

Daily Express Article

Beachbag Guide to Staying Safe in Sunshine

ADRIAN LEE reports.

01-07 2008

Ever since the designer Coco Chanel first made tanning fashionable in the 1920s, Britons have been going for the burn.

With the launch of cheap package holidays in the 1970s, millions of ordinary people could afford to binge on sun for a couple of weeks a year, most unaware of the potentially deadly consequences. Soaring cases of skin cancer today are one of the legacies.

Most people now realise the importance of using sun creams and sprays. But, with such a huge choice available, how do you choose the right one, and can you really be sure that it's providing enough protection?

The sun produces UVB and UVA rays, which are types of radiation and can both cause skin cancer.

UVB rays cause the skin to go red and, eventually, burn. The good news is that most sunscreens now give some level of protection against both UVB and UVA.

UVB protection is shown by the SPF rating, which is easy to understand and used by all manufacturers. The SPF is a measure of the level of protection against UVB rays. Be aware that even sun blocks don't give total protection and that as the SPF factor gets higher, the level of protection only increases slightly. An SPF 15 cream removes most (90%) of UVB rays striking the skin. Above SPF 30 you don't get much additional UVB protection from higher factors.

Although a recent study by Which? cast doubts on the accuracy of the SPFs of some sun screens, the SPF generally gives a good measure of protection and makes it easy to compare different products.

The skin cancer epidemic is also due to ignorance and confusion about creams and how to use them effectively, it's claimed.

Most of us aren't using enough sun cream. At least three tablespoons – about a sixth of a 200 ml bottle – are needed to cover an adult body. On a two-week beach holiday, one person should expect to get through about eight bottles.

With a medium-priced cream costing £5 and a spray £10, the cost for a family of four could easily exceed £300. That's more than the price of a

flight but, provided you check the SPF and UVA protection levels, you can economise. There's no evidence that expensive sun creams do a better job than cheaper alternatives.

Some brands claim to be "anti ageing", but all creams with a UVA filter will help limit wrinkles.

Another problem is that most sun lotions should ideally be reapplied every two hours. In reality, many of us forget after we've been swimming, worn clothes, been exposed to sand and wind, or sweated. There are creams that are designed to stay on the body longer but they tend to be greasy.

Even the experts are divided on sun safety issues. Some scientists believe that our habit of rubbing in creams could be harmful.

Dr Rachel Haywood, of the charity RAFT, which carries out skin cancer research, says sun creams only give proper protection if they are applied liberally and left on the surface in a thick layer. A spray is likely to give better coverage than a cream.

"We have found that rubbing in creams and sprays dramatically reduces their effect," says Dr Haywood, a leading skin cancer researcher. "You should still be able to see the cream. Unfortunately, it can feel greasy and look unsightly. Generally, people also need to apply up to four times more cream than they are doing at present if it is rubbed in. Not rubbing in cream may enable them to apply less but this would need to be validated scientifically" However, Boots insists creams are designed to be rubbed in, and pass tests that way.

UVA rays are also harmful but the damage caused is not immediately visible. The body can absorb 1000 times more UVA radiation than UVB radiation before burning but UVA is also a cause of skin cancer.

UVA can cause the build up of cancer-causing chemical toxins called free radicals and is also responsible for the ageing effects of the sun, such as wrinkles and saggy skin.

Many sun cream makers now use a star rating system, shown on packaging, to inform customers of the level of UVA protection. The highest is five but not every one has adopted the scheme, which was pioneered by Boots.

Dr Haywood says the star rating system, while a step in the right direction, is not an ideal measure and that even five star products may not be offering enough UVA protection. So people who think they are safe could be at risk, even though there's no sign of burning.

The words "broad spectrum" on packaging are another indicator of UVA

protection but Dr Haywood would like the makers to agree a new system to indicate protection against free radicals.

Most products are packed with chemicals. Boots' Soltan Once spray (£15.99), with a 15 SPF rating and relatively good UVA protection, contains up to 30. Apart from a few, such as the UV filters octocrylene, butylmethoxydibenzoylmethane and titanium dioxide, they don't offer any protection and are there to make the product smell or feel good, and stay on the skin. The company says it's confident they are safe.

There are alternatives, containing mainly organic ingredients, which can offer the same levels of protection. Green People sun cream (£15.99 for 200ml) has a SPF of 22 and UVA filters, but the company does not use the UVA star system, so buyers have no idea of how much protection they are getting. The company says the cream offers good UVA protection and plans to change packaging to give more information.

