



Vitamin D and Cancer Prevention

The Recommendations

In consultation with their family doctor the Canadian Cancer Society is recommending that adults living in Canada should consider taking 1000 IU vitamin D daily in the fall and winter. Year round dosing is suggested for those who are older, those with dark skin, those who do not go outside often and those who wear clothing that covers most of their skin.

The Research

It has been known for a long time that Vitamin D levels and/or sun exposure is inversely related to the incidence of various cancers. This evidence, until now, has been largely observational in nature. A recent study in the American Journal of Clinical Nutrition is cited to be the first randomized, controlled trial that involved an intervention sufficient to raise serum 25(OH)D >80nmol/L and report a cancer outcome.

In summary, the study involved 1179 post menopausal women aged >55 years who took placebo, calcium (1400-1500mg/d) or calcium plus vitamin D3 (1000 IU/d) over a four year period. In the placebo group, 6.9% developed cancer compared to the calcium plus vitamin D group in which 2.9% developed cancer. This equates to a relative risk reduction of 60% which is the number being used in the media. The absolute risk reduction was shown to be 4% and the number needed to treat for the vitamin D plus calcium group was 25 over 4 years.

The journal article sites a principle weakness of this study as the fact that cancer prevention was not a primary endpoint (primary endpoint was fracture incidence). Other short falls could include the relatively small sample size and narrow population studied. That being said, the paper adds to the growing evidence for the role of vitamin D in cancer prevention.

Vitamin D Sources

Intake from food and drink sources account for about 250 to 400 IU of Vitamin D daily. Based on 1997 recommendations adequate intake is considered to be 200 IU/d for those less than 50 years of age, 400 IU/d for those under 70 years of age and 600 IU/d for those over 70 years of age. The Canadian Cancer Society has taken this into account in their recommendations. Those who get adequate intake from sun and food and who also take the recommended 1000 IU daily would still be below the upper limit of vitamin D intake which is 2000 IU daily. All sources of vitamin D should be considered before a recommendation is made to supplement the vitamin.

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See doctor before upping vitamin D intake: expert. www.ctv.ca –accessed June 14, 2007.

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