

PATIENT INFORMATION ON SUNSCREENS

Dear Patient,

Protection from the sun is an increasingly important issue these days. Statistics indicate that the number of cases of malignant melanoma and especially basal-cell carcinoma are increasing every year. In most cases, the cause is intensive exposure to the sun's rays, known as UV light, in a person's younger years, either as direct sun exposure or through visits to solariums.

Essentially, UV light is divided into UVB, UVA and UVC. Particularly harmful rays include:

- **Long-wave UVA.** After several years of long-term exposure, these rays destroy certain fibres of the skin, causing premature skin ageing.
- **Short-wave UVB.** These rays change the genetic material in cells, thus promoting the development of skin cancer. For this reason, many sunscreens contain anti-UVA and anti-UVA filters.

Your dermatologist may have told you that your "sun account" is exhausted and that you need to **consistently protect yourself from UV radiation**. Finding a solution is often challenging in view of the confusing array of sun care products. Moreover, recent studies have shown that most sunscreens contain UV filters that are harmful to health and the environment. The focus here is primarily on mineral and chemical UV filters.

Mineral UV filters contain titanium dioxide and zinc oxide, the components of which reflect UV light. Titanium dioxide is suspected of causing lung cancer when inhaled, while zinc oxide is toxic to aquatic organisms. To mitigate the "whitewash effect", both are often added as tiny nanoparticles. Nanoparticles are suspected of entering the bloodstream through the skin. These ingredients are subject to compulsory labelling on packaging and are listed with the addition: "**nano-titanium dioxide**" and "**nano-zinc oxide**".

Chemical UV filters are substances that convert UV energy in the skin into infrared light. Some are **hormone-like substances** that are strongly suspected of causing cancer and other diseases such as Parkinson's, and in children, diabetes, obesity and impaired intelligence. **You must avoid products containing octinoxate, octocrylene and oxybenzone.** They are not biodegradable and accumulate in water bodies, which has already resulted in large-scale coral death. They also arrive directly on our plates via the food chain when we eat fish or seafood.

So, how can you protect yourself from harmful UV rays – and do this without sunscreens?

- Avoid direct sun exposure between the hours of 11:00 a.m. and 3:00 p.m..
- Don't spend too long exposed to direct sun. 15 minutes per day is sufficient.
- Cover areas of skin that are sensitive to the sun with suitable clothing (long-sleeved shirts, hats, scarves etc.).
- Some sunscreens are free of harmful substances. Find out about them using free smartphone apps such as CodeCheck or ToxFox.

For more information, visit www.akdermaplastik.de.