vitamin C plays an especially important role in protecting the sperm's genetic material (DNA) from damage. Ascorbic acid levels are much higher in seminal fluid than in other body fluids, including the blood.

The important role played by Vitamin C in male fertility had been proved in animal and human studies. In one study, when dietary vitamin C was reduced from 250 mg to 5 mg per day in healthy human subjects, the seminal fluid ascorbic acid level decreased by fifty percent and the number of sperm with damage to their DNA increased by ninety-one percent. Thus, dietary vitamin C plays a critical role in protecting against sperm damage. Low dietary vitamin C levels are likely to lead to infertility.

Cigarette smoking is known to greatly reduce the vitamin C levels in our bodies. RDA of Vitamin C for smokers is twice as much as that for nonsmokers.

In one clinical study, men who smoked one pack of cigarettes per day received either 0, 200, or 1,000 mg of vitamin C. After one month, sperm quality improved proportional to the level of vitamin C supplementation.

Nonsmokers also benefit from vitamin C supplementation. For example, in one study, thirty infertile, but otherwise healthy, men received either 200 mg or 1,000 mg of vitamin C or a placebo daily. Their sperm was tested weekly for sperm count, viability, motility, agglutination, abnormalities, and immaturity. After one week, the 1,000-mg group demonstrated a 140-percent increase in sperm count, the 200 mg group a 112-percent increase, and the placebo group no change. After three weeks, both vitamin C groups continued to improve, with the 200- mg group catching up to the improvement of the 1,000-mg group.

One of the key improvements observed during the study was in the number of agglutinated (clumped-together) sperm. When more than twenty-five percent of the sperm are agglutinated, fertility is very unlikely. At the beginning of the study, all three groups had over twenty-five percent agglutinated sperm. After three weeks, the agglutinated sperm in the vitamin C groups dropped to eleven percent.

The most impressive result of the study was that at the end of sixty days, all of the vitamin C group had impregnated their wives, compared to none for the placebo group. It can be concluded from these results that vitamin C supplementation can be very effective in treating male infertility, particularly if the infertility is due to antibodies against sperm.

## Vitamin E

Vitamin E is a powerful antioxidant vitamin. It plays a key role in inhibiting free-radical damage to the unsaturated fatty acids of the sperm membrane. Low levels of this nutrient have been linked to a low fertility in men. In addition, vitamin E has been shown to increase the ability of sperm to fertilize an egg in test tubes.

In one study, supplementation with vitamin E decreased the level of lipid peroxide concentration in sperm pellet suspensions. Eleven of fifty-two treated infertile men impregnated their spouses.

Increasing the levels of vitamin E in men with low fertility resulted in improving the number and quality of sperm. The sperm had improved mobility and were better able to attach to the unfertilized egg. The result: the spouses became pregnant.

Studies suggest that Vitamin E may be as effective -and possibly more effective- than expensive high-tech procedures.

A report by Kessopoulou and colleagues offered the first solid, convincing proof of the vitamin's effectiveness. In this study, thirty men with low fertility were divided into two groups. For three months, one group took 600 IUs of vitamin E daily while the other took a placebo. Sperm counts were measured and analyzed.

After a one-month rest period, the two groups changed routines. This time the group that had taken placebo pills took vitamin E, and vice versa.

For both stages of the test, sperm potency dramatically improved under the influence of vitamin E. Taking vitamin E supplement made sperm two and a half times as potent as they had been before supplementation began.

Another study, in Saudi Arabia, used a larger study group. Over one hundred couples unable to conceive due to low male fertility volunteered. In half of the group, males took daily vitamin E supplement, while the other half received a placebo. During the test period, none of the females in the placebo group became pregnant. By contrast, more than 20 percent of those in the vitamin E group conceived-a much higher success rate than in vitro fertilization can boast!

Dosage: In studies, a daily dose of 600 IUs of vitamin E was used. Don't take more than 800 IUs a day. Choose a product containing mixed tocopherols. Begin by taking 200 IU daily, then gradually increase the dosage until you are taking 400 IU twice daily.

Note: If you have high blood pressure, limit your intake of supplemental vitamin E to a total of 400 IU daily.

Studies have shown that vitamin E is more effective when taken with another key antioxidant, vitamin C. The reason may be that when a vitamin E molecule is damaged by interacting with a free radical, C converts it back to its original form, giving it, in effect, a second life. To minimize stomach upset, take vitamin E at mealtimes or with a snack.

Caution! People with anemia, poorly clotting blood, liver disease, or overactive thyroid should not take vitamin E supplements without consulting a doctor. If you are taking an anticoagulant (blood thinner), consult your physician before taking supplemental vitamin E.

Selenium

Scientists observed that selenium deficiency lowers the reproduction rates in man as well as in animals. Selenium is needed for production of testosterone. When selenium levels are low, sperm are immobile because the tail is weakened or deformed. In men, selenium is essential for sperm production-almost half of the male body's supply of selenium is concentrated in the testicles and the seminal ducts adjacent to the prostate gland.

Selenium is an antioxidant that prevents free-radical damage, works synergistically with vitamin E, and preserves tissue elasticity.

