

SUNSHINE HEALTH FOUNDATION
3500 Fairmount Street #417
Dallas, Texas 75219
(214) 766-7283

July 14, 2021

Office of Science Quality
Center for Disease Control and Prevention
InfoQuality@cdc.gov

INFORMATION QUALITY APPEAL

I received your letter dated June 24, 2021 relating to our Information Quality Request for Correction #76, in which you state, in effect, that your webpage Are There Benefits to Spending Time Outdoors together with the linked NIH Vitamin D Fact Sheet for Professionals adequately warn the American public of the health risks of following the CDC's sun protection advice. We respectfully and emphatically disagree. Nothing on the referenced webpage or the linked NIH Fact Sheet warns the public that low levels of serum 25(OH)D, a biologic marker for low sun exposure, are correlated with increased risk of premature death of the same order of magnitude as smoking, increased risk of acute respiratory tract infection, increased risk of breast cancer, increased risk of death from breast cancer in breast cancer patients, increased risk of colon cancer, increased risk of high blood pressure and cardiovascular disease, increased risk of metabolic syndrome and obesity, increased risk of Alzheimer's disease, increased risk of autistic offspring, increased risk of type 2 diabetes, increased risk of asthma, increased risk of multiple sclerosis, increased risk of myopia, and increased risk of sudden infant death syndrome, or that all of the foregoing increased risks are greater for African-Americans than for white Americans.

If a doctor gave health advice to a patient without warning the patient that following such advice involved the foregoing risks, he would be liable for malpractice and might (should) lose his/her medical license. If a drug company sold a drug without a warning that taking the drug involved the foregoing risks, the company would be liable for \$billions and would be in serious trouble with FDA.

I urge you to reconsider your decision and to either change your sun exposure advice or disclose to the American public all of the science showing that insufficient sun exposure is a very large public health problem in the U.S. with adverse health consequences such as, but not limited to, the ones listed above.

Respectfully submitted,

Sunshine Health Foundation

By: /s/ Allen P. Miller
Allen P. Miller
President

#76
Response 6-24-21



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30341-3742

June 24, 2021

Allen P. Miller, President
Sunshine Health Foundation
3500 Fairmount Street #417
Dallas, Texas 75219

Re: Information Quality Request for Correction #76, date October 8, 2020

Dear Mr. Miller:

This letter is in response to the Information Quality Request for Correction (#76), dated October 8, 2020. These requests are listed at: <https://aspe.hhs.gov/information-requests-corrections-and-hhs-responses>. We regularly review and update the content on our websites and appreciate the feedback you have provided.

The request, #76, references the webpage titled "Skin Cancer – Sun Safety" and asserts that "Nothing on these webpages or elsewhere on the CDC's website warns the American public of any health risks of following the CDC's sun protection advice. Most Americans suffer adverse health consequences as a result of insufficient sun exposure." Our webpage, Are There Benefits to Spending Time Outdoors?, discusses the link between sun exposure and Vitamin D. This page also links to scientific information provided by the NIH Office of Dietary Supplements (health professionals) on the established and potential health effects of Vitamin D. Both pages describe potential sources of Vitamin D, which include foods and dietary supplements in addition to UV exposure. We believe that these web pages appropriately address the issues of Vitamin D sources, serum levels, and health impacts.

If you wish to appeal the response to your request for correction #76, you may submit a written hard copy or electronic request for reconsideration within 30 days of receipt of the agency's decision. The appeal must state the reasons why the agency response is insufficient or inadequate. You must attach a copy of your original request and the agency's response to it. Clearly mark the appeal with the words, "Information Quality Appeal" and send the appeal by e-mail to InfoQuality@cdc.gov or to: CDC/ATSDR, Attn: Mailstop H21-8 (attn.: Office of Science Quality); 1600 Clifton Road, N.E., Atlanta, GA 30333.

Thank you for your interest in the quality of information disseminated by CDC.

