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Calcium Beneficial to Estrogen Replacement Therapy

NEW YORK-A review of clinical trials published in the January issue of *The American Journal of Clinical Nutrition* found that women who consumed high levels of calcium in conjunction with hormone replacement therapy (HRT) had a much greater increase in bone mass density than those who used either estrogen or calcitonin alone.

The reviewers evaluated 31 clinical trials investigating the impact of calcium intake on estrogen therapy for postmenopausal women and seven similar clinical trials with calcitonin instead of estrogen. Annual bone mass increases for those on estrogen and extra calcium averaged 2.4 percent in the femoral neck, 2.1 percent in the forearm and 3.3 percent in the lumbar spine. Increases in bone mass from HRT alone were 0.9 percent in the femoral neck, 0.4 percent in the forearm and 1.3 percent in the lumbar spine. For those taking calcitonin alone, the review found that bone mass of the spine increased 2 percent for those on calcium supplements and calcitonin but decreased by 0.2 percent for those in the one study in which only calcitonin was given.

An accompanying editorial by Bess Dawson-Hughes, M.D., of the US. Department of Agriculture's Human Nutrition Research Center on Aging at Tufts University, commented, "The meta-analysis supports the position that calcium is an important component of a regimen that includes antiresorptive therapy for the prevention and treatment of osteoporosis." She added, "It also supports the notion that the calcium intake requirement of women treated with estrogen may not be lower than the average women."

A consensus conference held by the National Institutes of Health in 1994 concluded that estrogen use lowers the calcium requirement. However, the National Academy of Sciences' Food and Nutrition Board (FNB) concluded that the evidence did not support different recommendations for postmenopausal women on estrogen therapy. The FNB recommends that men and women ages 51 and older consume 1,200 mg of calcium a day, a 50-percent increase over the previous Reference Daily Intake of 800 mg of calcium.