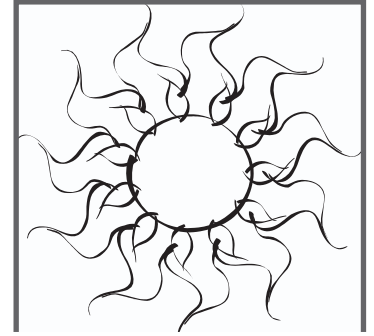


Sun protection and Vitamin D after a diagnosis of melanoma



Patient Information

&

advice

Introduction

Once you have been diagnosed with melanoma we usually advise you to avoid too much sun exposure.

This is for two reasons:

1. It reduces the risk of developing another melanoma.
2. Any sunburn may stop your immune system working as well as it should.

Yet, we know sun exposure is generally important to health because it allows your body to make Vitamin D, which is crucial for bone health. There is some evidence that Vitamin D may also be important for your health after diagnosis of melanoma. This is very new information and we need the results from further studies before we can be sure it is right. However, Vitamin D is necessary for many other aspects of your health, so there is no doubt that Vitamin D levels are important.

So what is our advice to you?

The best advice we can give you is to avoid too much sun exposure.

Firstly, avoid sunburn.

Secondly, when the UV index¹ is at, or above, 3:

- Avoid staying out in the sun for long periods.
- Avoid the sun between 10am and 2pm in particular.
- Use sun protection such as factor 30 SPF² sunscreen with four or five stars UVA³ protection.
- Use appropriate clothing to protect your skin where possible.

The UV index will vary depending on where you live in the world, the season and the time of day. For example, people living in Sydney, Australia may need to practise sun protection for most of the year. For people who live in Northern England the length of time will be shorter.



When UV levels are high, adequate Vitamin D is quickly created in the skin so prolonged exposure is not necessary.

Thirdly, keep your Vitamin D levels up.

You can do this in two ways:

1. Take a daily Vitamin D supplement (such as a multi-vitamin or cod liver oil), particularly in the winter.

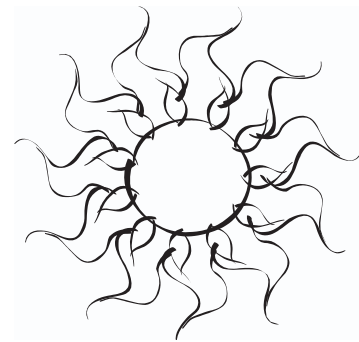
- A teaspoon (tsp) of cod liver oil may contain 450 IU⁴ of Vitamin D⁵.
2. Eat foods that are naturally rich in Vitamin D (such as fatty fish and eggs) or that have been fortified with Vitamin D (such as some yoghurts and cereals). If you eat reasonable quantities of these foods you may not need to take supplements every day. A portion



of cooked salmon (3.5 ounces/99 grams) may contain 360 IU of Vitamin D⁶.

- If you have kidney disease, a high calcium level, kidney stones or heart disease speak to your doctor before taking supplements.

If you are at all concerned please talk to your healthcare professional.



How much Vitamin D is enough?

At the moment the ideal intake of Vitamin D is unclear. Some authorities recommend 200 IU (five micro grams) per day for the general public but others suggest a far higher dose, especially for the elderly who stay indoors. For cancer patients, it is not known what to suggest and some scientists have concerns that high levels of Vitamin D in the blood might be harmful. Research is under way to find the right dose.

In the meantime, our cautionary advice is as follows:

- 200 IU (five micro grams) of Vitamin D a day should be adequate for most people. If you are over 50 years old 400 IU (10 micro grams) is probably more appropriate. Very high doses may be harmful.

References

1. The UV index is a measurement of how much ultraviolet radiation is reaching a particular place at a given time. UV index forecasts are sometimes given as part of weather reports.
2. Sun Protection Factor
3. UVA is a form of ultraviolet radiation. It is sometimes called long wave UV or black light.
4. IU – International Units
5. Figure given by the US Department of Agriculture's National Nutrient Database for Standard Reference (<http://www.nal.usda.gov/fnic/foodcomp/search>) accessed 9 May 2009.
6. Figure given by the US National Institutes of Health (<http://ods.od.nih.gov/factsheets/vitamind.asp>) accessed 9 May 2009.
7. A micro gram (mcg) is a millionth of a gram