## Insufficient Sun Exposure Called **Emerging Public Health Problem by World-Renowned Researchers**



The sun provides the energy all living things need to exist on the Earth!!

- 1. Boosts mood by increasing serotonin production and enhancing body's supply of endorphins
- 2. Stimulates the pineal gland to make Melatonin which is important for regulating sleep
- 3. The sun is our best source of Vitamin D 9. Protects eye health and which is important for strong bones and teeth
- 4. Boosts immune system
- May improve metabolic rate

- 6. Reduces risk for breast, colon and rectal cancers
- 7. Improves circulation and lowers blood pressure
- 8. Lowers risk of Multiple Sclerosis
- prevents macular degneration
- 10. Reduces risk of stroke

Spend at least 30 minutes in the sun without sunscreen to ensure your body gets an adequate supply of Vitamin D. Even an SPF 8 sunscreen can block 95% of Vitamin D synthesis!!

Public health advice to avoid sun exposure may be contributing to more than 300,000 deaths annually; Researchers from Medical University of South Carolina, Boston University, University of New Mexico and Leiden University (Netherlands) call for U.S. public health officials to encourage moderate non-burning UV exposure A landmark study published today in the Journal Dermato-Endocrinology has world-renowned researchers calling insufficient sun exposure an emerging health problem in the United States. In their paper, The Risks and Benefits of Sun Exposure 2016, the authors reference major papers in the past five years in concluding that Americans are not getting enough sun exposure and that public health advice needs to be retooled to embrace moderate sun while focusing on sunburn prevention. "The message of sun avoidance advocated by our government, and some within the medical community, should be changed immediately to a recommendation of regular non-burning sun exposure for most Americans," said lead author Dr. David Hoel, a member of the National Academy of Medicine and Distinguished University Professor at the Medical University of South Carolina. "The sun is essential for life and should be diligently pursued in moderation, not avoided."

The new study cites more than 100 studies demonstrating the benefits of non-burning sun exposure. Many benefits are related to vitamin D – produced naturally in the skin when exposed to UVB in sunlight. But new data show many benefits from sun are independent of vitamin D and may be related to other substances produced in sun-exposed skin. Just as important: New data suggest the significant risks associated with sun exposure are only related to sunburn or excessively large lifetime exposure, the study reports.

While recent public health guidance has encouraged people to avoid the sun out of concern that exposure will increase risk of skin cancer, the prevalence of vitamin D insufficiency in the United States – linked primarily to sun avoidance – is 70%. The study cites recent estimates that about 13% of all U.S. deaths (330,000 deaths per year) could be attributable to vitamin D insufficiency. Corresponding estimates for deaths linked to tobacco are about 20% (450,000 deaths).

The paper documents evidence that the health benefits of sun exposure are not limited to vitamin D, with nitric oxide and other sun-induced mediators identified with respect to reduced hypertension and other favorable health outcomes. Vitamin D supplements have not been shown to be an adequate substitute for sun exposure. Risks of insufficient sun exposure include increased risk of many types of cancer, cardiovascular disease, Alzheimer's disease/dementia, diabetes, multiple sclerosis, myopia and macular degeneration.

The paper's conclusions and call for a change in public policy are significant given the strong and diverse qualifications of its multi-disciplinary authors:

- Dr. David Hoel, recognized as one of the world's leading experts on the health
  effects of radiation, served on the World Health Organization's International
  Agency for Research on Cancer (IARC) panel of experts which in 2009 classified
  ultraviolet radiation (UVR) as a carcinogen. Dr. Hoel has since called this
  classification widely misunderstood, noting that UVR is associated with skin
  cancer only if it results in sunburn or if it is in very large lifetime amounts.
- Dr. Marianne Berwick is the distinguished professor of dermatology and internal medicine at the University of New Mexico, is widely regarded as one of the world's leading experts on melanoma epidemiology.
- Dr. Frank de Gruijl, associate professor of dermatology at Leiden University in the Netherlands, considered one of the world's leading pigment cell/melanogenesis researchers.
- Dr. Michael Holick is professor of medicine, physiology and biophysics at Boston University and perhaps the world's most recognized vitamin D researcher. Dr. Holick was on the research team that first discovered the active form of vitamin D in 1969.

"Sunlight provides vitamin D, but it provides so much more. The UV from sunlight has other health benefits," Dr. Holick said. "Most public health agencies have ignored the indisputable evidence that sensible sun is good for you in moderation." The authors are clear: sunscreen should be used as a tool to prevent sunburn, but the public should know that over-use of the product may have unintended consequences. They are calling for sunscreen labels to contain a statement explaining that sunscreen blocks vitamin D production in the skin. Labeling should also acknowledge that sunscreens have not been shown to be effective in reducing the risk of melanoma.

## About GrassrootsHealth

GrassrootsHealth is a nonprofit public health research organization dedicated to moving public health messages regarding vitamin D from science into practice. It has a panel of 48 senior vitamin D researchers from around the world contributing to its operations. That team published <u>Sunlight and Vitamin D: Necessary for Public Health in 2015</u>, showing that healthy vitamin D levels are consistent with outdoor living and regular sun exposure, concluding, "The current policy of sun avoidance is creating harm for the general population."