Sincerely,

/S/

Nicole F. Dowling, Ph.D.
Associate Director for Science
Division of Cancer Prevention and Control (DCPC)
National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

cc:

Lisa C. Richardson, MD, MPH, Director, DCPC


Rachel Kaufmann, PhD, Associate Director for Science, NCCDPHP

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Sunshine Health finals

270 KB

268 KB

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Sent on behalf of Dr. Mary Reynolds

Bridgette L Saunders | Veritas Management Group, Inc. (VMG)
Logistics/eClearance Coordinator, Office of Science Quality
Office of Science | Centers for Disease Control and Prevention (CDC)
404-639-4807 (direct) | 404-639-4903 (fax)



OS Mission: "To promote quality, integrity, and innovation of CDC science to improve the public's health."

Dear Mr. Miller,

We'd like to thank you for your inquiries to CDC and your interest in this topic. CDC scientists have provided responses to your queries in the three attached letters, which reference new websites.

Regards,
Office of Science Quality
Office of Science
CDC

Mary Reynolds, PhD
Deputy Director
Office of Science Quality
Office of Science, DDPHSS
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OS Mission: "To promote quality, integrity, and innovation of CDC science to improve the public's health."

Reply | Reply all | Forward



Sunshine Health Foundation

3500 Fairmount Street # 417

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214.766.7283

76
Request 10/8/20

October 8, 2020

Office of Science Quality
Centers for Disease Control and Prevention
InfoQuality@cdc.gov

This is a submission of an information quality request for correction.

Detailed description of the specific information that needs to be corrected.

The information that needs to be corrected is as follows:

The CDC's webpage titled "Skin Cancer – Sun Safety" tells the American public that:

"Sun Safety

The sun's ultraviolet (UV) rays can damage your skin in as little as 15 minutes...."

Shade

You can reduce your risk of skin damage and skin cancer by seeking shade under an umbrella, tree, or other shelter before you need relief from the sun. Your best bet to protect your skin is to use sunscreen or wear protective clothing when you're outside – even when you're in the shade.

Clothing

When possible, long-sleeved shirts and long pants and skirts can provide protection from UV rays. Clothes made from tightly woven fabric offer the best protection. A wet T-shirt offers much less UV protection than a dry one, and darker colors may offer more protection than lighter colors. Some clothing certified under international standards comes with information on its ultraviolet protection factor. If wearing this type of clothing isn't practical, at least try to wear a T-shirt or a beach cover-up. Keep in mind that a typical T-shirt has an SPF rating lower than 15, so use other types of protection as well.

Sunscreen

Put on broad spectrum sunscreen with SPR 15 or higher before you go outside, even on slightly cloudy or cool days. Don't forget to put a thick layer on all parts of exposed skin. Get help for hard-to-reach places like your back. And remember, sunscreen works best when combined with other options to prevent UV damage."

Further, the CDC's webpage titled "Sun Safety Tips for Families" tells the American public that

“Nearly 5 million people are treated for skin cancer each year in the United States. Skin cancer can be serious, expensive, and sometimes even deadly. Fortunately, most skin cancers can be prevented. Ultraviolet (UV) rays—from the sun or from artificial sources like tanning beds—are known to cause skin cancer. Damage from exposure to UV rays builds up over time, so sun protection should start at an early age. **Protect your family and yourself from skin cancer!**”

Nothing on these webpages or elsewhere on the CDC’s website warns the American public of any health risks of following the CDC’s sun protection advice. Most Americans suffer adverse health consequences as a result of insufficient sun exposure.

The specific reasons for believing the information does not comply with OMB, HHS or CDC guidelines and is in error.

The information does not comply with OMB, HHS and CDC guidelines because it recommends avoidance of sun exposure and daily use of sunscreen without disclosing the health risks of following this recommendation. This failure to disclose the risks of following the CDC’s advice is causing harm to millions of Americans. 21st Century science shows that most Americans suffer severe adverse consequences as a result of insufficient sun exposure, and that insufficient sun exposure may in fact be the nation’s second largest public health problem after tobacco [1]. CDC and HHS guidelines require the CDC and HHS to safeguard American’s health. Additionally, the information misinforms the American public on the risks of skin cancer from UV rays, which may be part of the reason that the incidence of melanoma has increased at a fairly steady exponential rate from 1935 to the present.

