

# “Dear Dr. McCollough”... Practical Answers for Every Body

An interactive journey *through your body* with Dr. E. Gaylon McCollough.

**Dear Dr. McCollough:** I like to have a tan, but keep hearing so much about how sun exposure can cause skin cancer and premature wrinkling. Are tanning beds safer than lying in the sun?

**Dear Reader:** Absolutely not. Thousands of Americans a year are diagnosed with squamous cell carcinoma, the second most common form of skin cancer. Everyday exposure to UV light either by the sun or tanning bed, is the biggest risk factor causing the development of squamous cell carcinoma.

Skin cancer is the most common form of cancer in the United States. The three major types of skin cancer are the highly curable basal cell and squamous cell carcinomas and the more serious malignant melanoma. The American Cancer Society estimates that during 2003, about 1 million new cases of basal cell or squamous cell carcinoma and about 54,200 new cases of malignant melanoma will be diagnosed. It is also expected that skin cancer will claim the lives of approximately 9,800 Americans.

Exposure to the sun's ultraviolet (UV) rays appears to be the most important environmental factor involved in the development of skin cancer. When used consistently, sun-protective practices can prevent skin cancer. UV rays from artificial sources of light, such as tanning beds and sunlamps, are as dangerous as those from the sun and should also be avoided. Although both tanning and burning can increase a person's risk for skin cancer, most Americans do not consistently protect themselves from UV rays. A recent survey sponsored by the Centers for Disease Control and Prevention (CDC) found that approximately 43% of white children under age 12 had at least one sunburn during the past year.

## Who Is at Risk?

Although anyone can develop skin cancer, some people are at particular risk. Risk factors include

- Light skin color, hair color, or eye color.
- Family history of skin cancer.
- Personal history of skin cancer.
- Chronic exposure to the sun.
- History of sunburns early in life.
- Certain types of moles, or a large number of moles.
- Freckles, which indicate sun sensitivity and sun damage.

Have you heard that tanning beds don't cause skin cancer? This belief isn't supported by the latest study looking at this controversial issue. Researchers found that people who used these artificial means of attaining that deep bronze glow were, in fact, putting themselves at great risk of skin cancer.

It might seem obvious to some that tanning beds would increase the chance of developing skin cancer. But others have suggested that indoor tanning is the "safer" way to tan. And medical research hasn't been able to solidly show that indoor tanning does, in fact, lead to more skin cancer.

Skin cancer, the most common type of cancer, occurs in more than a million people each year. There are three types: basal cell cancer, the most common; squamous cell cancer; and melanoma, which is the least common but most deadly type. The current study was looking only at the association between tanning beds and non-melanoma skin cancers.

Researchers at Dartmouth Medical School looked at over 1,400 people to see if any association between skin cancer and tanning beds exists. Almost 900 of them had either basal cell or squamous cell cancer. Each person was asked about their use of tanning beds or lamps or sun exposure.

Overall, those who had ever used a tanning bed were 2.5 times more likely to have squamous cell cancer and 1.5 times more likely to have basal cell cancer. When sun exposure or sunburns were factored in, the results did not change -- certainly not to say that sun doesn't also raise the risk of skin cancer.

Plus, those that started using tanning beds at an earlier age tended to be more likely to end up with skin cancer. For each decade younger someone was the first time they used a tanning device, they were 20% more likely to get squamous cell cancer -- and 10% more likely to suffer from basal cell cancer.

Although these two types of cancers don't kill you, they do require aggressive treatment with surgery. The surgery can leave disfiguring scars if the cancer isn't treated early.

Though this study doesn't prove that tanning beds actually *cause* skin cancer, the results certainly suggest that these devices contribute largely to the problem. More research is needed to determine if they actually cause the DNA damage that leads to skin cancer.

There are two messages here. These results make a good argument that tanning beds do raise your chance of getting skin cancer. Secondly, you should see a dermatologist regularly to get a skin check-up. Finding these cancers early makes treatment much easier.

If you would like any more information on this or other health related topics, call the McCollough Institute for Appearance and Health at 251-967-7600, email [info@mccolloughinstitute.com](mailto:info@mccolloughinstitute.com) or visit our website [www.mccolloughplasticsurgery.com](http://www.mccolloughplasticsurgery.com).

If you would like to ask Dr. McCollough a question, please submit the question using our online contact form at <http://www.mccolloughplasticsurgery.com/contactus.html>.