

## essentials of health

October 13th, 2010

Weight loss and reduced waist circumference are related to an improvement in heart health and factors related to metabolic syndrome. According to recent research, supplementing with calcium and vitamin D during weight loss enhances heart health benefits in women with typically low calcium intakes.

## CALCIUM AND VITAMIN D ENHANCE HEART HEALTH BENEFITS OF WEIGHT LOSS

Recent research has shown that overweight individuals with low calcium and dairy consumption are at increased risk of developing metabolic syndrome. These findings suggest that adequate calcium intake could create a healthier metabolic profile.

Canadian researchers investigated this issue by testing cardiovascular benefits of long-term calcium supplementation in women with low calcium intake. Healthy, overweight or obese women with a daily calcium intake of less than 800 mg/day were randomly assigned to one of two groups: a group consuming two tablets/day of a calcium + vitamin D supplement (600 mg elemental calcium and 200 IU vitamin D/tablet), or a group consuming placebo. Both groups completed a 15-week reduced calorie weight-loss program.

Significant decreases in LDL cholesterol levels, as well as the ratios of total to LDL and LDL to HDL were seen the calcium + vitamin D group. These changes were independent of changes due to fat loss and reduced waist circumference. A tendency for more beneficial changes in HDL cholesterol, triglycerides, and total cholesterol was also observed in the calcium+D group.

This was the first study to show that calcium and vitamin D enhance the beneficial effects of weight loss on cardiovascular risk factors in overweight women with typically low calcium intakes.

Major GC, et al. Supplementation with calcium + vitamin D enhances the beneficial effect of weight loss on plasma lipid and lipoprotein concentrations. 2007. American Journal of Clinical Nutrition 85(1): 54-9.