

## Just the Facts

**On Sunscreen:** Wearing sunscreen or cosmetics with sunscreen in northern climates most of the year totally blocks your body's ability to produce vitamin D. An SPF 8 blocks 92.5 percent of vitamin D production; an SPF 15 blocks 99 percent of vitamin D production.<sup>7</sup>

- ✦ When it is necessary to use sunscreen to prevent sunburn, use only full, broad spectrum SPF that blocks both UVA & UVB. Do not change what Mother Nature created; only reduce the energy so you do not overexpose yourself.
- ✦ When wearing SPF outdoors make sure you apply it properly. SPF 15 when applied improperly may only create an SPF 4. Apply 1-2 ounces at a time to get the full protection.

**On Healthy Skin:** Sunburn prevention – not sun avoidance – is the best way to prevent permanent skin damage. There are other lifestyle factors that greatly affect the health of your skin:

- ✦ A high-fat diet can increase your risk for skin cancer as much as 90 percent.
- ✦ Smoking cigarettes can increase your skin cancer risk up to 50 percent.

**On Canadian Sun:** Our Northern latitude makes vitamin D production nearly impossible from October through March, or four to six months out of the year in Canada. When the UV index is 3 or lower human skin will not make any vitamin D.

**On Indoor Tanning Equipment:** Almost all indoor tanning equipment emits UVA and UVB light, with about 2-6 percent of output being UVB. Exposure schedules are designed to gradually increase your exposure while minimizing the risk of sunburn.

- ✦ There is no such thing as artificial UV light. UV generated by the sun and tanning equipment are the same. Tanning equipment is controlled.
- ✦ 18 of 22 studies show no statistically significant connection between indoor tanning and melanoma. The largest and most recent study concluded: "Our study confirmed the expected associations between melanoma and fair skin, positive family history and numbers of naevi, but did not find a significant association with exposure to the sun and/or sunbeds."<sup>8</sup>

## Just the Facts

**On Professional Tanning:** Professional tanning facilities teach safety precautions.

- ✦ Some medications may make skin more susceptible to sunburn; consult your physician and your tanning professional before tanning.
- ✦ Your eyes do not tan. Eye damage may occur without the use of properly designed eye protection.
- ✦ Tanning professionals will teach you about your numeric skin type. There are six skin types; the lower the number the higher your risk of burning.

**On Overexposure:** Excessive overexposure to both UVA & UVB may be related to non-melanoma skin cancers. Sunburn prevention is the key.

**On Attraction to Sunlight:** When skin is exposed to UVB in sunlight it produces endorphins, chemicals that literally make us feel better. Some have incorrectly called this an addiction. It's not. It's a natural attraction.

For the complete story please visit JCTA's website, [www.TanCanada.org](http://www.TanCanada.org) and click on Ultra-Violet Info.



Joint Canadian Tanning Association

### Our Vision:

*Sun exposure, like air, water and food, is natural and necessary to human life. JCTA's vision is that all Canadians learn to correctly embrace ultra violet and sunshine as part of a healthy lifestyle – one which acknowledges that moderate ultra-violet light exposure when experienced in a non-burning fashion is the smartest way to maximize the potential benefits of UV light while minimizing the manageable potential risks associated with either too much or too little sunlight.*

# The Canadian Tanning Experience

Facts about Sunlight, Vitamin D, and Indoor Tanning for Canadians



Joint Canadian Tanning Association



## Step into the Light

- ✦ 3 million Canadians turn to professional indoor tanning studios every year
- ✦ Our country's northerly latitudes mean most of us are deprived of effective natural sunlight most of the year – a condition now recognized as unnatural and problematic.
- ✦ Melanoma rates among Canadian females have remained unchanged since 1985<sup>1</sup>
- ✦ Indoor tanning provides a responsible and *controlled alternative to sunlight*

### Our Position:

Moderate tanning, for individuals who can develop tans, is the best way to maximize the benefits of regular UV exposure while minimizing the risks associated with either too much or too little sunlight.

*Sunburn prevention is the key.*



## Tanning...not Burning

**Tanning** is a natural process – your body is biologically designed to produce melanin, which darkens the skin and is a natural free-radical scavenger. By increasing pigmentation a tan is your body's natural way of protecting you from sunburn; for most people it can be the equivalent of an SPF 4.

