

LeDerm Laser Medical Aesthetics

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UB or Not UB; That is the Question ©

Part of Fruit on the Beach ©

UVA - Longer rays. Aging - penetrates deeper and causes more damage.

Indirect DNA damage

Not associated with any pain thus no signal of damage

Blocked less by many sun screens

Emitted predominantly by tanning booths (12 times more than the sun)

More likely to mutate skin cells

Responsible for 92% of all **melanomas**

In Australia skin cancer accounts for approx 81% of all *new* cancers diagnosed each year

Damages collagen and accelerates aging

Destroys vitamin A in the skin

Penetrates glass

Triggers what is called oxidative stress

Somewhat reduced by sun screen but must be labeled - UVA protection

UVB - Shorter rays. Burning rays and Direct DNA damage.

Gives the body a warning through sun burn that you are damaging your skin

Causes the formation of moles and skin cancers. (Melanoma often starts in or near moles on the skin.)

Responsible for approximately 8% of all melanoma

Hazardous to the **eyes** - can cause cataracts and macular degeneration

I once worked with a prominent eye surgeon who thought wearing sunglasses was dangerous because it allows the pupil to relax and dilate which would expose the eye to more rays. I asked about mirrored glasses which would reflect the sun back - but no studies have been done to my knowledge. I'd say wear a hat and a good blocker to cover all bases.

Damages collagen and accelerates aging, slower than UVA

Destroys vitamin A in the skin

Does not penetrate Glass

Produces **Vit D** in the skin.

Vitamin D reduces the risk of cancer but there is no difference in getting it from the sun or from a supplement

In a recent study that came out 2 years ago, it was stated that vitamin D now

helps **lower your risk of colorectal cancer.**

Reduced by sun screen because it absorbs the UV preventing the DNA from absorbing it

The direct DNA damage is reduced by sunscreen. This prevents sunburn. When the sunscreen is at the surface of the skin it filters the UV-rays which weakens the intensity. Even when the sunscreen molecules have penetrated into the skin they protect against the direct DNA damage, because the UV-light is absorbed by the sunscreen and not by the DNA.

- 60,000 approx. new cases of invasive **melanoma** are diagnosed in the United States each year.
- 48,000 approx melanoma related deaths occur worldwide per year according to a World Health Organization (WHO) report.
- 300% increase in non-melanoma skin cancer incidence in the US since 1994, when rates were last estimated

Salon tanners are 2.5 times more likely to develop squamous cell carcinoma, and 1.5 times more likely to develop basal cell carcinoma. According to recent research, first exposure to tanning beds in youth increases melanoma risk by 75 percent. These figures are provided by the Skin Cancer Foundation I refer you to the Skin Cancer Foundation for **guidelines** on sun protection. See LeDerm's Tough Love Protection Guideline below

According to the **Skin Cancer Foundation**: Up to 90 percent of the visible changes commonly attributed to aging are caused by the sun.