

Alternative Medicine and Male Reproduction

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Note: Postings to *Androlog* have been edited before publication.

To aid a colleague preparing a presentation regarding what is known of nutraceuticals, “alternative medicine,” and male reproduction, I posted the following query on *Androlog*:

Does anyone have any references regarding data pertaining to the effect of nutraceuticals and dietary supplements on male infertility? I am interested not only in agents purported to aid fertility but also in “alternative” therapies and dietary supplements which may have effects on male fertility—for example, phytoestrogens. I am also very interested in what our global colleagues may be experiencing in this area, what agents are used, and what effects are noted worldwide . . .

Drs Hussein Ghanem, William Roudebush, and Adriane Fugh-Berman responded with numerous references, which may be found at http://godot.urol.uic.edu/androlog_archive/index.html.

Dr Roudebush also responded:

Dr Niederberger inquired about nutraceuticals, dietary supplements, and male infertility. There are a number of references on the impact of individual nutrients on semen parameters . . . but little to none on the male’s fertility for human. There are a few commercial products regarding nutraceuticals, but I know of only 2 (proXeed and Fertile One) that are being investigated by clinical studies. Our clinic is investigating Fertile One and observing significant improvements in the total number of morphologically normal sperm as well as the reduction of DNA fragmentation rates. As for fertility after taking the product,

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Androlog Summary

data are still being collected, and we have noted some positive pregnancy outcomes. Acupuncture and specific botanical medicines have been documented in several studies as having a positive effect on sperm parameters.

Dr Alberto Garcia inquired about Fertile One, and Dr Roudebush responded with initial observations to be presented at the American Society for Reproductive Medicine annual meeting in 2003. Dr Lawrence Ross commented:

I have followed with interest the recent postings on nutraceuticals and dietary supplements for treatment of male infertility. Unfortunately, we continue to receive anecdotal reports of the beneficial effects of these various supplements without good scientific data. We are all committed to trying to help our patients achieve parenthood. I certainly cannot say that some of the available supplements may not have efficacy, but anecdotes are no substitute for randomized, double-blinded, placebo-controlled studies to determine the value of a medical therapy. As a minimum, we must be certain that there is no harm in any unproven therapy we recommend. At best, we must continue to insist from industry and ourselves that appropriate science be used to determine the value of new treatments. The risk of not doing so is to invite more governmental interference and control of medical practice.

Dr Ross’s comment provokes much thought. Traditional Western medicine is based on empirical hypothesis testing with reproducibility and statistical discrimination from placebo as firm foundations on which therapy ultimately rests. Traditional Western drugs are subject to enormous scientific and regulatory scrutiny at immense expense before widespread clinical use. The growing popularity of alternative medicine (which generally implies unproven in the Baconian empiric sense) shifts the burden of proof into the realm of the general public, which frequently has neither the critical sensibility nor the analytical tools to discern actual effect. We play catch-up as physicians and scientists, but, for the good of the public and our patients, it is incumbent on us to investigate alternative medicine with the same vigor that we attend traditional drugs.