

USANA Demonstrates That Symptoms of Metabolic Syndrome Can Be Improved

New Study Involving a Low-Glycemic Diet and Exercise Offers Promising Results

SALT LAKE CITY--(BUSINESS WIRE)--USANA Health Sciences, Inc. announced today that a large, third-party clinical study recently completed at the University of Colorado Denver (UCD) has confirmed that lifestyle change, involving diet, supplementation and exercise, can improve the metabolic syndrome.

The results of this study verified those from an earlier study conducted by USANA in 2005. Both clinical trials employed a lifestyle program that included exercise, USANA's nutritional supplements, and a low-glycemic diet including USANA's nutritional shakes and bars. Metabolic syndrome is a pre-diabetic state that involves multiple symptoms including central obesity, insulin resistance, elevated blood lipids, elevated blood glucose, and high blood pressure.

USANA's original study, conducted with 25 subjects, found that the lifestyle modification program had dramatic effects on the health of participants. The University of Colorado study used a larger group (n=60) and found similar results. Those results will be fully published later this year, however initial results from the study are promising. Subjects in the UCD study lost an average of 12 pounds over the 12-week program.

Even more dramatic, however, were the significant improvements in measures of glycemic control, cardiovascular health, inflammation and antioxidant status.

On average, study participants who completed the study (n=53) achieved the following transformations of measures of glycemic control:

- Fasting insulin was reduced by 32 percent
- Insulin levels during an oral glucose tolerance test at 120 min decreased by 44 percent
- Insulin resistance as measured by the HOMA index decreased by 32 percent

There also were notable changes in the subjects' measures of cardiovascular health:

- Systolic blood pressure declined 6 percent
- Diastolic blood pressure dropped 8 percent
- Total cholesterol dropped 5 percent
- Fasting triglyceride levels dropped 16 percent

Markers of inflammation and antioxidant status were also considerably improved:

- Plasma Antioxidant Reserve (PAR) increased 20 percent
- Urinary Isoprostanes, a marker of lipid peroxidation due to oxidative stress, decreased 29 percent
- C-Reactive Protein (CRP), a marker of inflammation, dropped 27 percent
- Vitamin E alpha levels increased by 30 percent

All of these changes are consistent with improvements to markers of Metabolic Syndrome and with significant improvements in cardiovascular and metabolic health.

Holly Wyatt, a physician and faculty member of the University of Colorado's Department of Medicine, Division of Endocrinology, Metabolism and Diabetes, oversaw the university study. "This is a very promising program that produced some very positive changes in the cardiovascular risk factors associated with the metabolic syndrome," Dr. Wyatt said. "The shifts in dietary habits to calorically restricted low-glycemic meals and the modest increases in physical activity were not only effective but also are realistic behavioral changes many people can make."