The best metric for determining the amount of sun exposure experienced by a person is the level of the biochemical 25(OH)D in their blood. This is because over 90% of this biochemical is produced by sun exposure.

A review of 21st century science shows that low levels of serum 25(OH)D are correlated with:

- 12.8% of all deaths in the United States (340,000 deaths annually) [2].
- Increased risk of premature death of the same order of magnitude as that from smoking [3].
- 83% increased risk of acute respiratory tract infection (ARTI) from colds and influenza and 146% increased risk of death from ARTI from colds and influenza [4].
- 104% increased risk of colon cancer [5].
- 400% increased risk of breast cancer [6].
- 376% increased risk of death from breast cancer in breast cancer patients [7].
- Increased risk of high blood pressure [8] and cardiovascular disease [9].
- 64% increased risk of metabolic syndrome [10] and increased risk of obesity [11].
- 122% increased risk of Alzheimer’s disease [12].
- 142% increased risk of autistic offspring [13].

- 35% increased risk of type 2 diabetes [14].
- Increased risk of asthma [15-17].
- 100-120% increased risk of multiple sclerosis [18-26].
- Increased risk of myopia [27-29].
- Increased risk of deficiency in serotonin and brain serotogenic activity linked to sudden infant death syndrome (SIDS) [30].

It is well known, and has been for 100 years, that African-Americans suffer from worse health than white Americans. A review of 21st century science explains why:

- All of the above adverse health consequences are worse for African-Americans than for white Americans. The prevalence of 25(OH)D levels less than 30 ng/mL is 97% for African-Americans vs. 77% for white Americans, and the prevalence of 25(OH)D levels less than 10 ng/mL is 29% for African-Americans vs. 6% for white Americans [31]. The reason for these low levels of serum 25(OH)D in African-Americans is that African-Americans have more melanin in their skins than white Americans, and melanin partially blocks radiation from the sun. As a result, if an African-American gets exactly the same amount of sun exposure as a white American, the African-American will have lower serum 25(OH)D than the white American. This was not a problem for African-Americans' ancestors who evolved under the more powerful tropical sun, but it became a problem for African-Americans when they were forcibly migrated from the tropics to the higher latitudes of the United States.
- Evidence that the above adverse health consequences are worse for African-Americans is provided by statistics on the relative prevalence of several sun-related diseases in African-Americans vs. white Americans.
- The prevalence of colorectal cancer in the United States is 25% higher in African-Americans than in white Americans [32].
- The prevalence of hypertension in the United States is 37% higher in African-Americans than in white Americans [33], and mortality due to hypertension and its consequences is 4 to 5 times more likely in African-Americans than in white Americans [34]. Notably, the prevalence of hypertension in black-skinned persons is far lower in Africa and increases in a consistent gradient from Africa to the Caribbean to the United States [35].
- The prevalence of type 2 diabetes in the United States is 100% higher in African-Americans than in white Americans [36].
- The prevalence of Alzheimer's disease in the United States is 100% higher in African-Americans than in white Americans [37].
- The prevalence of asthma in the United States is 35% higher in African-Americans than in white Americans, and the mortality rate of asthma is 400% higher for African-Americans [38].

- The prevalence of multiple sclerosis in the United States is 47% higher in African-Americans than in white Americans [39]. Minority populations in the United States have a higher incidence of multiple sclerosis than in their ancestral countries of origin [40].
- A recent population-based cross-sectional study on preschool American children aged 6–72 months reported a myopia prevalence of 1.2% in non-Hispanic whites, 3.7% in Hispanics, 3.98% in Asians, and 6.6% in African Americans. Greater difference in the prevalence of myopia was found in older school-aged children of different ethnicity [41].
- SIDS rates are more than twice as high among African Americans as among whites (1.4 per 1,000 versus 0.6 per 1,000) [42].
- Melanoma is rare among African-Americans, with incidence rates of 1.2 per 100,000 men and 1.0 per 100,000 women, compared with 33.0 per 100,000 men and 20.2 per 100,000 women among white Americans [43].

