Daylight protection – the new sun protection

The extraordinarily scorching hot Summer last year may have had you reaching for the sunscreen, but now we're reaching for our knitwear are you as fastidious about sun protection?

Maybe not... but you certainly should be...

Many of us are unaware that the sun is damaging skin every day, all year round – regardless of the weather. The awareness of the need to protect skin against UVB is high (even if some people don't heed the warning), but there's a long way to go when it comes to raising awareness of the dangers of UVA, visible light and infrared-A – all of which damage the skin all year round.

Misleading terms

The very fact that products are referred to as sunscreens, SPFs or even sun protection is misleading, suggesting that you only need to apply them when the sun's out. The reality is that whenever it's daylight we need to be protecting our skin. So rather than thinking of sun protection, we need to think of it as daylight protection.

But what aspects of daylight are damaging our skin - and how?

The lesser known culprits

There has been increasing research into highenergy visible light and infrared-A and the damage that they cause. In a recent paper, Dr Henry Lim, board certified dermatologist and previous president of the American Academy of Dermatology (AAD), highlighted the need to consider the damage that can be caused by visible light and infrared-A, as well as UVA and LIVB

So let's do that...

High-energy visible light is present in daylight and penetrates clouds, so it's a daily challenge to skin. We're also exposed to blue light, a part of high-energy visible light, when we're using computers, phones and tablets. The exposure is lower here, but the proximity and regularity of exposure means that it's still a potential concern when it comes to skin damage.

A recent OFCOM study showed that on average we spend more time using media – texting, gaming, talking and typing – than we do sleeping! So while there are currently few clinical studies in this area, it's certainly something to consider.

The main source of visible light is of course the sun. It makes up 40-45% of the radiation that reaches the earth's surface. Its biological effects on the skin include not only changes to pigmentation and redness, but also free radical production. In fact, it's responsible for 33% of sun-induced free radicals in the skin and has been shown to cause even darker pigmentation than UVA.

Free radicals are unstable molecules that damage parts of cells and in turn, the way our skin functions - they can even cause cell death. They not only affect how our skin looks, but also its health.

Infrared-A, also present all-year-round, represents over a third of solar radiation reaching our skin, and directly affects cells in the epidermis, dermis and even the subcutaneous tissue (the top three layers of the skin). The biological effects of chronic exposure results in collagen breakdown.

Moreover, studies have shown that more wrinkles are formed when the skin is exposed to both infrared-A and UV radiation in comparison to either one alone – a scary thought!

On to more familiar ground...

UVA is present in daylight all year round, penetrating cloud and even glass. It makes up 95% of the sun's rays and, as a longer wavelength, it penetrates deeper into the skin than UVB.

The level of UV exposure is dependent on several factors, including where you live in the world, with the highest level of exposure being at the equator. Unfortunately, even in the wet and windy UK, way up in the northern hemisphere, the fall in UVA exposure is relatively low – particularly in comparison to UVB, which experiences a much greater drop. In short, UVA exposure and the damage it causes shouldn't be underestimated and remember, for those who enjoy winter sports, the UV risk is approximately doubled in snowy conditions!

Coping with the barrage of skin abuse

So there you have it. The data proves it. We need to protect our whenever we're outside in daylight to help prevent skin damage and premature ageing. And it's not just UVA that we need to consider, but the full spectrum including visible light and infrared-A.

Daylight protection is a nonnegotiable component to every skincare regime

There's little point in investing time and money into improving your skin if you don't take the right measures to protect it – and it's as simple as using one product every morning.

It's time to buck the seasonal sun protection trend and start a new one... daylight protection. It's the must have this season.

