

# Protecting your skin from the sun: What you need to know about photo-damage.

# Little ability to protect itself from the sun.

Despite its many useful functions, skin has very little ability to shield against sun's harmful ultraviolet and infrared radiation. Photodamage to skin caused by unprotected and/or repeated sun exposure can result in chronic deterioration, various signs of premature aging, and carcinogenesis (the initiation of cancer formation)—as well as impair its ability to heal previous damage.

Usually, photodamage is not immediately detectable. It accumulates stealthily over a lifetime, building upon itself until it becomes visible or apparent.

## Natural aging process, or sun damage?

When we look in the mirror, what we think of as the 'natural aging process' can often be attributed to photo-damage. Harmful sun exposure can account for a majority of the visible signs of aging, such as wrinkles, sunspots, roughness, visible blood vessels, loss of elasticity and thinning skin.

## There is no such thing as a 'healthy' tan.

A suntan (browned skin) obtained through sun exposure means damaged skin—the opposite of 'healthy.' A sunburn indicates more severe damage. Both are detrimental to your skin's health, and can lead to premature aging and the formation of skin cancer.

## What can you do to protect your skin?

The more sun protection you provide for your skin, the more you reduce potential photo-damage and help protect against skin cancer and signs of aging.

- Properly apply a high-quality, mineral-based sunscreen (see Using Sunscreen Protection)
  every morning, regardless of weather or time of year.
- Seek shade and wear physical barriers such as hats, sleeves, t-shirts and sunglasses.
- Do not use indoor tanning beds.
- Minimize sun exposure between the hours of 10am and 4pm when UV rays are the strongest.

# Using sunscreen protection: How it works and what it covers.

# Not all sunscreens are created equal.

Sunscreens vary in their effectiveness against the photodamage that can lead to premature aging and skin cancer. Despite claims of adequate UV protection, some products rely on less-effective chemical filters that can break down in light, rather than more-effective mineral (physical barrier) ingredients—which prevent damaging UV rays from reaching the skin.

For example, even though a 'broad-spectrum, SPF of 100' sunscreen may help provide adequate protection from a UVB sunburn, it could also be ineffective against UVA rays after as little as 30 minutes of sun exposure—allowing undetected photodamage to your skin.

### **UVA and UVB: What does that really mean?**

Both are ultraviolet sunrays that damage your skin. UVB rays cause sunburns, the most visible and immediate symptom of sun over-exposure. UVA rays are called the 'aging rays'—they do harm without causing visible sunburns, penetrate the skin more deeply, are more abundant than UVB, and can pass through glass. Despite their differences, **both UVA and UVB rays can cause skin cancer**.

# A mineral-based sunscreen offers true UVA/UVB protection.

Many sunscreens offer an SPF rating, and claim 'broad-spectrum UVA/UVB' protection. However, an SPF applies only to the UVB (burning) rays. Chemical filters, such as Avobenzone, can break down when exposed to light, allowing exposure to the UVA spectrum. Mineral (physical) barriers, such as zinc oxide, do not break down, and protect across the full UVA/UVB spectrum when properly applied.

For the most-effective sun protection, look for mineral-based sunscreens that contain zinc oxide and/or titanium dioxide in combined concentrations greater than eight per cent. As well as preventing additional photodamage, this type of sunscreen gives the skin a reprieve from both types of radiation, allowing it to partially repair itself from previous damage.

### Diligent use of sunscreen helps protect your skin.

- Apply mineral-based sunscreen to your face, top of ears, neck and upper chest every morning, regardless of weather and time of year. Wear it beneath makeup.
- For adequate coverage, do not rely solely on makeup or foundations containing SPF.
- On hot days, reapply mineral-based sunscreen every three-to-four hours.
- Mineral-based sunscreens tend to be more expensive—use them on areas more frequently exposed, such as the face, ears, neck, shoulders and tops of arms. Use lessexpensive chemical-based sunscreens on other areas, if needed, to save money.

We offer professional grade skincare products including excellent mineral-based sunscreens in lightweight and non-greasy formulas which can be purchased at our office, located at 102-47 Sunpark Dr SE or online at www.beautifulnaturalyou.ca. If you have additional questions or concerns about sun protection, please call our office at (403) 571-3141.