

## Calcium and Vitamin D

In October 2004, the Surgeon General declared that Osteoporosis is an epidemic in the United States. By 2030, half of Americans over age 50 will have osteoporosis. Prevention of hip and spine fractures begins in childhood and continues through adulthood.

Americans do not consume adequate amounts of calcium or vitamin D. At least 50 - 75% do not have appropriate levels of vitamin D. Our vitamin D levels are progressively decreasing with time.

Vitamin D deficiency is associated with increased incidences of heart disease, cancer (breast, colon, prostate), multiple sclerosis, and diabetes.

The only sources of Vitamin D are sunlight, some oily fish, and supplements. Taking oral doses of Vitamin D is the only reliable way to make sure you are getting the appropriate amounts.

Calcium must also be taken. The most common types of calcium are calcium carbonate and calcium citrate. The vast majority of preparations are calcium carbonate. Calcium citrate is a better preparation for most people. Calcium carbonate must be taken on an empty stomach, as it requires high stomach acid for absorption. This is why anyone taking pepcid, prilosec, or any other medicine for ulcers or reflux esophagitis will not absorb calcium carbonate. The carbonate preparation is more likely to cause constipation, gas, GI upset, and kidney stones. For all of these reasons, calcium citrate is a better preparation.

### How much should I be taking?

Calcium citrate with Vitamin D3 - 3 or 4 pills per day to reach 1000 mg  
Multivitamin (Centrum or One-a-day or generic)  
Vitamin D3 - 1000 units/ day

This will provide 1000 mg of calcium and 2000 iu of Vitamin D per day. This is same for children and adults. For small children, check with your pediatrician to see what preparations can be given.

These are all generic preparations and available at all drug stores. Calcium carbonate is easier to find, but look for the calcium citrate for the reasons listed above.

The least expensive that I have found are at Wal-Mart, BJ's, or Sam's Club. This can be obtained for about \$4 a month.