Supplemental Calcium Fails to Prevent Weight Gain

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BOSTON — Two years of treatment with supplemental calcium failed to significantly prevent weight gain in overweight, middle-aged adults, Dr. Jack Yanovski reported at the annual meeting of NAASO, the Obesity Society.

Multiple epidemiologic and observational studies have suggested that greater calcium intake is associated with less adiposity and reduced weight gain, but there have been no large clinical trials directly assessing the effects of calcium supplementation on body weight and composition.

To address the hypothesis of whether calcium can help prevent weight gain, a 2-year, double-blind trial randomized 340 healthy subjects to 1,500 mg calcium carbonate per day or placebo, said Dr. Yanovski, who heads the unit on growth and obesity in the Developmental Endocrinology Branch of the National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Md.

Participants were informed that the study's purpose was to examine the health effects of calcium supplementation. They completed questionnaires every 3 months regarding their health and activities, and they were evaluated yearly for body weight and composition.

Mean age of the participants was 38.8 years, mean body mass index (BMI) was 33.4 kg/m^2, and 72% were female. A total of 39% were overweight, and 61% were obese.

There were no baseline differences between the calcium and placebo groups in terms of age, BMI, sex, race, or reported dietary calcium intake, which was a mean of 882 mg/day. Roughly 23% of patients reported calcium intake that was extremely low, less than 600 mg/day, he said.

A total of 77% of patients in the calcium group completed the 2-year study, as did 71% of those in the placebo group,

Orlistat Helps Maintain Weight Loss Long Term

BOSTON — Three years of orlistat following significant weight loss helped patients maintain the loss and reduced the incidence of new-onset type 2 diabetes, Dr. Bjorn Richelsen said at the annual meeting of NAASO, the Obesity Society.

"We know that we can induce initial weight loss, with maximal loss occurring after about 6-9 months, but thereafter, a strong regain occurs, so we need strategies for weight loss maintenance," Dr. Richelsen said.

In a study that included 383 abdominally obese patients from Denmark, Norway, Sweden, and Finland, 309 were able to lose at least 5% of their body weight during a 2-month very low energy diet consisting of 600-800 kcal/day and were randomized to 3 years of lifestyle counseling plus orlistat, 120 mg three times daily, or placebo.

Mean body mass index at baseline was 37.5 kg/m^2, and all patients had metabolic risk factors such as dyslipidemia and impaired fasting glucose.

There was an initial mean weight loss of 14.4 kg in the patients who subsequently were randomized. During each of the 3 years of the study, a statistically significantly greater number of patients in the orlistat group maintained at least a 5% weight loss, compared with those in the placebo group.

Patients in the orlistat group regained a mean of 4.6 kg during the 3 years, whereas those in the placebo group regained a mean of 7 kg. The overall weight loss, therefore, was 8.3% of body weight in the orlistat group and 6.4% in the placebo group, said Dr. Richelsen of the department of endocrinology and metabolism, Århus University Hospital, Århus, Denmark.

Waist circumference also was significantly more reduced in the orlistat group, by 7.7 cm, than in the placebo group, by 5.4 cm.

In contrast to findings from other studies, there were no differences between the active treatment group and the placebo group after 3 years on risk factors including insulin, glucose, and lipids. Nonetheless, there was a significantly lower incidence of new-onset diabetes during the study, with 8 cases (5.2%) developing in the orlistat-treated patients, compared with 17 cases (10.9%) in the placebo-treated patients.

—Nancy Walsh