

Popular Supplements Improve Sperm Motility

Combined treatment with L-carnitine, a popular dietary supplement, and acetyl L-carnitine, a related chemical, appears to improve sperm motility in men with fertility problems, according to a new study.

In the study, 60 infertile men between the ages of 20 and 40 years were randomly selected to take a combination of L-carnitine and acetyl L-carnitine or an inactive placebo for 6 months.

In the medical journal *Fertility and Sterility*, researchers at the University of Rome led by Dr. Andrea Lenzi report that 2 months after the completion of the 6-month L-Carnitine and Acetyl L-Carnitine therapy, men who took L-carnitine and L-acetyl-carnitine had increases in sperm concentration, forward movement, and total movement.

The most significant improvements in sperm motility, both forward and total, were observed in men who had the lowest levels of moving sperm when the study began.

The researchers note that four spontaneous pregnancies were achieved during the study by men who had taken the combination therapy.

"Combined treatment with L-carnitine and L-acetyl-carnitine... was effective in increasing sperm motility, especially in groups with lower baseline levels (of moving sperm)," the authors conclude.

SOURCE: *Fertility and Sterility*, June 2004.

Coenzyme Q10 May Help Treat Male Infertility

Physicians may want to add Coenzyme Q10 to their treatment of [infertile men](#) who have a condition known as idiopathic asthenozoospermia—the loss or reduction of sperm motility in semen.

The pilot study, which appeared in the January 2004 *Fertility and Sterility*, examined the effects of [Coenzyme Q10](#) on 22 men, age 25 to 39, with idiopathic asthenozoospermia. In the six-month study, the subjects consumed 200 mg of CoQ10 twice daily. After treatment, CoQ10 levels significantly increased in seminal plasma. In addition, Coenzyme Q10 levels in sperm cells significantly increased. Furthermore, phosphatidylcholine levels rose significantly in both seminal plasma and sperm cells. Sperm forward motility also increased after Coenzyme Q10 treatment, from 9 percent at baseline to 16 percent after treatment. Other improvements in the male's sperm also were noted after treatment. Six months after the Coenzyme Q10 treatment stopped, sperm forward motility was significantly reduced from 16 percent back to 9.5 percent.

Three of the women whose male partners participated in the study became pregnant within three months after the CoQ10 administration ended. The study's authors concluded that Coenzyme Q10 can improve a condition that leads to male infertility. "The exogenous administration of CoQ10 may play a positive role in the treatment of asthenozoospermia," the researchers wrote. "This is probably the result of its role in mitochondrial bioenergetics and its antioxidant properties."

Reference: Balercia G, Mosca F, Mantero F, Boscaro M, Mancini A, Riccardo-Lamonica G,

Littarru G. Coenzyme Q10 supplementation in infertile men with idiopathic asthenozoospermia: an open, uncontrolled pilot study. Fertil Steril. 2004 Jan;81(1):93-8.

Significant Increase in Men's Fertility from 90-day Pycnogenol® Treatment

The antioxidant [Pycnogenol®](#) improved the quality and function of sperm in [men with fertility problems](#) by a mean of 38% and 19%, respectively, after only 90 days of use, according to a landmark clinical trial published in the October 2002 issue of the Journal of Reproductive Medicine. This gives infertile couples new hope and a new alternative to more invasive procedures.

"Up to 60% of infertile couples have difficulty conceiving due to abnormalities in the male's sperm. By the men taking Pycnogenol® to increase normally functioning sperm naturally, couples may be able to avoid in-vitro fertilization and either enjoy improved natural fertility or undergo less invasive and less expensive fertility-promoting procedures," stated Dr. Scott Roseff, author of the study and Director of the West Essex Center for Advanced Reproductive Endocrinology (W.E. C.A.R.E.) in West Orange, NJ.

The seminal fluid surrounding the sperm is normally rich in antioxidants and protects the sperm from oxidative damage, according to Dr. Roseff, "but in sub-fertile men the seminal fluid, for unknown reasons, may not be protected by these antioxidants."

"We chose Pycnogenol® for the study because it is one of the richest natural sources of bioavailable and bioactive antioxidant compounds known. Pycnogenol® has been found to be many times more potent than other known antioxidants like vitamin C and vitamin E. The biological precursors of the oligomeric procyanidins such as catechin and taxifoline are effective and well-known free-radical scavengers," he said.

According to Dr. Roseff, the study clearly shows that taking daily doses of 200 mg Pycnogenol® resulted in improved sperm quality and function because the natural antioxidant protection was supplemented.

Sperm parameters in 19 subfertile men before and after 90 days treatment with Pycnogenol: