

SUN HEALTH

As humans we evolved living outdoors, so our brains and bodies function best with a lot of natural light. It's very beneficial for us to get outside as much as possible, whilst taking steps to protect ourselves against skin cancer.

SUNSCREEN

TIPS

- Essential protection to prevent damaging UV radiation
- Look for broad spectrum UVA and UVB protection, water-resistant and an SPF between 15-50
- Apply regularly & ensure you use enough – roughly 1 tsp per body part
- Check out EWG for healthy sunscreens as many are inadequate

CAUTIONS

Sun Burn

Even with sunscreen you should limit sun exposure time

Harmful Chemicals

Avoid: Oxybenzone, vitamin A (retinyl palmitate) & added insect repellent

Look for: Zinc oxide, Avobenzone, Mexoryl SX

EFFECTS OF SUNLIGHT

BENEFITS

Vitamin D (calciferol)

A fat-soluble vitamin synthesised from UV radiation as it strikes the skin

Essential for Immune Health, Bone Health, Mood

Sunscreen and clothing stop Vit D from penetrating

15-20 mins for Caucasian exposed skin and closer to 2 hrs for Black exposed skin

Age, skin colour, weight, how much skin is exposed, the time of year and which country you live in, all play a part in how much Vit D is synthesised

ON SKIN



ON EYES



Melatonin

A hormone produced in the brain after dark

Essential for insulin sensitivity, regulates our sleep/wake cycle, antioxidant, and anti-inflammatory

Just 1 hour of natural light in the morning can improve sleep (avoid wearing sunglasses or a hat first thing)



Nitric Oxide

A messenger molecule found in the skin and blood

Its key function is vasodilation, relaxing the inner muscles of the blood vessels.

Helps reduce the risk of high blood pressure and cardiovascular disease

Sunlight exposure releases small amounts of nitric oxide from the skin stores into the circulation

Serotonin

A neurotransmitter that regulates mood, learning, cognition, appetite, sleep, and sexual desire

Made in the gut and the brain. When bright light enters the eyes, retinal ganglion cells send signals to produce serotonin. Research has now found light on the skin also boosts serotonin

Metabolic Pathways

Some studies have found that daylight exposure influences body weight independently of sleep timing and duration



CAUTIONS

ON SKIN

Skin Cancer

2 types of Ultraviolet (UV) light can damage the genetic material in skin cells and contribute to skin cancer:

UVA (skin ageing)

UVB (skin burning)

Exact cause of melanoma is unclear, but risk factors include sunburn, fair skin, family history, exposure to UV radiation, freckles and moles and indoor tanning

Clothes and hats offer the best protection

Sunscreen does not give complete protection

Keep infants in the shade as they lack melanin to protect the skin



ON EYES



Cataracts

Do wear sunglasses in bright sunlight to protect your eyes from UV radiation that causes cataracts

