

SUMMER SUN:

HEALTH PROMISES, PERILS AND PITFALLS IN RECENT RESEARCH.

For health conscious families who are concerned about the use of conventional sunscreens, yet remain confused about how best to protect against harmful UV rays, while also reaping some health benefits of a little summer sunshine.

Article Highlights:

- The health benefits of natural sunlight.
- The health hazards of UV rays.
- The problems with most conventional sunscreens of the last twenty years.
- SUN SMART HEALTH TIPS for: infants, toddlers/children, adolescence and adults.

You know how it is:

- For the last two decades Public Health Agencies have been convincingly telling you that the sun's UV rays harm your health, particularly leaving you prone to the development of skin cancer and thus you should avoid the sun at all cost, specifically by lathering you and your children's bodies with abundant amounts of sunscreen.
- Over the course of my generation's lifetime the sunscreen industry has exploded into a multi-billion dollar industry with multiple brands and various types to choose from - different SPF levels, some for adults, some for kids, sprays, powders, creams and make-up.

Yet recent research has uncovered some major pit-falls with this message, including:

A). VITAMIN D DEFICIENCY & HEALTH PROBLEMS BECAUSE OF IT.

- There appears to be an epidemic of vitamin D deficiency in North America with a simultaneous increase in cases of lung, breast, prostate and colon cancers, diabetes, high blood pressure, frequent URTI and autoimmune illnesses in this same population.
- Turns out that Vitamin D deficiency is significantly linked to the development of these health problems in North Americans.



- Vitamin D is known as the sunshine vitamin because it is made in your skin by exposure with UV light. Yet sunscreens block this action and can leave you deficient in Vitamin D for most of the year, unless you take supplements.
- Only recently has science caught up to the reality that we need more vitamin D than originally thought. As a recent result, many health aware people now take vitamin D supplements to get their levels up to par.

Yet the questions remain:

- Will Vitamin D pills replace the complex metabolic processes your body performs while interacting with your natural environment? - An intricate process that has developed over a millennia.
- Will vitamin D in a bottle do the trick to save you from these life threatening illnesses or do you need to go back to your roots and not fear the sun, but respect the benefit it brings, while understanding that too much of anything is not good for your health?

B). SKIN CANCER RATES & SUNSCREEN USE - NOT MATCHING UP!

- Despite the widespread use of sunscreen over the last two decades, science is scrambling to stand on some solid evidence that skin cancer rates have proportionately decreased. However, no such evidence exists to support this claim. In fact, the science is equally divided.
- Some studies show less skin cancer development amongst sunscreen users, while others find the opposite – higher rates of skin cancer in the North American population, despite wide spread use of sunscreen.
- Some research points out that only squamous cell carcinoma (a slow growing, benign, easily treatable form of skin cancer) is reduced by using sunscreens, while the rates of basal cell

carcinoma and melanoma have actually increased in the population over the last twenty years, despite most of the population using conventional sun blocks on a regular basis.

What gives?

UVB/UVA Protection has not been balanced in conventional sunscreens:

- The sun blocks of the last twenty years have been designed to protect you primarily from UVB rays - short wave length rays that penetrate the surface of the skin giving you a sunburn when you get too much.
- Yet the sun also emits UVA rays – longer wave length rays that penetrate deeper into the skin, not promoting a burn but leading to cell and DNA damage in the deeper layers of the skin when you get too much.
- Scientists are now suggesting that UVA radiation plays a larger role in skin cancer development than originally thought, particularly of the basal cell and melanoma kind.
- Conventional sunscreens of the last two decades have afforded very minimal UVA protection and therefore cancer rates of basal cell and melanoma have not decreased, but increased in the population.

SPF Promises and Perils:

- SPF – Sun Protectant Factor – is a measure meant to indicate how much burn protection you get when applying sunscreen properly.

Studies are finding some major problems with SPF's or at least how we interpret them:

- An SPF 50 for instance does not pan out in reality. It can give a false sense of security to the people who use it. Meaning that they stay out in the sun longer than they usually would if using their own body signals as an indicator of “too

much sun". As a result, applying SPF 50 leads many users stay out much longer than they should, exposing their body to more UV radiation overall, which is harmful to the skin and depletes the immune system.

- A high SPF level (50+) also leaves some people prone to applying sunscreen less often than what is recommended on the label (which the SPF measure is meant for) giving rise to sunscreen by products, even the originally protective ones, breaking down with prolonged UV exposure and promoting free radical skin damage rather than protecting from it.

Substances used in conventional sunscreen may promote abnormal skin cell growth and tumor development as well as harm our health in other ways.

C). HEALTH HAZARDOUS CHEMICALS IN CONVENTIONAL SUN BLOCK.

Ugh! You have been lathering your body with stuff that has not necessarily helped and maybe done some harm. Ugh!

- Take a breath.
- Let's go through it.
- We will come out better for it and there are some excellent solutions for you to take charge of!