The jury is still out on whether chemicals in the creams cause any long-term damage to skin, says Dr Haywood. Cancer charities say those doubts should not deter us from using sun creams because the risks of skin cancer caused by sun are well-known. Cases of the most serious form of skin cancer, melanoma, have quadrupled since the 1970s and skin cancer now claims almost 2,500 lives a year in the UK alone.

Melanoma is the most common form of cancer among young people, yet more than 70 per cent of us say we go on holiday intent on getting a sun tan. Almost half of us admit we only bother to use sun creams when we are overseas.

A recent survey for Cancer Research UK's SunSmart campaign showed that many young people will go to almost any length to get a tan. One in three spend five hours or more in the sun on their main holiday.

In Australia, where 380,000 people are diagnosed with skin cancer every year, there's been no drop in the number of cases despite major public awareness campaigns including "Slip! Slop! Slap!"

One theory is that sun creams, especially those with high SPFs, can give a false sense of security.

Dr Haywood adds: "One of the dangers is that sun creams encourage us to stay in the sun longer because they stop us going red, the body's early warning sign of DNA damage."

Most makers now offer a range of creams, sprays, milks and gels, with many now also offering added ingredients. For the consumer, it's confusing. There are even products which claim to repair sun burn, such as AfterBURN (£9.99 for 75g).

One of the latest extras is antioxidants, in creams such as Environ RAD

(£15.95 for 75ml), and increasingly found in standard products.

It's claimed that antioxidants provide an extra barrier of protection, in addition to UVA and UVB filters. There's evidence that antioxidants, which can include vitamins such as C and E, may limit damage to skin cells and DNA by mopping up free radicals. Scientists at the University of Illinois said they could be important additional ingredients in sun creams.

Researchers at RAFT are currently testing some of these products to see how well they work. There is no agreed labelling system for antioxidants in sun creams, and there's also disagreement among scientists over how successful they are. Some experts say they work well on the skin surface, while others claim they are only effective beneath the skin so may not be delivered very well in cream or spray form.

"Creams with antioxidants could have added benefits but we need more tests," says Dr Haywood.

The skin does have its own natural protection against sun damage, called melanin. Olive skinned people have more melanin and can stay in the sun longer, but it does not make them immune to skin cancers. It's also possible for fair-skinned people to build up protection naturally by gradual exposure to the sun, but they should still use high factor creams.

Sunlight contains yet another type of radiation, called visible light. Although it is lower down the scale, scientists now believe that visible light, like UVB and UVA, can cause skin cancer by fuelling changes in skin cells. So far, there is no sun cream on the market which offers protection against visible light, says Dr Haywood.

A few minutes in the sun every day is good for health, because it helps build up vitamin D, which protects against some forms of cancer. About 15 minutes of weak sunshine should be enough.

Longer exposure, including sun bathing, carries a risk. The threat can be diminished by using creams correctly, but the best way of avoiding skin cancer is to stay out of the sun at the hottest times of the day, or keep covered up.

Remember that sun creams don't last forever – to be on the safe side throw away any unused, or half empty, bottles after about a year.

Most experts agree that just as there is no safe way of smoking a cigarette, we should accept that there's no safe way of getting a tan and change our lifestyles. Any sign of a tan means the skin is damaged. It's vital to protect children because there's evidence that sunburn in early life is linked with developing cancer later.

"We really need to change our attitudes to tanning," says Dr Haywood, who avoids sunbathing. "There is still an association between being tanned

and being beautiful. Unfortunately that is encouraging people with sensitive skin to stay in the sun too long.”

- Stay out of the sun between 11am and 3pm;
- Always use a high SPF sun cream – at least 15 - but don't assume it's giving total protection;
- Choose a cream with a good UVA filter;
- Use plenty of sun cream and avoid rubbing in too vigorously;
- Avoid the sun if you start turning pink
- If you have freckles, fair skin or moles you are at greater risk
- You don't need to burn to get a tan.
- UV rays penetrate cloud and levels of UVA can still be high on overcast days
- Don't use sun creams as an excuse to spend more time in the sun. SPF 20 does not mean you can stay in the sun 20 times longer.

*RAFT: <http://www.raft.ac.uk/>; 01923 835815.

For more information about staying safe visit: <http://www.sunsmart.org.uk/>

ends