In one double-blind trial, low-fertility men who took selenium supplements increased the mobility of their sperm by 100 percent! Take 200 micrograms of selenium daily. Do not exceed the dosage as it is toxic at levels above recommended. (Toxicity levels are 100 times the daily recommended value.)

## Zinc

Zinc is a critical trace mineral for male sexual function. It is involved in virtually every aspect of male reproduction, including hormone metabolism, sperm formation, and sperm motility. Zinc found in the seminal fluid, increases sperm count and mobility, and blood testosterone levels.

Zinc deficiency is characterized by decreased testosterone levels and sperm counts. Zinc levels are typically much lower in infertile men with low sperm counts, indicating that a low zinc status may be the contributing factor to the infertility.

The results from several studies suggest that zinc supplementation may be beneficial for men who have low sperm count and low testosterone levels.

In one study, thirty-seven men who had been infertile for more than five years, and whose sperm counts were less than 25 million/ml were given a supplement of zinc sulfate (60 mg of elemental zinc daily) for forty-five to fifty days. In the twenty-two patients with initially low testosterone levels, mean sperm count increased significantly, from 8 to 20 million/ml. Testosterone levels also increased, and nine out of the twenty-two wives became pregnant during the study. In contrast, in the fifteen men with normal testosterone levels, although sperm count increased slightly, there was no change in testosterone level and no pregnancies occurred. Thus zinc appears to be effective in increasing male fertility when testosterone levels are low.

Optimal zinc levels must be attained if optimum male sexual vitality is desired. RDA for zinc is 15 mg. Zinc is found in whole grains, legumes, nuts, and seeds. In addition to eating these zinc-containing foods, therapists suggest that you take 45 to 60 mg per day of zinc supplements.

## Vitamin B12

A deficiency of Vitamin B12 leads to reduced sperm counts and reduced sperm motility. Even if there is no deficiency of Vitamin-B12, its supplementation may be beneficial for men with sperm count less than 20 million/ml or a motility rate of less than fifty percent.

In one study, twenty-seven percent of men who had sperm counts under 20 million/ml were given 1,000 mcg of vitamin B12 per day. As a result, their total sperm count increased in excess of 100 million/ml. In another study, fifty-seven percent of men with low sperm counts who were given 6,000 mcg of vitamin B12 per day demonstrated improvements.

## Arginine

The amino acid is also essential in sperm formation. (It is found in the heads of sperm.)

Arginine supplementation is often, but not always, an effective treatment for male infertility. The critical determinant appears to be the level of sperm count. If sperm counts are less than 20 million/ml, arginine supplementation is less likely to be of benefit. Also, the dosage of arginine should be at least 4 grams per day for three months to be effective.

In one study, seventy-four percent of 178 men with low sperm counts were treated with 4 grams/day of arginine. They showed significant improvements in sperm counts and motility as a result of this therapy. Use arginine supplementation only after other nutritional measures have been tried.

## Carnitine

A deficiency of carnitine results in a decrease in fatty acid concentrations in the mitochondria and reduced energy production. After ejaculation, the motility of sperm correlates directly with carnitine content. The higher the carnitine content, the more motile the sperm. Conversely, when carnitine levels are low, sperm development, function, and motility are drastically reduced.

In one clinical study thirty-seven of forty-seven men who had abnormal sperm mobility and given carnitine supplementation (1,000 mg three times daily) experienced an increase in sperm count and mobility.

Supplementing the diet with L-carnitine may help restore male fertility in some cases. Start by taking a dose of 250 to 500 milligrams of L-carnitine with breakfast. After one week, add a second dose, with lunch. After another week, add a third dose, so that you are taking 250 to 500 milligrams with each meal. Continue taking L-carnitine for three to four months.

Suggested Daily dosages:

Most Important:

Vitamin B complex, 100 mg twice daily.

Vitamin B6, 50 mg twice daily for six months or more.

Vitamin E, with mixed tocopherols, Start with 200 IU daily and increase gradually to 400-1,000 IU daily.

Vitamin C, with bioflavonoids, 1,000-3,000 mg three times daily for at least three months.

Zinc, 80 mg, with 3 mg copper daily six months, then reduce zinc to 30 mg. . Do not exceed a total of 100 mg daily from all supplements.

L-arginine, 4,000 mg.

Coenzyme Q10, 200 mg.

Chromium, 100 mcg.

Selenium, 200-400 mcg daily.

Helpful:

Lactobacillus acidophilus, 1-3 capsules or 1 tsp.

Flaxseed oil, 1 tablespoon daily.

Carnitine, 300 milligrams three times daily.

Dietary and Lifestyle Recommendations

Consume a diet that focuses on whole, unprocessed foods (whole grains, legumes, vegetables, fruits, nuts, and seeds).

Eat 1/4 cup of raw sunflower seeds or pumpkin seeds each day.

Eliminate alcohol, caffeine, and sugar.

Identify and control food allergies.

Get regular exercise. (Avoid excessive exercise.)

Perform a relaxation exercise (deep breathing, meditation, prayer, visualization, etc.) 10 to 15 minutes each day.

Drink at least 48 ounces of water daily.