Problems with Vitamin A in Sunscreen:

- Most conventional sunscreen products have added Vitamin A. This is because Vitamin A and its derivatives such as: retinol, retinyl palmitate and retionic acid are known to be "anti-aging" substances. That is, they create healthy skin by protecting against oxidative stress (free radical damage) that is thought to age the skin.
- So, sunscreen makers were on the right track by adding this ingredient, as this is true of Vitamin A used in lotions and creams indoors. But

science is now discovering that this may not be the case for Vitamin A in creams and lotions (sunscreen) used outdoors!

- When exposed to UV light, Vitamin A and its derivatives break down. As a result they no longer provide free radical protection in skin. Instead it produces more free radical damage than it prevents. The result equals enhanced skin damage, abnormal cell growth and tumor development at much higher rates than sunscreens without added Vitamin A.

Hormone Disrupter Chemicals in Sunscreen:

- The main UVB filter used in most conventional sunscreens of the last twenty years is a substance called oxybenzone.
- Leading sunscreen researchers now know that oxybenzone absorbs into the skin and blood stream in high enough amounts to adversely disrupt normal hormone activity.
- Oxybenzone acts like estrogen in the body, but is more toxic and potentially more difficult to eliminate than the body's naturally made estrogen. As a result, oxybenzone is left to wreak havoc on hormonal organs and systems such as: the uterus, ovaries, breast, prostate and thyroid.

IT' NO WONDER YOU END UP CONCERNED & CONFUSED ABOUT HOW BEST TO PROTECT YOURSELF AND YOUR FAMILY FROM THE HEALTH HAZARDS OF TOO LITTLE AND TOO MUCH SUN EXPOSURE.

Here is what you can do:

FOLLOW THESE FOUR KEYS TO HELP PROTECT YOURSELF AND FAMILY FROM HARMFUL UV RAYS, WHILE REAPING THE BENEFITS OF SOME NATURAL SUMMER SUN:

1). BEFORE APPLYING SUN BLOCK FOLLOW THESE GUIDELINES TO ENSURE UVA & UVB PROTECTION:

- **Wear Clothes:** shirts, shorts/pants and a hat are the best kind of sun protection.
- **Shade:** find it or make it.
- **Play around the sun:** plan outdoor time for the morning and late afternoon, if possible. UV radiation peaks at mid-day when the sun is directly overhead.
- **Sunglasses:** UV protection is essential for your eyes to prevent cataracts.
- **Listen to your Body:** watch for signs of a burn – when you've had enough, cover up with clothes or shade.

2). SAFE, EFFECTIVE SUNSCREEN INGREDIENTS AND USE:

AVOID:

Ingredients:

- **Oxybenzone:** hormone disrupter.
- **Vitamin A** (retinyl palmitate, retinal, retinoic acid): Even if it is "natural" - these ingredients are still harmful when added to sunscreen.
- **Insect repellent.**
- **Parabens, phalates, benzene and petroleum.**

Types:

- **Sprays & Powders:** risk of inhalation, causes toxic damage to lungs and nervous system.
- **High SPF (50+):** risk of staying out too long and applying less – "tricks" your body's natural burn signal and leaves you vulnerable to more overall UV exposure.
- **Nano-sized Particles:** very tiny molecules of mineral (zinc, titanium) based sunscreens that will penetrate the skin, leading to toxic burden inside the body organs and tissues.

LOOK FOR THESE:

Ingredients:

- **Zinc oxide or Titanium dioxide:** excellent UVB, UVA filters that do not penetrate the skin. (Non-nano-sized).
- **Avobenzene:** UVB/UVA protection – relatively safe.
- **Mexoryl SX:** well tested and used in many sunscreens in Europe.

Types:

- **Creams.**
- **Broad-Spectrum Protection.** (UVB and UVA protection).
- **Water-resistant for beach, water activities and exercise.**
- **SPF 15 to 30. SPF 30 for beach and pool.**

For a list of tested NA sunscreens that are: – safe and effective - broad-spectrum protection, long-lasting protection with ingredients that pose fewer health concerns when the body absorbs them go to:

www.ewg.org

Sunscreen Tips:

- **Read the label.**
- **Apply as instructed.**

This way you will be closer to achieving the true SPF and avoid "old sunscreen" products breaking down with UV exposure, resulting in more damage to your skin than actual protection.

3). GET SOME NATURAL SUN LIGHT WITHOUT COVERING UP – VITAMIN D:

Many medical and naturopathic practitioners are recommending that people get some natural sunlight on exposed areas such as the arms and legs several times per week without using sun block.

Depending on your skin tone and sun-tolerance you can aim for natural sun exposure of the following amounts:

- **Adults:** 10 to 30 minutes + per day.
- **Children (5 to 18years):** 10 to 15 minutes per day.
- **Toddlers (2 to 5years):** 5 to 10 minutes per day.

USE SUNSCREEN SPARRINGLY – BETTER TO USE CLOTHING, HAT AND SHADE.

