

Sunbeds

PLEASE NOTE YOU MAY BE ASKED FOR ID IF YOU LOOK 18 YEARS OR YOUNGER

How many times a week can I sensibly use a sunbed?

People with skin type 1; children under 18 and people on certain medications that may cause photosensitivity; people with a history of skin cancer in their family should not use a sunbed at all. Moderate tanning of 2-3 sessions a week is OK for everyone else but ensure you rest the skin for a minimum of 24 hours between each session and at least 48 hours for skin type 2. The European Standard advises not to exceed 60 sessions per annum.

What is a sunbed session?

A sunbed session is the length of time it takes to reach an individual's MED (minimal erythema dose). This is the point prior to over-exposure and burning, which must always be avoided. A session will therefore depend on the type of sunbed being used, the skin type of the person using it and the development point of their tan. Never sunbathe outdoors on the same day you take a sunbed session.

Why will some sunbed salons let me use their sunbeds for longer sessions?

This depends entirely upon the type of sunbed being offered. The power and UV output varies considerably from sunbed to sunbed. A professional sunbed operator will advise on the correct session length, dependent upon sunbed, skin type and stage of tan development.

Is there a link between UV exposure and skin cancer?

There are two types of skin cancer – non-melanoma which can usually be easily treated. The second is malignant melanoma, which if not treated early enough can prove fatal.

Some evidence points to sunburn and over-exposure to UV being one of the possible risk factors in contracting skin cancer. It follows, therefore, that avoiding melanomas can be helped by controlling exposure to UV – particularly in children.

Malignant melanoma is found to be most prevalent on parts of the body not normally exposed to sunlight, suggesting that it is those areas that have to deal with intermittent, excessive doses of UV that are most vulnerable – or that UV over-exposure is not the only cause.

Controlled exposure to UV, either in sunlight or on a sunbed, is important to avoid over-exposure and sunburn.

What are the benefits of using a sunbed?

Sunbeds offer a controlled way to tan and can provide appropriate levels of UV to ensure sufficient levels of vitamin D are achieved and maintained (see section on Vitamin D for more on this subject).

Tanning in sunlight means the body can be subjected to different levels of UV rays, depending on the time of day, location in the world, month of the year and so on. With a sunbed, a tanning programme can be developed to ensure skin type and the type of sunbed being used, are taken into consideration to ensure that over exposure, including the possibility of burning, is avoided.

Is it true there is no such thing as a safe tan?

No. Tanned skin protects against sunburn, thought to be the main cause of melanoma. If you avoid getting sunburned, the benefits of moderate sun exposure (see vitamin D section) will far outweigh any risks.

Did You Know...?

- **7% of the UK's adult population uses a sunbed = over 3 million**
- **70% of people want to be tanned**
- **95% of sunbed users do not exceed the European Standard on maximum number of sessions per annum**
- **88% of the UK population has skin types that can tan successfully in a controlled environment**
- **38% of sunbed users do so for a pre-holiday tan.**
- **83% of sunbed users claim to be quite or very knowledgeable of the possible risks from over-exposure to UV.**

Source: Consumer Research on Sun tanning and Sunbeds, The Sunbed Association, UK, 1997, conducted by Taylor Nelson with a sample base of 6143 adults.

The main benefit of being tanned is seen as looking and feeling healthier. The main reason for using a sunbed is for a pre-holiday tan. Whilst the sun protection factor from a sunbed tan does not provide total protection, people having a base tan are less likely to over-expose themselves during the initial days of a holiday.

Ultraviolet rays – UVC, UVB and UVA – are emitted by the sun. UVC rays, the most dangerous to the human system, are filtered out by the upper atmosphere but some UVB (which can cause sunburn and eye damage) and UVA, reach the earth's surface. The intensity depends on the angle of the sun – ie the geographical position, season and time of day. UV levels can increase by up to 50% between 11am and 1pm!

UV is invisible. People outdoors are exposed to varying levels of UV and they are often unaware of the UV intensity. Unfortunately, warnings of sunburn often come too late. A survey in Denmark revealed that beach sunbathers exposed themselves for an average of three-and-a-half hours a day.

Sunbed lamps simulate the sun and emit UVA and UVB but they go a stage further and control the output with a balance of UV to minimise the risk of burning and maximise the tanning. As we know – no-one controls the sun! Sunbed lamp technology is subject to on-going research and development programmes to keep abreast of researched evidence on the effects of UV.

How the Skin Tans

Our natural skin colour is determined by skin pigment – melanin – and the presence and amount of melanin in an individual is determined by hereditary factors.