**Sunburn** is a totally different process. Sunburn is an injury; the red color actually is increased blood flow, which is sent to the skin to help your body repair the damage done by overexposure to ultraviolet light.

**Never Sunburn!**

## Vitamin D

### The Sunshine Vitamin

Your body makes vitamin D naturally when skin is exposed to UVB, storing the vitamin in fatty tissue. It's the most controlled and reliable source of vitamin D.

- ✦ 97 percent of Canadians are vitamin D deficient in the winter – a condition caused by Canada's relatively sun-deprived northerly climate.<sup>2</sup>
- ✦ Over 90 percent of tanning lamps emit some UVB light. UVB light stimulates vitamin D production in skin. Indoor tanners have 90 percent higher vitamin D levels compared to non-tanners.<sup>3</sup>
- ✦ Supplements can be an alternate source. However, while it may not be necessary to develop a tan to produce sufficient amounts of vitamin D, UVB exposure is the body's most natural way to produce vitamin D.
- ✦ Current vitamin D recommendations ranging from 200-600 international units (IU) daily are now widely recognized as woefully inadequate.<sup>4,5</sup>
- ✦ Canadian Cancer Society recommends 1,000 IU of vitamin D daily for all Canadian citizens and the Canadian Paediatric Society recommends 2,000 IU daily for pregnant and nursing women.
- ✦ Vitamin D intake isn't a true measure of your vitamin D levels. A caldiol test measures vitamin D in your bloodstream. The Vitamin D Council, a leading vitamin D advocacy group, now recommends target vitamin D blood levels of 125 nanomoles/liter (nm/L) or 50 nanograms/milliliter (ng/mL).<sup>6</sup>



Vitamin D Sources	Vitamin D Content
Sun Tanning*	10,000 – 20,000 IU
Cod Liver Oil	400 – 1,000 IU
Salmon (fresh, wild, 3.5 oz.)	600 – 1,000 IU
Salmon (farmed, 3.5 oz.)	100 – 250 IU
Fortified Milk (8 oz.)	100 IU
Fortified Orange Juice (8 oz.)	100 IU

\*A full-body suntan without a sunburn. Variables include age, amount of skin exposed to sunlight. A dark-skinned individual may need 5-10 times more sun exposure to make the same amount of vitamin D as a fair-skinned person. Source: Dr. Michael Holick

## Our Sources

- 1** Statistics on melanoma mortality rates provided by the National Cancer Institute of Canada show that no more Canadians are dying from melanoma today than in 1985. The average male and female mortality rate from melanoma in 1985 was 2.1 per 100,000 (2.6 for males, 1.6 for females). In 2001, which is the last reported, non-estimated year, the rate was again an average of 2.1 per 100,000 people (2.8 for males and 1.4 for females).
- 2** Rucker D, Allan JA, Fick GH, Hanley DA. Vitamin D Insufficiency in a Population of Healthy Western Canadians. Canadian Medical Association Journal. June 11, 2002; 166 (12)
- 3** Tangpricha V et al. Tanning is associated with optimal vitamin D status (serum 25-hydroxyvitamin D concentration) and higher bone mineral density. Am J Clin Nutr 2004;80:1645-9

For more information on vitamin D visit [www.vitaminDsociety.org](http://www.vitaminDsociety.org) and [www.vitaminDcouncil.org](http://www.vitaminDcouncil.org)

- 4** Holick MF. High prevalence of vitamin D inadequacy and implications for health. *Mayo Clin Proc.* 2006;81:353-373
- 5** Heike A Bischoff-Ferrari, Edward Giovannucci, Walter C Willett, Thomas Dietrich, and Bess Dawson-Hughes. Estimation of optimal serum concentrations of 25-hydroxyvitamin D for multiple health outcomes. Am J Clin Nutr 2006;84:18 –28.
- 6** Vitamin D Council recommendations published on [www.vitaminDcouncil.org](http://www.vitaminDcouncil.org).
- 7** Holick MF. Vitamin D Deficiency. N Engl J Med 2007; 357:266-81
- 8** Bataille V, Boniol M, De Vries E, Severi G, Brandberg Y, Sasieni P, Cuzick J, Eggermont A, Ringborg U, Grivegne A, Coebergh JW, Chignol MC, Dore J, Autier P. A Multicentre Epidemiological study on Sunbed use and Cutaneous Melanoma in Europe. European Journal of Cancer 41 (2005) 2141-2149