Male Infertility: Complementary/Alternative Medicine

Inability to conceive a child after six months of unprotected sex in the absence of female causes A total sperm count lower than 5 million/ml The presence of greater than fifty percent abnormal sperm Inability of sperm to impregnate egg, as determined by the post-coital or hamster-egg penetration tests QUICK REVIEW • The average sperm count has declined by forty percent since 1940. • Reducing scrotal temperature in infertile men will often make them fertile. • Infertile men should wear boxer-type underwear and periodically apply a cold shower or ice to the scrotum. • If testosterone levels are low or marginal, or if estrogen levels are elevated, a diet rich in legumes (beans), especially soy foods, may be of benefit. Free radical or oxidative damage to sperm is thought to be responsible for many cases of male infertility. Antioxidants such as vitamin C, beta-carotene, selenium, and vitamin E, have been shown to be very important in protecting the sperm against damage and improving male fertility. Zinc supplementation can be very helpful in achieving fertility, especially in men with low testosterone levels. Carnitine supplementation can lead to improvements in sperm counts and sperm motility. TREATMENT SUMMARY Male infertility is most often due to abnormal sperm count or semen quality. As elevated scrotal temperature is a common cause of infertility, scrotal cooling through the use of loose underwear made of cotton, avoidance of activities that elevate testicular temperature (e.g., hot tubs), and application of cold water to the testes should be utilized. Nutritional status should be optimized (especially antioxidants and zinc), environmental pollutants identified and eliminated, and fertility-enhancing botanicals such as one of the ginsengs consumed. We recommend consulting a urologist or fertility

specialist for a complete evaluation. <u>General Measures</u>

• Maintain scrotal temperatures between 94 and 96 degrees Fahrenheit. Avoid exposure to free radicals. Identify and eliminate environmental pollutants.

• Stop or reduce consumption of all drugs, especially antihypertensives, antineoplastics such as cyclophosphamide, and antiinflammatory drugs such as sulfasalazine. Diet

Avoid dietary sources of: free radicals; saturated fats; hydrogenated oils; trans-fatty acids; and cottonseed oil. Increase consumption of: legumes, especially soy (high in phytoestrogens and phytosterols); good dietary sources of antioxidant vitamins, carotenes, and flavonoids (dark-colored vegetables and fruits); and essential fatty acids and zinc (nuts and seeds).

Consume daily: t1-10 servings of^- vegetables; 2-4 servings of fresh fruits; and 1/2 cup of raw nuts or seeds.

Nutritional Supplements

High-potency multiple vitamin and mineral supplement Vitamin C: 500-3,000 mg three times per day

Vitamin E: 600-800 IU per day Beta-carotene: 100,000-200,000 IU per day Folic acid: 400 mcg per day Vitamin B 12: 1,000 mcg per day Zinc: 30-60 mg per day Botanical Medicines • Panax ginseng (three times per day dosages) High-quality crude ginseng root: 1.5-2 g three times per day Standardized extract (5% ginsenosides): 100-200 mg three times per day • Eleutherococcus senticosus (three times per day dosages) Dried root: 2-4 g Tincture (1:5): 10-20 ml Fluid extract (1:1): 2.0-4.0 ml Solid (dry powdered) extract (20:1): 100-200 mg Pygeum africanum The dosage of the fat-soluble extract, standardized to contain fourteen percent triterpenes including beta-sitosterol and 0.5 percent ndocosanol, is 100 to 200 mg per day in divided doses.