

essentials of health

October 5th, 2011

Researchers in Europe have recently estimated that increasing serum vitamin D levels could slash world-wide mortality rates by as much as 20%.

INCREASING SERUM VITAMIN D LEVELS COULD SIGNIFI-CANTLY REDUCE WORLD-WIDE MORTALITY RATES

Previous research has repeatedly indicated that low serum vitamin D levels may increase the risk of mortality from a number of diseases.

In a new study published in the *European Journal of Clinical Nutrition*, researchers estimated the reduction in mortality rates for six regions of the world under the assumption that serum vitamin D levels were doubled (21.6 ng/ml to 44 ng/ml).

The researchers used scientific literature to interpret the association between sun exposure and vitamin D levels and disease risk related to cancer, cardiovascular disease (CVD) and respiratory infections. In addition to these diseases, other respiratory diseases, tuberculosis and diabetes mellitus account for more than half of global mortality rates. Other vitamin D-sensitive diseases and conditions that account for 2 to 3% of global mortality rates are Alzheimer's disease, falls, meningitis, Parkinson's disease, maternal sepsis, maternal hypertension (pre-eclampsia), and multiple sclerosis.

The scientists estimated that increasing serum 25(OH) D levels from 21.6 to 44 ng/ml, would reduce the vitamin D-sensitive disease mortality rate by an estimated 20%. The reduction in all-cause mortality rates range from 7.6% for African females to 17.3% for European females. Reductions for males is on average 0.6% lower than for females. The estimated increase in life expectancy is 2 years for all six regions.

Since it is inexpensive and there are very few adverse effects associated with oral intake of vitamin D or frequent moderate UVB sun exposure, increasing serum vitamin D levels may be the most cost-effective and safe way to reduce global mortality rates.

WB Grant. An estimate of the global reduction in mortality rates through doubling vitamin D levels. European Journal of Clinical Nutrition 65, 1016-1026 (September 2011).