- **Infants (<1yr):** Keep your infant in the shade and covered up with clothing and a hat. **DO NOT USE ANY KIND OF SUNSCREEN ON YOUR INFANT.**
- Infants and young children have more skin surface area to body weight and less developed immune and detoxification systems. As a result, they are more prone to sun damage as well as toxic burden from chemicals applied to the skin.
- Recommendations for natural sun-exposure without sun block for the purpose of Vitamin D manufacture remains an area where medical experts are divided.
- Thus, these are the best guidelines I can provide based on current research, professional guidance and discussion with colleagues (both ND, MD and Nurse Practitioners).
- You need to make the best choice you can for yourself, using a combination of the scientific knowledge provided and what your inner wisdom tells you about what is right for you and your family.

4). PAY ATTENTION TO NUTRITION:

Nutrition plays a significant roll in sun damage protection or promotion depending on what you choose to eat.

Consume lots of fresh fruits and vegetables:

- Fruits and vegetables contain a plethora of cancer fighting substances that act to sop up free radicals in the skin created by UV exposure (or improper use of conventional sunscreens).
- Eating a diet abundant in fresh fruits and vegetables can provide you with excellent anti-cancer protection from the inside out, complete with other positive side effects such as helping the liver and kidneys detoxify harmful chemicals coming in from the outside.
- A diet high in fruits and vegetables also serve to keep the body hydrated during the hot months of the summer.
- **Nutrition Tip:** Pack a cooler full of fresh fruit and chopped veggies sticks – choosing from the most colorful kinds (such as berries, mangoes, papaya, pineapple, peaches, plums, melons, carrots, peppers, string beans, beets, broccoli, dark green lettuce, and sweet potatoes) – for your family to snack on and to add to meals during your day at the beach.
- **Note: Dietary Vitamin A** and beta-carotene (a water soluble form of Vitamin A found in carrots) is very healthy for you and provides skin damage protection from the inside out. Only Vitamin A added to sunblock is problematic.

Avoid:

- **Too many sugary foods and drinks such as:** cookies, ice cream, regular Popsicles/freezies, pop and fruit juices that contain a lot of sugar.
- **Too much alcohol and not enough water.**
- **Processed foods with added preservatives and dyes.**
- **Foods your body is sensitive too (food intolerances and allergies).**

- These types of foods and beverages deplete your immune system and burden your detoxification systems, leaving you prone to a higher amount of sun-induced skin cell and DNA damage without the ability to repair it from the inside, via your immune cells.
- **Nutrition Tips:**
- **Purchase natural fruit juices** and dilute them- half and half- with water.
- **Make your own Popsicles** using natural fruit juices.
- **Iced Herbal Tea:** Steep 2 to 4 bags of any herbal tea of your choice or make a mix of a few kinds in 1L of boiling water. Let sit 30min+. Add honey or stevia for sweet flavor. Add ice. Enjoy.
- Kids often like the fruit flavored herbal teas such as berry and peach.
- **Whole grain breads and crackers** – for sandwiches and snacks = brown carbs vs. white carbs.

FINDING THE BEST BALANCE IN YOUR FOOD CHOICES

- **Summer is, and should be a lot about enjoying and relaxing** – letting go of some of your major and minor stresses. Part of that includes being easier and freer with your family’s dietary routine and including foods that are “fun” and tasty, especially the ones that remind you of your own childhood summers.
- I am suggesting that you aim to achieve the best balance you can in your food choices for you and your family. This balance could surely include some of summer’s most classic foods, like ice cream!
- The point is, not to overdo it and balance your family’s diet with a higher amount of the recommended foods, which can also be fun, very delicious and reminiscent of the lazy, hazy days of childhood summers.

- ***Do you remember that wonderful feeling of taking that first bite into a sun-warmed peach, which oozed fresh, sweet, juice and goodness onto your taste buds as well as dripped down your face, chin and hands – ah.... the lovely stickiness of summer rich food!***

FOLLOW THESE KEYS TO MAINTAIN THE BALANCE OF HEALTH YOU DESIRE FOR YOURSELF AND FAMILY WHILE STILL ENJOYING THE SUMMER SUN AND SUMMER FUN!

WISHING YOU A JOY FILLED, REJUVINATING SUMMER SEASON.

Reference: Environmental Working Group Research and Resources (www.ewg.org)

Inspired by: A personal love of the sun, all HFNC clients, Sonya, Joanne, Isabella and Amelie.



Heidi McGill is a registered doctor of naturopathic medicine. She has helped dozens of families discover their best balance for overall wellness in body and mind, using the principles and practices of naturopathic medicine. She offers seminars and writes articles on topics that matter to you. Heidi is focused on educating you about how

your body functions in combination with the natural and cultural environment. She is genuinely passionate about guiding you towards optimal health, vitality and more joy in your life.

Healing Foundations Naturopathic Clinic

Phone: 519-821-1999

Email: clinic@healingfoundations.ca

Website: www.healingfoundations.ca



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