

fast facts on UVR

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UVR (ultraviolet radiation) and premature ageing

UVA radiation is known as the ageing rays of the sun because the wavelength penetrates deep into the dermal layers causing irreparable damage to our DNA of our skin cells, including collagen and elastin. Degenerative changes accumulate over time and are largely irreversible.

These structural changes occur in the dermis and appear on the skin's surface in the form of sagging, loss of elasticity, deep lines and wrinkles and uneven skin tone.

Prevention is the best form of treatment however if the damage is done, you can help to combat the signs of premature ageing with treatment formulations such as active serums rich in antioxidants e.g. White Tea and Vitamin C as well as Peptides and Polyphenols to help stimulate formation of collagen and Hyaluronic Acid in the dermis. LYS/ARG Polypeptide and Glucosamine will prevent stiffening on the collagen which leads to deeper lines on the skin's surface.

Protection from UVR

Protection from UVR comes in several forms including sun screen, antioxidants, peptides and anti-enzyme ingredient technology.

Antioxidants are vital for protection from UVR and the greatest delivery system for a fresh dose of antioxidants is 'smart booster technology'; encapsulated vitamins that are released on the surface of the skin when they come into contact with UV rays.

Dehydration is just one effect of UVR and will generally manifest itself as fine lines but is easily fixed with the right ingredients. Simply top up your skin's moisture levels with products that contain hydrating ingredients such as Hyaluronic Acid or Alteromonas Ferment. Your moisture boosters will include spritz toners, hydrating serums and hydrating masks. Carry a travel size spritz toner so you can give your skin a top up every hour or so.

Redness and sensitivity may be linked with either an increase in dehydration or UV exposure. Opt for anti-inflammatory, ultra calming products such as soothing serums and masks and products that work on repairing the lipid barrier.

Oleosomes are the next generation in sun screen technology. Capsules that can be loaded with active substances such as sunscreens that allow a product to deliver high volumes of SPF without the challenges of increased skin sensitisation and allows for advanced formulating of sun screen products with improved skin benefits.

If you have **oily skin** and are prone to breakouts use a medicated, oil free treatment moisturiser with an SPF 30+ and ensure it is non-comedogenic (won't cause congestion and breakouts).

If you get caught out and have **too much sun**, it can be partially repaired by using after after-sun products that contain Japanese Elder, an amazing ingredient that can help reverse the damage done to the DNA in the skin cell.

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How much is enough?

The sun can have an extremely damaging impact on our skin. Many people apply less than a pea size amount, or worse, expect the light covering of their foundation that includes an SPF to do the job.

The Cancer Council of Australia recommends you apply about half a teaspoon of SPF15 - 50 on each application to ensure you are getting the proper amount of sun protection. Reapplication is recommended every 2 - 3 hours. Also be aware that UVR can be reflected by light onto your skin, bouncing off shiny surfaces like water and sand so don't wait until after swimming to reapply your SPF protection.

Chemical vs. Physical

Physical or mineral sunscreens include the physical compounds zinc oxide and titanium dioxide. These physical sunscreens sit on the skin and scatter or reflect UV rays.

Chemical sunscreens typically absorb the UV rays. These include ingredients such as avobenzone, oxybenzone and homosalate, among others.

Is there a better option? There are lots of options for sunscreens, and most formulations will use a combination of physical and chemical sunscreens. There isn't a better option because they are all so different.

Chemical sunscreens were developed to provide versatility in formulations, allowing for invisible coverage whilst physical sunscreens are excellent for sensitive skin, provide superior coverage but can leave a white-ish tone to the skin.

Time will tell

Time spent in the sun banks up meaning the more UVR you have collected throughout your life, the greater your chances of skin cancer and prominent signs of premature ageing at an earlier age.