

April 8th, 2009

A study published in the Journal of Clinical Endocrinology & Metabolism reported that calcium supplementation in adolescent boys increased skeletal growth and bone mineralization. Twice per day for 13 months the adolescent boys were given either a placebo or 500 milligrams of calcium as calcium carbonate.

CALCIUM SUPPLEMENTATION INCREASES BONE MINERAL MASS AND HEIGHT IN ADOLESCENT BOYS

Bone mineral content, bone area, lean and fat mass, height, and weight were measured before, during and following the treatment period. They were also grouped according to activity level.

Both groups experienced increases in height, weight, lean and fat mass and most bone measurements over the course of the study. However, the group receiving calcium was found to have a significant increase in height, lean mass and bone mineral content of the whole body, lumbar spine and hip compared to the boys who received a placebo. Physical activity level increased the effect of calcium supplementation on bone mineral content only in an area of the upper leg bone.

Calcium supplementation early in life may improve bone mineral content and stature and help reduce future osteoporotic fractures.

< The Journal of Clinical Endocrinology & Metabolism Vol. 90, No. 6 3153-3161 >