



## FAMIPED

**Familias, Pediatras y Adolescentes en la Red. Mejores padres, mejores hijos.**

## Be aware of the sun

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[Volumen 5. Nº2. Junio 2012](#) [1]

**Palabras clave:** photo protection, UV radiations, skin cancer, melanoma

### Is it bad to sunbathe?

The Sun is the origin of life on Earth (it also allows organisms to live). Therefore, most of its radiation effects over us are beneficial, as, for instance, the production under the skin of one of the most important vitamins: vitamin D.

However, in the last decades we see an increase in skin cancer all over the world, affecting, above all, people with fair skin and derived because of excessive exposure to the sun.

### Which are harmful solar radiations?

Most harmful radiations are stopped in the atmosphere, which functions as a protective shield. Within those which arrive at the Earth, the ones which can be most harmful are called ultraviolet radiations (UV).

We are mainly affected by ultraviolet radiations A (UVA) and, to a lesser extent, by the most harmful ultraviolet radiations B (UVB). Both are involved in processes which damage our skin.

### Why are children more exposed?

It has been proved that the carcinogenic effect of solar radiations is cumulative, so that repeated solar burns are related to the subsequent development of skin tumours, especially if burns are produced in childhood. Hence, children should be specially protected from excessive solar exposure and educated in order to show an efficient behaviour regarding photo protection.

### Which are photo protection effective measures?

They are grouped into three areas:

- Reduce exposure.
- Protect skin from the sun.
- Use sun lotion.

## Be aware of the sun

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### Which factors influence sensitivity to sunlight?

Apart from physical external factors (latitude, height, time, UV index, and presence of close reflecting surfaces), a decisive factor in solar burns and in their long term effects is related to its genetic features and can be observed in the kind of skin that everybody have: from black to white skin with freckles.

A special risk case are people with family history of skin cancer and those who have many skin nevus.

Sun lotions are a helping tool for photo protection but they cannot be an excuse to increase time of solar exposure or the way to get a better tan.

It is not recommended at all to use artificial tanning mechanisms, UVA ray beds or lamps.

### Recommendations and advice

BE AWARE OF THE SUN! Although it is beneficial...

- Sunburns increase the risk of suffering from skin cancer.

- Youngest children are the most vulnerable ones.

- How can sunburns be prevented?

1. Avoid excessive exposure to the sun.

- Try not to be in the sun in the central day hours.
- Look for places in the shade.

2. Use clothes which cover your skin, as long-sleeved shirts and shorts, caps and hats and also approved sunglasses with ultraviolet filter UVA and UVB.

3. Apply protecting lotions with protection factor 15 or higher on non covered skin areas. The lotion must not be the only protective measure.

- Sun lotions must be water-resistant and Project from UVA and UVB.
- They must be used before sun exposure and every two or four hours, depending on the time, sun intensity, skin type, number of baths and taking also into account the booster effect of reflecting surfaces, as water or sand.

- Those with fair skin and with many freckles or spots should be really careful with these recommendations.

- According to the skin type (chart 1) general Photo protection measures must be intensified:

Chart 1.- Recommended photo protection according to skin type.

Skin type	Protection type
Skin type I (it always gets burned and never gets	Avoid solar exposure at midday and protect with long

## Be aware of the sun

tanned)	trousers, long-sleeved shirts and hat if there is exposure. Water-resistant photo protector (factor 15 or higher) to be used every day in the summer and also when exposed.
Skin type II (it always gets burned and gets tanned a bit)	Reduce solar exposure at midday. Protecting clothes and photo protector factor (15 or more) if there is exposure
Skin type III (it sometimes gets burned and always gets tanned)	Intense exposure: the same than type II. Moderate exposure: Photo protector factor 10-15
Skin type IV-VI (it does not usually get burned; V and VI dark or black skin)	It does not usually need protection

### Websites

<http://www.aepap.org/familia/solar.htm> [2]

<http://enfamilia.aeped.es/prevencion/proteccion-solar> [3]

[http://scielo.isciii.es/scielo.php?pid=S1139-76322009000200012&script=sci\\_arttext](http://scielo.isciii.es/scielo.php?pid=S1139-76322009000200012&script=sci_arttext) [4]

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