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File: ■ Fenugreek (*Trigonella foenum-graecum*)
■ Male Libido

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RE: Fenugreek Extract Formulation Enhances Male Libido

Steels E, Rao A, Vitetta L. Physiological aspects of male libido enhanced by standardized *Trigonella foenum-graecum* extract and mineral formulation. *Phytother Res.* 2011; [epub ahead of print]. doi: 10.1002/ptr.3360.

In the Global Study of Sexual Attitude and Behaviours of 27,500 men and women in 30 countries including the United States, Canada, Australia, and New Zealand, 18% of men reported low libido or lack of interest in sexual activity, low sexual drive, or lack of urge or desire. Low libido can be caused by psychological issues, physical conditions, or combinations of other factors. Some medications, such as diuretics, antidepressants, and statins can contribute to this problem. Estrogen/testosterone ratios influence libido; estrogen therapy inhibits libido in women, and androgen therapy has a positive effect on libido in both men and women. Recently, interest has increased in herbal medicines used traditionally to improve sexual function and performance. Fenugreek (*Trigonella foenum-graecum*) is rich in steroidal saponins that can serve as sex hormone precursors. Fenugreek seed extract has exhibited estrogenic activity, binding to estrogen receptors and inducing the expression of estrogen-responsive genes. These authors, from Brisbane, Queensland, Australia, conducted a study to evaluate the effects of a formulation containing the Testofen brand of fenugreek extract (Gencor Pacific Ltd.; Anaheim, California) combined with magnesium, zinc, and pyridoxine on healthy males with low libido but without sexual dysfunction.

Participants were recruited through local media advertising and clinical trial databases. All were healthy heterosexual males aged 25 to 52 years interested in increasing libido who were not experiencing sexual dysfunction. They were in a stable sexual relationship, sexually active for at least 6 months and anticipating a stable sexual relationship for the following 8 weeks.

At baseline, a case history was taken on the 60 consenting participants. Each underwent a brief medical assessment and had blood samples drawn for a full blood count (FBC), prostate-specific antigen (PSA), and testosterone and prolactin levels.

The participants were assigned randomly to 2 groups of 30. The active treatment product was an herbal formulation tablet containing 300 mg of Testofen brand fenugreek extract powder, 17 mg magnesium, 15 mg elemental zinc, and 5 mg pyridoxine, as well as pharmaceutical grade excipients. The placebo product contained 50 mg rice bran and the same pharmaceutical grade excipients.

The primary outcome was treatment efficacy determined by using the Derogatis Interview for Sexual Functioning-Self Report (DISF-SR) (males), a set of 21 questions in 4 domains: sexual cognition/fantasy, sexual arousal, sexual behavior/experiences, and orgasm. All participants completed the questionnaires at the start of the trial (baseline) and at weeks 3 and 6. A secondary outcome was quality of life (QOL) assessed by using a 5-point satisfaction scale at baseline and at 6 weeks. The scale rated the participants' satisfaction with libido, performance, muscle strength, energy, stamina, mood, and sleep.

FBC, serum testosterone, and serum prolactin were measured again at 6 weeks. Of the 60 recruited participants, 54 completed the study (27 in each group). Average age (41.3 years) and body mass index were similar in the 2 groups.

The authors report that statistically significant increases were seen in total DISF-SR scores in the Testofen group at both 3 weeks (67.59 to 75.67; P<0.01) and 6 weeks (67.59 to 82.48; P<0.01). A statistically significant decrease in total DISF-SR score was seen in the placebo group at week 6 (72.93 to 66.81; P<0.01). Regarding subscores of the DISF-SR, at week 3, statistically significant changes were seen in sexual arousal, sexual behavior, and orgasm in the Testofen group. At week 6, statistically significant increases were seen in all 4 domains of the DISF-SR in the Testofen group. No statistically significant changes were reported for the placebo group in any of the domains throughout the study.

Regarding QOL, most of the Testofen group participants reported improved libido (81.5%), recovery time (66.7%), and quality of sexual performance (63%). Also, most of the Testofen group participants reported improved general energy (81.5%) and well-being (55.6%). Overall, little change in mood and sleep was reported in either group. The placebo group participants reported no improvement in any of the QOL factors.

Serum prolactin and testosterone levels remained within normal reference range for all participants in both groups. No adverse events were reported during the trial.

The authors cite several unpublished studies supporting fenugreek's role in balancing hormones and supporting libido in healthy males. They conclude that in this study fenugreek extract powder was efficacious in enhancing male libido in healthy adult males with normal testosterone, prolactin, and PSA levels. Positive changes in the physiological aspects of libido (particularly, sexual arousal and orgasm) as well as improved QOL (well-being, muscle strength, and energy) were reported by participants in the Testofen group.

—Shari Henson

Reference

¹Brock G, Laumann E, Glasser DB, et al. 2003. Prevalence of sexual dysfunction among mature men and women in USA, Canada, Australia, and New Zealand. *Program and Abstracts from the American Urological Association 98th Annual Meeting.* Abstract. American Urological Association: Chicago, IL; 1226.

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