Pale people may need vitamin D supplements

Fair-skinned people who burn quickly in the sun may need to take supplements to ensure they get the right amount of vitamin D, according to a new study.

Researchers at the University of Leeds suggest that people with very pale skin may be unable to spend enough time in the sun to make the amount of vitamin D the body needs - while also avoiding sunburn.

The study, published in Cancer Causes and Control and funded by Cancer Research UK, suggested that melanoma patients may need vitamin D supplements as well.

But researchers also noted that sunlight and supplements are not the only factors that can determine the level of vitamin D in a person's body.

Some inherited differences in the way people's bodies process vitamin D into the active form also have a strong effect on people's vitamin D levels.

Researchers took the vitamin D levels of around 1,200 people and found that around 730 people had a sub-optimal level.

Those with fair-skin had significantly lower levels.

Professor Julia Newton-Bishop, lead author of the study based in the Cancer Research UK centre at the University of Leeds, said: "Fair-skinned individuals who burn easily are not able to make enough vitamin D from sunlight and so should take vitamin D supplements.

"This should be considered for the majority of populations living in a mild climate like the UK and melanoma patients in particular."

The study defined the optimal amount of vitamin D required by the body as at least 60nmol/L.

At present there is no universally agreed standard definition of an optimal level of vitamin D.

Researchers chose 60nmol/L in part because there is evidence that levels lower than this are linked to greater risk of heart disease and poorer survival from breast cancer.

A consensus between health charities including Cancer Research UK says that levels below 25nmol/L are vitamin D deficient which means that these levels are associated with poor bone health.

But some researchers consider that higher levels, around 60nmol/l, may be desirable for optimal health effects.

Sara Hiom, director of health information at Cancer Research UK, said: "We must be careful about raising the definition of deficiency or sufficiency to higher levels until we have more results from trials showing that maintaining such levels has clear health benefits and no health risks.

"We do know that some groups can have a higher risk of vitamin D deficiency.

"These include people with naturally brown or black skin who need much more sunlight to increase their vitamin D levels, pregnant women and people who don't go outside much.

"If you are worried about your vitamin D levels, our advice is to go see your doctor."

**For more information:**

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The paper: Newton-Bishop J et al, The determinants of serum vitamin D levels in participants in a melanoma case-control study living in a temperate climate, is published in Cancer Causes & Control (2011)[doi 10.1007/s10552-011-9827-3].

This study defined fair-skinned as people with freckles, blue eyes or any tendency to get sunburnt.