When our skin is exposed to UV, cells deep in our skin – called melanocytes – initiate a process where more melanin is produced. This subsequently 'browns' as it rises to the skin's surface producing a tan. UV also causes the outer layer of the skin to thicken. This is the body's way of building up protection to UV and to avoid burning.

People will react differently to UV rays – darker skinned people produce melanin more readily. The skin of some very fair people contains very little melanin and, even when exposed to UV, they cannot form melanin, so they will not tan in sunlight or on a sunbed.

If the natural tanning process is rushed, sunburn will result. Our skin has a natural repair mechanism but if this is triggered off too frequently, it may become exhausted and result in permanent damage to the skin.

Sunlight is the most effective way for the body to manufacture Vitamin D. Yet in the UK, our bodies can only manufacture Vitamin D from exposure to the sun during the months of May to October. Outside of these months, the sun is simply not strong enough.

Considered by many to be the foremost authority on vitamin D, Dr Michael Holick (Professor of medicine, physiology and biophysics at the Boston University School of Medicine, one of the USA's top universities), recommends a daily amount of 1,000 IU is necessary to maintain a healthy level. It is very difficult to eat enough Vitamin D rich foods on a daily basis to achieve these levels. Most multi-vitamin supplements only provide 400IU of Vitamin D.

Unprotected UV exposure to 25% of 1 MED, 2-3 times a week is recommended by Dr Holick to ensure sufficient Vitamin D levels. Depending on skin type, this is the equivalent of about 5 minutes of unprotected UV exposure 2-3 times a week.

In natural sunlight the word 'unprotected' is very important, as SPF creams reduce the effectiveness of the body to produce Vitamin D from UV exposure by up to 97%.

MYTH: UNPROTECTED SUN EXPOSURE IS UNHEALTHY

TRUTH: Although precautions do need to be taken, regular, moderate amounts of unprotected UV exposure are absolutely necessary for good health. Independent scientific research has shown that whether you live in a sunny or not-so-sunny climate, but expose yourself to sun, then your subsequent increased production of vitamin D will help lower the risk of a host of debilitating and fatal diseases including colon, breast, prostate and ovarian cancer, heart disease, high blood pressure, Type 1 diabetes, multiple sclerosis and depression.

MYTH: YOU CAN GET THE REQUIRED AMOUNT OF VITAMIN D THAT YOU NEED FROM DIETARY SUPPLEMENTS ALONE

TRUTH: Since most multivitamins only contain 400 IU of vitamin D, you need to take two and a half a day to get the recommended daily dose of 1000 IU, thereby exposing your body to an overload of vitamin A, which in excessive amounts, has been associated with birth defects and osteoporosis. Vitamin D supplements provide the same benefits as sunshine but if taken in too large a dose, can cause vitamin D toxicity, whereas sun exposure does not.

MYTH: YOU PRODUCE VITAMIN D IN THE WINTER TIME

TRUTH: You cannot make vitamin D in the UK or any location above 40 degrees north in the winter months. However, if you get moderate exposure to the sun between May and October, the excess vitamin D is stored in the body's fat, which can be released during the winter.

MYTH: THERE IS NO SUCH THING AS A 'SAFE' TAN

TRUTH: Tanned skin protects you against sunburn, thought to be the main cause of melanoma. If you avoid getting sunburned, the benefits of moderate sun exposure will far outweigh the possible dangers.

MYTH: MELANOMA IS DIRECTLY ASSOCIATED WITH UV EXPOSURE

TRUTH: There is no credible scientific evidence that regular, moderate sun exposure causes melanoma. Melanoma is seen more often in people who do not receive this type of

exposure than in those who spend time in the sun. Melanomas also usually occur on parts of the body that receive little or no UV exposure. This suggests that genetics plays a much more important role in the development of melanoma than does regular, moderate UV exposure.

MYTH: SUNBEDS ARE FOR TANNING ONLY

TRUTH: If you don't have the opportunity to go out in the sun or prefer a more private and controlled environment, indoor tanning facilities represent a viable alternative to natural sunshine for stimulating your production of vitamin D. However, it is important to remember that the radiation that you are exposed to in an indoor tanning facility is the same as what you get from the sun. That means you need to take the same precautions that you would if you were in natural sunlight.

MYTH: THE ELDERLY DON'T NEED AS MUCH UV EXPOSURE AS THE YOUNG

TRUTH: Your ability to manufacture vitamin D diminishes fourfold from age twenty to age seventy. Older people are especially receptive to the alarmist warnings about excessive sun exposure and often decrease their exposure at a time when they need it most. Since vitamin D is directly linked to bone health, this age group should be more concerned about fracturing a hip because they are vitamin D deficient, than the risk of getting wrinkles or skin cancer.