Zinc Reduces Diarrhea in Children

Supplemental zinc reduces the duration and severity of diarrhea in children, as reported in a recent meta-analysis. In children younger than five years, diarrheal disease is a significant cause of morbidity in the United States and mortality worldwide.

Twenty-two randomized, controlled trials were identified in which diarrhea was treated with either oral zinc supplementation or placebo. The studies included 16 analyses of acute diarrhea (15,231 children) and six of persistent diarrhea (2,968 children). Children who received zinc had a significantly shorter duration of diarrhea compared with the placebo group, which amounted to a 15% decrease in duration for both acute diarrhea and persistent diarrhea. Stool frequency declined after zinc supplementation, by 18.8% for acute diarrhea and 12.5% for persistent diarrhea. Zinc reduced the likelihood of diarrhea by 18% compared with placebo for both types.

Vomiting was more frequent with zinc treatment. Nevertheless, these results confirm previous reports of the benefits of zinc for diarrhea treatment and prevention.

DHEA Sulfate Associated with Cognitive Ability

Naturally high levels of dehydroepiandrosterone sulfate (DHEAS) are associated with better cognitive function in healthy women, according to a study from Australia. Dehydroepiandrosterone is a steroid precursor that is converted into estrogen, testosterone, and other hormones.

Study participants were 295 healthy women aged 21-77 years (average age 55 years) who were recruited from the community. The women underwent blood sampling for DHEAS and a battery of tests of cognitive function that measured verbal ability, spatial and working memory, attention and concentration, and speed and accuracy.

Women with higher levels of DHEAS performed better than women with lower levels on a test of executive function (general cognitive ability). Among women with at least 12 years of education, those with higher DHEAS also scored better on tests of concentration and working memory.

The results confirm previous research that suggested beneficial effects of DHEA and DHEAS on the nervous system and on cognitive ability.

Broccoli Sprouts Help Prevent Bladder Cancer

In a recent issue of Cancer Research, scientists reported that an extract of broccoli sprouts given to rats dramatically reduced the development of bladder tumors.

When rats were exposed to a carcinogenic agent in their drinking water, 96% developed bladder tumors. But when rats received low-dose broccoli sprout extract beginning two weeks prior to carcinogen exposure, just 74% developed tumors. Only 38% of animals who consumed high-dose broccoli sprout extract prior to carcinogen exposure developed bladder cancer.

The cancer-preventive effect of broccoli and other cruciferous vegetables such as cabbage appears to be the result of their isothiocyanates—phytochemicals that have been associated with cancer protection in numerous other studies. Broccoli sprouts contain 30 times more isothiocyanates than mature broccoli, and the compound used in the study provides 600 times more.

"Although this is an animal study, it provides potent evidence that eating vegetables is beneficial in bladder cancer prevention," one of the authors stated.