It has recently become a matter of common knowledge that African-Americans are being disproportionately adversely affected by COVID-19. Data from the CDC indicate that infection is 2.6x higher and death is 2.1x higher for African-Americans than for white Americans. It is known that death from COVID-19 normally results from acute respiratory tract infection (ARTI). These data for the disproportionate adverse effects of COVID-19 on African-Americans are similar to the 1.83x higher infection for colds and influenza and 2.46x higher death from colds and influenza for persons with low serum 25(OH)D vs. high serum 25(OH)D [4].

In addition to the foregoing, the information on the CDC's website on the risks of skin cancer from UV rays is not correct. The correct science on the relationship between sun exposure and skin cancer is set forth in *Alfredsson et al. 2020* [1]. The authors of *Alfredsson et al. 2020* include Dr. Frank R. de Gruijl, the world's leading scientist on the biomolecular relationship between sun exposure and skin cancer, and Dr. Bruce A. Armstrong, the world's leading scientist on the epidemiological relationship between sun exposure and skin cancer. Among other matters, it is noted that melanoma risk from sun exposure is correlated only to severe sunburns (sunburns with blistering or pain for at least 2 days) and not to non-burning sun exposure even in very large amounts. Squamous cell carcinoma is correlated to sunburns and to chronic non-burning sun exposure of at least 20,000 hours for northern Europeans and 70,000 hours for southern Europeans. Basal cell carcinoma is correlated to sunburns and, to a lesser extent than squamous cell carcinoma, to chronic non-burning sun exposure [1].

The small amount of additional sun exposure (10-30 minutes a day of sunbathing three times a week) needed for good health among people with low serum 25(OH)D will not increase the risk of melanoma at all if sunburns are avoided. Since most squamous cell carcinomas and basal cell carcinomas are located on the face and neck, such sun exposure will not materially increase the risk of squamous cell carcinoma or basal cell carcinoma if the face and neck are

covered. It is important that the eyes be protected while sunbathing, by keeping them closed or wearing sunglasses [44], and the importance of avoiding sunburns cannot be overemphasized.

Alfredsson et al. 2020 [1] is a landmark study by fifteen of the world's leading scientists on sun exposure and human health that for the first time identifies insufficient sun exposure as a real public health problem.

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The specific recommendation for correcting the information

The CDC should update its website to include 21st century science and present up-to-date and accurate scientific information on the risks and benefits of sun exposure. This appears to be the responsibility of the CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). If the Director of NCCDPHP, Dr. Karen Hacker, would like to contact me to discuss this matter, she can call be at 214-766-7283 or email me at allen.miller@sunshinehealthfoundation.org. I have been working on these issues for the past 10 years and know many of the foremost scientists in the world on the subject of sun exposure and human health.

Description of how the person submitting this complaint is affected by the information error

The purpose of the Sunshine Health Foundation is to educate the public on the health risks and benefits of sun exposure. Inaccurate science from the CDC conflicts with this purpose.

The name, mailing address, telephone number and e-mail address of the person making this complaint


The person making this complaint is the Sunshine Health Foundation, which is a charitable foundation. The mailing address, telephone number and e-mail address of the Sunshine Health Foundation is:

Sunshine Health Foundation

3500 Fairmount Street #417
Dallas, Texas 75219
Telephone 214-766-7283
E-mail address allen.miller@sunshinehealthfoundation.org

Respectfully submitted,

Sunshine Health Foundation

By: 
Allen P. Miller, President

Attachments: CDC Webpage on Sun Safety
AAD's instructions on sun safety

CDC -

https://www.cdc.gov/cancer/skin/basic_info/sun-safety.htm

Sun Safety

[Español \(Spanish\)](#)



You can reduce your risk of skin damage and skin cancer by seeking shade under an umbrella, tree, or other shelter before you need relief from the sun.

The sun's ultraviolet (UV) rays can damage your skin in as little as 15 minutes. Check the U.S. Environmental Protection Agency's [UV Indexexternal icon](#) for your area, and follow these recommendations to help protect yourself and your family.

