The Sun: Friend or Foe

Vitamin D
(The Sunshine Vitamin)

There is a relationship between low vitamin D levels and poor bone health. Links have been made to everything from multiple sclerosis to prostate cancer.
Friend

Getting some sun may shake off the winter time blues.

Research suggests that light hitting your skin helps reverse seasonal affective disorder (SAD).
Like most things in life, it’s the dose that counts.
Some is beneficial, but too much can be very harmful.
Sunlight is hard on your skin.

There is evidence that exposure before your 20th birthday matters most.
A large Scandinavian study of melanoma risk published in the Journal of the National Cancer Institute in 2003 found that **adolescence** is the most dangerous time to get sunburn.
Melanoma Superficial Spreading
Melanoma beneath the fingernail
Melanoma facts

The American Cancer Society estimates in 2007 8,110 fatalities
5,220 men, 2,800 women

Melanoma is estimated at 59,940
33,910 men, 26,030 women
Sunburn

Sunburn literally a burn on your skin, from ultraviolet (UV) radiation.

The consequence is inflammation of the skin.

Injury can start within 30 minutes of exposure.
Sunburn Levels

- First degree burn
- Second degree burn
- Third degree burn
“Hoot Owl”
Sunburn
Premature aging (photoaging) of the skin and wrinkles

Strong melanoma candidate
Both UVA and UVB are responsible for photoaging and sunburn.

Tanning beds produce both UVA and UVB rays
Certain light-skinned and fair-haired people are at greater risk of sunburn injury.
High risk sunburn

Prior sun exposure & prior skin injury are risks for sunburn, even in limited exposure to the sun.
High Altitude: Skiers/Hikers/Climbers
(Pic: Everest, North Col ice field)
Everest Climber UV Victim
(Thin air, less UV protection)
Other sun related issues

- Premature Aging
- Severe Wrinkling
- Cancerous Skin tumors
- Pigmented Skin Lesion Development (moles)
- Premature Cataract Formation
Pigmented Skin Lesion
Mild Sunburn Symptoms

Mild and uncomplicated cases of sunburn usually result in minor skin redness and irritation.
More severe cases (sun poisoning) are complicated by severe skin burning and blistering, massive fluid loss (dehydration) electrolyte imbalance, and infection.
Seeking Medical Care

Conditions that should motivate you to go to the hospital emergency room include the following:

- Severe pain
- Severe blistering
- Headache
- Confusion
- Nausea or vomiting
- Fainting
Prevention

AVOID extensive time in the SUN
Prevention

Other more practical strategies include wearing:

- *Wide-brim hats*
- *Long-sleeve shirts*
- *Long pants.*
Sunscreen

SPF 8 protects twice as long as SPF 4

Most sunburns can be prevented with SPF 15
Sensitive Skin

SPF 30
Sunscreen Notes

- Apply and Re-apply.
- Apply in generous amounts & in layers.
- Activities such as sweating and swimming degrade its effectiveness.
- Sunscreens are not waterproof.
- Words sunblock, waterproof, and all day protection are no longer used.
Some drugs such as antibiotics, antipsoriatics (prescribed for skin conditions) and acne medicines can cause sun sensitivity.
Tanning Salons

"Tan indoors with absolutely no harmful side effects"

"No burning, no drying, and no sun damage"

"Unlike the sun, indoor tanning will not cause skin cancer or skin aging"

True or False??
False

- Tanning indoors damages your skin.
- The tanners emit ultraviolet rays.
- Tanning occurs when the skin produces additional pigment to protect itself from ultraviolet rays.
- Overexposure can cause eye injury, premature wrinkling, and light-induced skin rashes.
- Chances of developing skin cancer increase.
"You can achieve a deep year-round tan with gentle, comfortable, and safe UVA light."

"No harsh glare, so no goggles or eye shades are necessary."

"Tan year round without the harmful side effects often associated with natural sunlight."
Be Wise!
Sun Wise!
This Children's Environmental Health presentation was made possible through a grant from The Dow Chemical Company Foundation.
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- National Environmental Health Association (NEHA.org) for website storage and oversight.

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