Case Report: D-Pinitol for Polycystic Ovary Syndrome

A 35-year-old woman had a nine-month history of amenorrhea, acne on the face and chest, and intermittent abdominal pains in the area of the ovaries. Her serum testosterone level was more than twice the upper limit of normal. She was given a presumptive diagnosis of polycystic ovary syndrome (PCOS) and was started on D-pinitol (Vital Nutrients) at a dosage of 600 mg twice a day. The D-pinitol product also provided daily 500 mcg of chromium and 1,200 IU of vitamin D. Within two weeks, the acne and abdominal pains had resolved, and menstruation returned shortly thereafter. After one month of treatment, the supplement was discontinued and the acne and abdominal pains returned rapidly. Resumption of treatment was again followed by a rapid resolution of symptoms. Menstruation has remained normal for several months, since shortly after D-pinitol treatment was started.

Comment: D-Pinitol (3-O-methyl-D-chiro-inositol) is present in foods such as legumes and citrus fruits. It is structurally similar to and has biochemical actions similar to those of D-chiro-inositol, a compound found in small concentrations in the body. D-chiro-inositol is a component of an endogenous phosphoglycan that has been reported to mediate the action of insulin. There is evidence that the insulin resistance seen in women with PCOS is due in part to a deficiency of this D-chiro-inositol-containing phosphoglycan or to a defect in its tissue availability or utilization. In a double-blind trial, supplementation with 1,200 mg per day of D-chiro-inositol for eight weeks improved insulin resistance, decreased serum testosterone levels, and restored ovulation in women with PCOS. D-chiro-inositol is not commercially available, but the present case report and other anecdotal evidence suggest that D-pinitol is also useful for treating PCOS.


Probiotic Treatment for Bacterial Vaginosis

One hundred-ninety women with bacterial vaginosis (Nugent scores between 7 and 10 on a scale of 0 to 10) received 300 mg of clindamycin twice a day for 7 days and were then randomly assigned to receive or not to receive (control group) vaginal capsules containing 10^9 colony-forming units of Lactobacillus casei rhamnosus (Lcr35) for seven days. Vaginal swabs for Nugent scoring were taken four weeks after the last probiotic dose. The proportion of women showing an improvement in the Nugent score of at least 5 points was significantly greater in the active-treatment group than in the placebo group (83% vs. 35%; p < 0.001). The median degree of improvement from baseline was 6.61 in the active-treatment group and 4.13 in the control group (p < 0.001).

Comment: Bacterial vaginosis, the most common form of vaginitis, is caused by an imbalance of the bacterial flora in the vagina. The condition can usually be treated successfully with antibiotics, but there is a high recurrence rate. Certain probiotic organisms can help restore normal vaginal flora and thereby prevent recurrences of bacterial vaginosis. In addition to the specific Lactobacillus strain investigated in this study, the combination of Lactobacillus rhamnosus GR-1 and Lactobacillus reuteri RC-14 (Femm-Dophilus; Jarrow Formulas) has been shown to enhance the effect of antibiotics in eradicating bacterial vaginosis, and may also help prevent recurrences of this condition. (FEMS Immunol Med Microbiol. 2003;35:131-134; Microbes Infect. 2006;8:1450-1454.)

Peteficevic L, Witt A. The role of Lactobacillus casei rhamnosus Lcr35 in restoring the normal vaginal flora after antibiotic treatment of bacterial vaginosis. BI0G. 2006;115:1369-1374.

Healthful Pregnancy Diet for Healthy Children

The association between maternal dietary patterns and fetal growth was investigated in a prospective cohort study of 44,612 women in Denmark. Compared with women...