Shade

You can reduce your risk of skin damage and skin cancer by seeking shade under an umbrella, tree, or other shelter before you need relief from the sun. Your best bet to protect your skin is to use sunscreen or wear protective clothing when you're outside—even when you're in the shade.

Clothing

When possible, long-sleeved shirts and long pants and skirts can provide protection from UV rays. Clothes made from tightly woven fabric offer the best protection. A wet T-shirt offers much less UV protection than a dry one, and darker colors may offer more protection than lighter colors. Some clothing certified under international standards comes with information on its ultraviolet protection factor.

If wearing this type of clothing isn't practical, at least try to wear a T-shirt or a beach cover-up. Keep in mind that a typical T-shirt has an SPF rating lower than 15, so use other types of protection as well.

Hat

For the most protection, wear a hat with a brim all the way around that shades your face, ears, and the back of your neck. A tightly woven fabric, such as canvas, works best to protect your skin from UV rays. Avoid straw hats with holes that let sunlight through. A darker hat may offer more UV protection.

If you wear a baseball cap, you should also protect your ears and the back of your neck by wearing clothing that covers those areas, using a broad spectrum sunscreen with SPF 15 or higher, or by staying in the shade.

Sunglasses

Sunglasses protect your eyes from UV rays and reduce the risk of cataracts. They also protect the tender skin around your eyes from sun exposure.

Sunglasses that block both UVA and UVB rays offer the best protection. Most sunglasses sold in the United States, regardless of cost, meet this standard. Wrap-around sunglasses work best because they block UV rays from sneaking in from the side.



“Sunscreen isn’t an all-protective force field. It is intended to be combined with other sun-safety approaches.” Get [The Truth About Sunscreen](#) in this blog post.

Sunscreen

Put on broad spectrum sunscreen with SPF 15 or higher before you go outside, even on slightly cloudy or cool days. Don’t forget to put a thick layer on all parts of exposed skin. Get help for hard-to-reach places like your back. And remember, sunscreen works best when combined with other options to prevent UV damage.

How sunscreen works. Most sunscreen products work by absorbing, reflecting, or scattering sunlight. They contain chemicals that interact with the skin to protect it from UV rays. All products do not have the same ingredients; if your skin reacts badly to one product, try another one or call a doctor.

SPF. Sunscreens are assigned a sun protection factor (SPF) number that rates their effectiveness in blocking UV rays. Higher numbers indicate more protection. You should use a broad spectrum sunscreen with SPF 15 or higher.

Reapplication. Sunscreen wears off. Put it on again if you stay out in the sun for more than two hours and after swimming, sweating, or toweling off.

Expiration date. Check the sunscreen's expiration date. Sunscreen without an expiration date has a shelf life of no more than three years, but its shelf life is shorter if it has been exposed to high temperatures.

Cosmetics. Some makeup and lip balms contain some of the same sun-protective ingredients used in sunscreens. If they do not have SPF 15 or higher, be sure to use other forms of protection as well, such as sunscreen and a wide-brimmed hat.

AAD Website <https://www.aad.org/public/diseases/skin-cancer/prevent/how>

Follow these tips to protect your skin from the sun's damaging ultraviolet rays and reduce your risk of skin cancer:

- **Seek shade when appropriate**, remembering that the sun's rays are strongest between 10 a.m. and 2 p.m. If your shadow is shorter than you are, seek shade.
- **Wear sun-protective clothing**, such as a lightweight and long-sleeved shirt, pants, a wide-brimmed hat and sunglasses with UV protection, when possible. For more effective sun protection, select clothing with an ultraviolet protection factor (UPF) label.
- **Apply a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher**. Broad-spectrum sunscreen provides protection from both UVA and UVB rays.
 - Use sunscreen whenever you are going to be outside, even on cloudy days.
 - Apply enough sunscreen to cover all skin not covered by clothing. Most adults need about 1 ounce — or enough to fill a shot glass — to fully cover their body.
 - Don't forget to apply to the tops of your feet, your neck, your ears and the top of your head.
- **When outdoors, reapply sunscreen every two hours**, or after swimming or sweating.