





Sunburn is a reaction to over exposure of UV radiation. The superficial layers of the skin release chemicals that cause your blood vessels to expand and leak fluid causing swelling, pain and redness. Without sun protection, UV radiation penetrates deep into

the layers of the skin causing damage to the skin cells. Skin turns red within 2-6 hours of being exposed and reaches peak redness after 8-24 hours. It can take several days for the redness to subside.

Blistering sunburn in childhood or adolescence can increase a person's chance of developing the risk of melanoma later in life. A person's risk for developing melanoma also doubles if there has been five or more sunburns at any age.

Danger times for sunburn: UV radiation is most intense between 11am to 3pm in the British summer time. Sunburn can occur in less than 15 minutes sunbathing on a clear summer's day. People are most likely to get burnt when participating in sports or leisure activities and are not thinking about the sun and protecting themselves.

Peeling: Damaged skin cells self-destruct and peel off in sheets. It is the body's way of ridding itself of damaged skin cells that might develop into cancers.

Our Skin - How do we tan?

Skin colour is dependent on a pigment called melanin. This is produced by specialised cells called melanocytes. Melanocytes are found throughout the skin. All races have the same number of melanocytes, however different skin types have more melanosomes, giving better sun protection and more pigmentation. There are two types of melanin pigmentation: Genetically inherited skin tone, the other caused by sun exposure. Melanin protects your skin by absorbing harmful UV

radiation and it darkens when doing so, producing pigmentation and leaving you with a sun tan.

Prevention and education is key!

Protective attitudes to sun exposure during childhood and adolescence can lead to fewer moles, moles are a known risk factor for potentially developing into a skin cancer. Children who grow up with a knowledge and understanding of the importance of sun safety are less likely to burn and damage their skin. We believe it is therefore imperative that children are educated about sun protection and sensible precautions.



Science and the sun - Solar UVR- Levels of solar UVR vary across the country on any given day. The UV index is a rating system adopted from the World Health Organisation and provided by the MET Office in the UK. The forecast is expressed as a 'Solar UV Index' from 1 to 11+, which determines your level of exposure to ultraviolet radiation. The higher the number, the stronger the levels of solar UVR and the less time it takes for damage to occur. The aim of the index is to warn people of increased risk and encourage them change their behaviour in order to protect themselves against the risks of skin damage and skin cancer.

The UV index has five categories:



UVR is part of the electromagnetic spectrum emitted by the sun. The sun emits 3 types of ultraviolet (UV) light/radiation: UVA, UVB and UVC. UVC radiation is blocked by the ozone layer whilst UVA and UVB both reach the earth's surface and penetrate our skin. UVB rays have a short wavelength that reaches the outer layer of your skin called the epidermis- these are involved in BURNING. UVA rays have a longer wavelength that can penetrate the middle of the skin called the dermis- these are involved with AGEING.

Skin types - do you know your skin type?

Your skin type is a major contributing factor to your risk of sun damage. Certain types of skin are at greater risk of sun damage and therefore at greater risk of developing into a disease. There are six different skin phototypes ranging from very fair to very dark skin. Individuals with skin types 1



and 2- fairer skin has less pigmentation which provides less natural protection and burns more easily - causing damage to skin cells Skin types 5 and 6 are at the lowest risk as they have a greater amount of pigmentation that provides more natural protection from UV, but they are still at risk so safety is key.

Vitamin D? Know the score...

The sun makes us feel good and we all need the sun to survive. Sunlight helps your body produce Vitamin D which is important for developing and protecting strong and healthy teeth and bones. We can also get Vitamin D from certain foods. However, exposure to UVB radiation is the most efficient way to boost Vitamin D supply.

Although environmental and personal factors greatly affect the Vitamin D production in the skin meaning there is no 'one-size-fits-all' level of exposure. What we do know is that sunburn caused by over exposure to the sun is highly damaging to our skin so it is very important to strike a balance. Best estimates suggest that for most people every day casual exposure to sunlight is enough to produce the required Vitamin D levels. Research has consistently shown that Vitamin D can efficiently and sufficiently be produced at doses of UV below those which, cause reddening of the skin or sunburn. Thus 15 to 20 minutes of unprotected sun exposure, without skin reddening or burning, per day should be sufficient for most people to produce the required Vitamin D levels.



Proudly supporting SKCIN.

We have partnered with national skin charity Skcin to provide you everything you need to know about sun safety.

http://www.skcin.org/