

# Sunlight and Vitamin D Controversy Heats Up

*Endocrinologist author argues exposure promotes vitamin D production, reduces melanoma risk.*

BY JANE SALODOF MACNEIL  
Southwest Bureau

PHOENIX, ARIZ. — Physicians, get ready. This summer, patients are likely to ask whether they should be spending more time in the sun, Darrell S. Rigel, M.D., warned attendees at a clinical dermatology conference sponsored by Medicis.

He blamed a book, "The UV Advantage" (New York: iBooks, May 2004), which scorns sun avoidance and advocates moderate doses of sunlight for better conversion of vitamin D in the body. Widespread distribution in tanning salons and coverage in the popular press has piqued public interest, according to Dr. Rigel of New York University.

Illustrating his point, he showed videotape of a "Good Morning America" segment in which he debated the author, Michael Holick, M.D.

"There will be a lot of stories this summer about how people should spend more time in the sun," Dr. Rigel said, urging his audience to have rebuttal data ready to hand.

Dr. Holick, an endocrinologist, is a professor of medicine, physiology, and biophysiology at Boston University. He was asked to resign from the department of dermatology after the book's publication, but he continues to serve as director of the school's vitamin D, skin, and bone research laboratory and of its general clinical research center.

"There's no evidence that you increase your risk of melanoma from sensible sun exposure. In fact, it decreases your risk,"

he said in a brief telephone interview following Dr. Rigel's talk.

Here are some of the issues under dispute:

► **Tanning industry support.** Dr. Rigel alleged the tanning industry is the driving force behind the book. "The tanning industry could not claim any health benefits [gained] by going to a tanning salon," he said, noting that Dr. Holick often speaks at tanning industry functions. "They bankrolled the book. ... There is a conflict of interest that is not disclosed."

Dr. Holick confirmed \$150,000 in grants from International Tanning Association but said the money is to be awarded during the next 3 years for research into sunlight and vitamin D. "They did not fund the book. I paid money out of my own pocket, and I haven't made a cent," he said of its publication.

► **Vitamin D deficiency.** In the book and in a journal article, Dr. Holick warned of "an unrecognized epidemic of Vitamin D deficiency among both children and adults in the United States" (Am. J. Clin. Nutr. 2004;80[suppl. 6]:1678S-88S). Among the potential consequences, he has listed rickets, worsening of bone diseases such as osteoporosis and osteomalacia, and increased risk of cancer, cardiovascular disease, multiple sclerosis, rheumatoid arthritis, and type 1 diabetes mellitus.

"Where is this epidemic?" Dr. Rigel asked. "We're not seeing this."

He questioned whether it is based on a recommendation that blood concentrations of 25-hydroxyvitamin D should be higher than 80 nmol/L. "There is no science to this. It is just an arbitrary argument that levels should be changed," Dr. Rigel said.

► **Cancer risk.** Dr. Rigel accused the author of ignoring life-threatening consequences of sun exposure. "He says risk of

melanoma patients who have more sun exposure survive longer (J. Natl. Cancer Inst. 2005;97:195-9)—a conclusion Dr. Rigel dismissed as "advocating getting more sun after diagnosis, so you'll survive better."

Dr. Rigel said an alternative interpretation could be that people with a history of sun exposure are more concerned about their cancer risk and, therefore, seek treatment earlier. He also cited a commentary that warned the study should be interpreted with caution and questioned whether a more likely explanation involves "a different pathogenesis in melanomas that arise in persons at risk to develop actinic skin damage" (J. Natl. Cancer Inst. 2005;97:161-3).

► **Sensible sun exposure.** Dr. Holick recommends 5-10 minutes of sun exposure on the face and on the arms and legs or hands and arms two or three times a week, along with increased dietary and supplemental vitamin D.

The average person gets more exposure than that during the normal course of daily life, according to Dr. Rigel. "There's

no reason to suggest to your patients they should expose themselves, because they will get enough otherwise," he said.

He urged physicians to recommend to their patients that sunscreen be part of a total sun-protection program that includes wearing protective clothing and avoiding the midday sun.

Even with sunscreen, incidental levels of UV light appear to lead to normal levels of vitamin D, he said. ■



Even using sunscreen, most people will absorb enough UV light to produce normal vitamin D levels, a noted dermatologist said.

nonmelanoma skin cancer is not really important. He does not talk about melanoma," Dr. Rigel said.

"Sensible sun exposure decreases your risk of melanoma," countered Dr. Holick. "Unfortunately, [dermatologists] have very closed minds about this and lump all skin cancers together."

The author said most melanomas occur in areas of the body with the least sun exposure. He also cited a study that found

## Sunless Tanning Cuts Tanning Bed Use

BY MICHELE G. SULLIVAN  
Mid-Atlantic Bureau

NEW ORLEANS — Sunless tanning preparations are linked with a decrease in the use of tanning beds and a slight increase in the use of sunscreens, Daniel Sheehan, M.D., said in a poster presentation at the annual meeting of the American Academy of Dermatology.

Although Dr. Sheehan's survey of 121 people who used such a product indicated that most didn't change their outdoor sun exposure, the reported decrease in tanning bed exposure could have a positive effect on skin health.

"Traditional ultraviolet light tanning bed use has been linked to melanoma and nonmelanoma skin cancers by recent case-control studies," commented Dr. Sheehan in an interview.

He also said, given this prevalence, physicians "should advocate the use of sunless tanning to their patients and their community as a means of decreasing traditional [ultraviolet light] tanning bed use and UVL exposure."

Dr. Sheehan, of the Medical College of Georgia, Augusta, administered surveys to 121 sunless tanning patrons at two salons.

The subjects ranged in age from 14 to 58 years.

The survey group was composed of 78 first-time users and 43 repeat users.

About one-quarter of patrons (26%) said sunless tanning decreased their outdoor sun exposure, but most (64%) said it had no effect. Almost one-quarter (23%) said sunless tanning increased their use of sunscreen.

The largest effect was seen in decreased use of tanning beds; 70% said sunless tanning decreased their use of tanning beds.

The trend toward decreased outdoor sun exposure and increased sunscreen use may represent additional health benefits of sunless tanning, in addition to the statistically significant decrease in tanning bed use, Dr. Sheehan noted.

The spray-on tanning offered at the salon isn't cheap: It's at least \$20 per session, he said. But there are many over-the-counter preparations that offer similar results at a lower cost.

It's important to remember, however, that patients counseled to use those products should also be counseled to use sunscreen, he added. ■

## Genders Use Different Techniques to Avoid Sun

WASHINGTON — Most adults say that they always or nearly always use at least one method of preventing overexposure to the sun, according to a convenience sample of 1,269 adults aged 18-39 years living in Maryland in 2004.

The most common strategies reported were avoiding the sun between 10 a.m. and 4 p.m. (35%); using sunscreen with at least SPF 15 regularly (30%); using protective clothing, such as long-sleeved shirts or pants (16%); and wearing a hat (12%), wrote Eileen Steinberger, M.D., in a poster presented at the annual meeting of the American College of Preventive Medicine.

Men and respondents with higher levels of education were more likely to wear hats, while women, white responders, and responders of an ethnicity other than white or black were more likely to use sunscreen, wrote Dr. Steinberger of the University of Maryland.

Overall, people aged 25 years and older were more likely to use at least one sun protection method. White responders accounted for almost all users of artificial tanning, with 8% of males and 23% of females reporting use of an artificial tanning device within the previous year.

—Heidi Splete

