Over exposure

We all know about the *WORRYING effects* of sun damage, but our behaviour tells a VERY different story.

WORDS: REMY DUSCHER

When was the last time you truly waited for something? And by wait I mean truly gave yourself a sense of delayed gratification for that pair of shoes or that dress you've been hankering for. From the latest gadget fix to the newest app, we have a buy-now, think-later mindset, and that extends to our health. This attitude might explain why our 21st-century attitude towards tanning isn't as advanced as it should be. We want the short-term goal: bronzed skin, with little thought of the long-term effects of premature ageing and skin cancer. It only takes a trip to Bondi Beach (or your coastline of choice) in the height of summer to question whether what we know about sun damage is actually being put into action.

"Sunscreen is the best anti-ageing product on the market," says Emma Hobson, education manager for the International Dermal Institute and Dermalogica.

While we invest in the most advanced eye creams, skincare and facial treatments, the savviest product of all is right under (or better yet, *on*) our noses: broad-spectrum, high-SPF sunscreen. "Eighty to 90 per cent of what we think is ageing is actually photo-ageing [due to exposure to UV radiation]," according to associate professor Pablo Fernández Peñas, head of research and education at Skin & Cancer Foundation Australia. This is startling, since sunscreen – accessible, inexpensive and effective – is the best protector against photo-ageing due to the sun.

The effects of tanning are proven to be instant and gratifying, as it stimulates the production of endorphins; however, the fallout is catastrophic for our skin cells and health. It's incongruous then that a survey by Roy Morgan found that four per cent fewer Australians purchased sunscreen in 2013 than did in 2009.

The reason for this is perhaps twofold: our skincare routine is now more advanced and more products typically contain an SPF, therefore we do not feel compelled to purchase additional sunscreen; plus we've become a little lax in our approach to sun protection and skin cancer. It's staggering, given we have the highest incidence of skin cancer in the world (two to three times that of Canada, the US or the UK) and, due to the depletion of the ozone layer over Australia, UV-B exposure is on the rise.

It harks back to that short-termist mindset: a skin cancer diagnosis is met with a casual "show up, cut out, go home" attitude due to its prevalence in Australia. "People in Australia are quite relaxed [about melanoma]," explains Fernández Peñas. "When I talk to my colleagues in Europe, they try to transmit the concept of skin cancer to patients really carefully. Here in Australia, most people talk about skin cancer like: 'Oh, another skin cancer, that's fine.' That's not good because it means people are still exposing their skin to the sun." Associate professor Greg Goodman from the Dermatology Institute of Victoria agrees the attitude to melanoma is relaxed; however, he believes it's due to early detection and hence, a better prognosis: "We're so good at picking [skin cancer] up early, better than Europeans, so we are complacent because we're seeing a lot more good prognoses, in that we cut it out, get rid of it, that's the end of the story."

In Australian culture, the top-to-toe tan is still considered the ideal picture of health, even though it signifies the very opposite in regards to skin damage and ageing. A 2010 study by the American Academy of Dermatology found that 66 per cent of respondents said they think people with a tan look healthier and 72 per cent admitted they find people with a tan more attractive. Google the phrase "sun protection and tanning" and the number of hits that still focus on getting the perfect tan is alarming: an outdated mentality that clearly still prevails today. It is important to note that you would never catch any self-respecting beauty editor (including this one) tanning, as they completely understand how detrimental it is, from both an ageing and skin cancer perspective.

It only takes a second

The skin is the first line of defence from the sun. "The UV-B rays are what cause the 'burn', creating the heat, stimulating our nerves, circulation and immune system to all go into overdrive to try and protect the body," says Hobson. A tan is the skin's attempt to protect itself by over-stimulating our pigment cells. While it may feel great (cue the endorphins), it's actually the skin sending out an SOS that it's in trauma and needs to start protecting the DNA in the cells. "The cell notices the changes and tries to fix them, but if the damage to the cell is too bad and it gets destroyed then the content of the cell is released and this creates inflammation [sunburn]," says Fernández Peñas.

