

Archive Newsletter : Originally published April 2005

Male fertility – things ain't what they used to be

In the United States alone it is estimated that as many as 15% of all couples have difficulty conceiving a child. In about a third of these cases, it is the male who is responsible; in another third, both male and female are the cause; and in the last third, the problem is with the female.

Male infertility

Most cases of male infertility reflect a lower than normal sperm count or quality. In about 90% of these cases, the reason is deficient sperm production. Unfortunately, in nearly all instances, the cause for the decreased sperm formation cannot actually be identified.

In general the total sperm count, as well as sperm quality, of the male population has been deteriorating during the last few decades. In 1940, the average sperm count was 113 million per millilitre; in 1990, that figure had dropped to 66 million. Adding to this problem, the amount of semen fell almost 20% from 3.4ml to 2.75ml. Altogether, these changes mean that men are now supplying about 40% of the number of sperm per ejaculate compared with 1940 levels. It has been suggested that the downward trend in sperm counts is a result of environmental, dietary or lifestyle changes in recent decades. These may be interfering with a man's ability to manufacture sperm.

This is pretty controversial but still possible when you stop to consider the effects the environment could have on sperm counts. For example, increased pollution, heavy metals in water supplies, organic solvents and pesticides must have some impact on the body. Add to this dietary changes like a reduced intake of fruits, vegetables and whole grains, reduced intake of fibre, increased exposure to synthetic oestrogens (would you believe that some fish have actually started to develop both male and female sex organs!) and other chemicals and hormones found in meat, food, air and water.

Also, on another note entirely, fashion can be somewhat to blame for introducing men to tight fitting clothing and briefs that can in fact be harmful – not to mention uncomfortable!

Healthy sperm count

When the actual cause of lowered sperm count is known, standard medical treatment can be pretty effective. Things like increased scrotal temperature, chronic infection of male sex glands, use of certain prescription medicines and endocrine disturbances (including low levels of testosterone and thyroid hormone) can all lead to low sperm counts. However, in almost 90% of cases the cause is unknown – which is not very helpful when it comes to correcting the problem.

The usual approach to treatment is to focus on enhancing factors which maintain healthy sperm formation. Nutrition is vital in this instance. It is critical that men with a low sperm count have optimal nutritional intake. In addition to consuming a nutrient dense and balanced diet, there are several nutritional factors that deserve special mention: zinc, vitamin C and other antioxidants; fats and oils; folic acid; vitamin B12; arginine and carnitine. In addition, it appears that extracts of Panax ginseng may be helpful in maintaining healthy sperm counts.

Think Zinc

When it comes to male sexual function though, perhaps the most critical nutrient is zinc. Zinc is involved in virtually every aspect of male reproduction, including hormone metabolism, sperm formation and sperm mobility. Zinc deficiency – characterised by decreased sperm formation and sperm mobility – is a leading cause of male reproductive problems. Zinc levels are much lower in infertile men with low sperm counts. This indicates that a low zinc status may actually be a major contributing factor when it comes to infertility.

All this is pretty impressive when you stop to consider the long-term nature of the infertility and the speed of the results when zinc was added to the diet via supplements. The obvious conclusion is that if male sexual vitality is desired then optimal zinc levels must be obtained.

Correcting deficiencies

Severe zinc deficiency is actually quite rare. However, it is a fact that many men do consume a diet that does not provide the Recommended Daily Amount (RDA) for zinc. Therefore it is suggested that the diet is re-tailored to include foodstuffs where zinc is found in relative abundance – eggs, fish, meat, seeds, nuts, legumes, whole grains, brewer's yeast, oatmeal. Supplements are also extremely valuable to ensure maximum intake.

The best supplement programme when it comes to boosting sperm count is suggested as:

One high potency vitamin and mineral supplement
Vitamin C: 1g to 3g in divided doses each day
Vitamin E: 600iu to 800iu each day
Beta Carotene: 25,000iu to 50,000iu each day (one or two 15mg capsules)
Folic Acid: 400µg each day
Vitamin B12: 100µg each day
Zinc: 30mg to 60mg each day
Arginine: 3g to 5g in divided doses each day
Carnitine: 900mg to 1500mg each day
Ginseng: 100mg to 200mg three times each day
Saw Palmetto: 80mg to 320mg of standardized extract twice a day

Health Plus provide a number of supplement products to help achieve these levels:

Metabolic Pack: a high-strength, comprehensive formulation of vitamins and minerals, which includes vitamin C and vitamin E.

Super C 1000: 1000mg of vitamin C per tablet, in three different pack sizes.

Super Natural E600: 600iu of vitamin E per capsule.

Super Natural Betavit 15mg: 15mg of beta carotene per capsule.

Folic Acid 400µg: 400µg of folic acid per tablet.

B12 50µg: 50µg of vitamin B12 per tablet.

Zinc 15mg: 15mg of zinc per tablet.

Amino L-Arginine: 500mg of L-arginine hydrochloride per tablet.

L-Carnitine: 500mg of L-carnitine per tablet.

Korean Ginseng: 600mg of korean ginseng per tablet.

Saw Palmetto + Zinc: 200mg of saw palmetto standardized extract and 15mg of zinc per capsule.