

## JULY 2008 NEWSLETTER

As the days get longer and hotter, we must consider the benefits and risks of time spent in the sun. What to do?

The most obvious benefit of getting a dose of sunlight is its' effects on vitamin D production in the body. There is much evidence suggesting vitamin D is very important to human health. Vitamin D is synthesized in the body when exposed to UVB light in sunshine at much higher rates than is possible to supplement using nutritional aids. In fact, the level at which oral vitamin D causes toxicity symptoms (such as nausea) is 2000 IU in adults, the amount of vitamin D produced in as little as 48 seconds of full-body sun exposure for some (without toxicity symptoms). This has led some to suggest that recommended dietary levels of vitamin D are completely inadequate.

The benefits of sufficient vitamin D are many: It is estimated 50 000 - 63 000 cancer deaths could be prevented in the United States if all Americans had sufficient vitamin D. Suggested adequate intakes for vitamin D range from 200-600 IU depending on age, but to prevent cancer approximately 1000 IU are recommended (<http://ods.od.nih.gov/factsheets/vitamind.asp>). Further, vitamin D helps prevent or reduce symptoms of many conditions including osteoporosis, multiple sclerosis, types 1 and 2 diabetes and high blood pressure.

Contrast this to the approximately 10 000 who die annually from skin cancer and the evidence clearly suggests sunlight is something to be enjoyed and embraced (responsibly), not feared and avoided as we seem to now do.

## IN THE NEWS ...

The actual calculation for how to determine the amount of time you should spend in direct sunlight to prevent development of cancer can be found in volume 10, number 2 of *Alternative Medicine Review* (Available at <http://www.thorne.com/altmedrev/.fulltext/10/2/94.pdf>). The calculation is made considering sun intensity at noon in the southern United States during spring, summer and autumn, and assuming the entire body is exposed (i.e., nudity). Under these conditions, to produce 10 000 IU of vitamin D, pale-skinned and dark-skinned persons require 4 to 10 minutes and 60 to 80 minutes of sun exposure respectively.

The body can be divided as follows: The head and each arm represent 9% of the body's surface area. The front of the torso, the back of the torso and each leg represent 18%. The genitals represent 1%. It follows that should the head alone be exposed (approximately 10% of the body), approximately 10 and 80 minutes of sun exposure respectively is required to generate 1000 IU of vitamin D, depending on your skin tone.

In other news, Du was recently featured in an article in *Chatelaine* comparing traditional (conventional) and alternative methods for treating head lice. Discussed are herbal hair rinses, essential oils and moisturizing oils. Her article is on page 64 of the August 2008 issue of *Chatelaine*, on newsstands now! Run, don't walk! Supplies are limited!

## HEALTH TIP

Spend time in the sun, particularly around noon. At noon (but any time between 10 a.m. and 3 p.m.) UVB ("good" radiation that increases body vitamin D levels) is highest relative to UVA ("bad" radiation causing skin cancers).

Generally, pale-skinned persons having only their heads exposed (as on a work day) require approximately 10 minutes of direct, noontime sun exposure to generate enough vitamin D to prevent cancer. Dark-skinned persons require approximately 80 minutes to gain this same benefit. As these values are calculated considering sun intensity found in the southern United States, these should be considered minimum values in Canada.

Extra time should be added if sunblock is used. As a general guideline, spend time in the sun until your skin develops a sensation of heat, then seek out shade (the only completely safe and effective form of sunscreen). Extra care should be taken with children whose skin is very sensitive and who may not be able to identify or verbalize when their skin is feeling hot.

Enjoy the weather!