

essentials of health

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New research suggests that obese individuals who use a multivitamin/mineral supplement may experience both a decrease in body weight and improved serum lipid profiles.

MULTIVITAMIN SUPPLEMENTATION CAN HAVE POSITIVE EFFECTS ON BODY WEIGHT

Obese individuals are more likely to have lower blood concentrations of most vitamins and minerals. Unfortunately, there is currently limited information on the effects of nutritional supplementation on body weight control and energy metabolism in obese adults.

In new research published in the *International Journal of Obesity*, scientists evaluated the effects of multivitamin/mineral supplementation on body fat, energy expenditure, and lipid profiles in obese Chinese women.

Ninety-six obese Chinese women between the ages of 18 and 55 participated in a 26-week randomized, double-blind, placebo-controlled intervention study. Subjects were divided into three groups, receiving either a multivitamin/mineral supplement (MMS), 162mg of calcium, or placebo daily. Body weight, BMI, waist circumference, fat mass, lean tissue, resting energy expenditure, blood pressure, fasting plasma glucose and serum insulin, total cholesterol, LDL and HDL cholesterol, and triglycerides were measured at the beginning and end of the study period.

After 26 weeks, the multivitamin/mineral group had significantly lower body weight, BMI, fat mass, total and LDL cholesterol, significantly higher resting energy expenditure and HDL cholesterol than individuals in the placebo group. They were also more likely to have a reduced waist circumference. The calcium group also had significantly higher HDL cholesterol and lower LDL cholesterol levels compared with the placebo group.

The results suggest that multivitamin/mineral supplementation could reduce body weight and fatness and improve serum lipid profiles in obese women, possibly through increased energy expenditure and fat oxidation.

Li Y, Wang C, Zhu K, Feng RN, and Sun CH. Effects of multivitamin and mineral supplementation on adiposity, energy expenditure and lipid profiles in obese Chinese women. 2010. Int J Obes (Lond) 34(6):1070-7.