Aside from a wide-brimmed hat and long-sleeved clothing, a broad-spectrum sunscreen containing UV-A and UV-B protection is the best defence against sunburn. Hobson notes why broad spectrum is tantamount: "UV-A and UV-B have different wavelengths that penetrate different levels of the skin," says Hobson. "UV-A are known as the ageing rays (A), as they penetrate the deepest; UV-B are the burning rays (B) responsible for immediate damage and skin tanning/burning." An SPF indicator (30+, 50+) only refers to the protection against UV-B rays, which is why applying a broad-spectrum sunscreen needs to be a daily ritual. "UV-A gets through cloud cover, it goes through the glass in windows and it deeply penetrates your dermis," says Goodman.

GILLES BENSIMON

I know what you did last summer

"Your skin cells have an incredible 'memory' and record the trauma they have received," explains Hobson. While the skin appears to spring back and is seemingly healthy and plump to the naked eye, the damage caused by tanning runs far deeper and usually comes into full focus around your late 30s or early 40s.

American photographer Thomas Leveritt lifted the lid on the true state of our skin in his video campaign *How the Sun Sees You*. It shows the subjects' complexion under UV light: freckles, sun spots and pigmentation appear magnified, a sneak peek at the skin's condition and what may show up later in life. The most powerful scene is when children's skin appears under this light; their skin looks almost exactly as it appears in real life, not yet tarnished by a prolonged brush with the sun.

In reality, we all want to press pause on this young, supple skin, however, if the effects of tanning and sun exposure are already felt, then to some extent, the damage isn't necessarily irreparable. "You can repair your skin by doing nothing else but protecting it by staying out of the sun. Your skin has the ability to repair itself and the problems come when you deny it that healing ability by staying out in the sun," says Goodman. ■

TRUTH BE TOLD

Our experts separate fact from fallacy in the sun-exposure stakes.

***Myth*: I'll be vitamin D deficient if I don't go out in the sun for long enough.**
***Fact:* Healthy levels of vitamin D can be obtained through diet and supplements. "Ten minutes in the sun a day is enough to absorb vitamin D. You can get it from diet or supplements, but you don't need the sun," says Goodman.**

***Myth:* Sun damage is irreparable, so there's no point in trying to avoid it.**
***Fact:* Skin can repair itself if you start to protect it from sun exposure. "It will take time, about 10 to 20 years, but as soon as you start protecting your skin the risk of skin cancer gets lower," Fernández Peñas explains.**

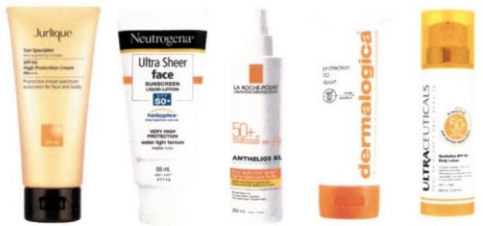
***Myth:* By repeatedly applying sunscreen you can stay in the sun longer.**
***Fact:* "It is very individual how long an SPF works on a person," says Hobson. "This is determined by measuring the time it takes your skin to burn without a sunscreen, say, five minutes, then you multiply that by the SPF." So an SPF30 on skin that takes five minutes to burn will allow, at most, 150 minutes of safe sun exposure per day. You get a finite time; reapplication only reinforces the one daily coverage period you can have.**

***Myth:* A person with naturally dark skin does not need sun protection.**
***Fact:* While their skin may not burn immediately from UV-B damage, the impact of UV-A rays is still occurring. "Older people with darker skin can be heavily wrinkled because they don't burn so readily and so they miss the warning signs of UV-B damage," says Goodman.**

***Myth:* Sunscreen isn't needed in winter.**
***Fact:* UV-A rays penetrate clouds and windows so SPF protection is a must all year round. Goodman says: "UV-A rays are the omnipresent wavelength."**

CREAMS OF THE CROP

We love a sunscreen loaded with SPF but light on texture. Our pick of the oh-so-smooth bunch.



From far left: Jurlique Sun Specialist SPF40 High Protection Cream, $50; Neutrogena Ultra Sheer Face SPF50+ sunscreen, $17; La Roche-Posay SPF50+ Anthelios XL Easy Application Spray, $35; Dermalogica Protection 50 Sport SPF50 sunscreen, $45; Ultraceuticals SunActive SPF 50+ Body Lotion, $79.