

Eating for Sun Protection

By Elizabeth Taddiken, ND

Summer is in full swing, but it doesn't have to be summer for us to be sure we are eating for sun protection. The UV rays of the sun are always poking through whether we have blue skies or gray, and while it may be more difficult to be affected adversely by a sun burn in the winter, we still want to give the body as much protection against those rays as possible.

Did you know that a sunburn is actually an inflammatory reaction of the skin after too many UV rays? When we think of it like that, we can start to realize there are plenty of nutritional anti-inflammatory and anti-oxidant options out there to protect our skin from the inside.

Researchers use a measurement tool called the minimal erythema dose (MED), which measures the minimal amount of UV light exposure that produces redness after 24 hours. When something can extend that measurement, then it is classified as photoprotective. This does not mean it is an all-out barrier to the damages of UV light, but it can sure add a protective layer.

Some of those sun protective nutritional agents are as follows:

- Beta-carotene
- Lycopene
- Vitamin A
- Vitamin C

When it comes to our nutrition, ideally we would get everything from our food. However, due to our soil which is often depleted, we must be sure we have a good back up in supplement form. So, what is the best way to get each of the above super sun protective nutrients from our food? Check out the best food sources as follows:

Beta-carotene

Carrots might be what come to mind when we think of carotenes. However, carotenes are also present as a carotenoid mixture within all green leafy foods, as well as all red, yellow, and orange fruits and vegetables. These are also highly available in edible flowers of the same colors, for example Calendula, Dandelion, and Nasturtium flowers. Beta-carotene is the most prominent carotenoid available in nature. Researchers have found that plasma levels of beta-carotenes are significantly reduced in prolonged sun exposure, indicating the need to increase consumption of these colorful foods with increased UV exposure. Researchers have also found that it is especially important to get this compound predominantly in food and especially for smokers where a higher rate of lung cancer was seen when taken as a single supplement.

Food sources of Beta-carotenes:

- Sweet potatoes
- Carrots
- Dark leafy greens
- Butternut squash

- Red bell peppers
- Appricots
- Broccoli
- Cantaloupe

Lycopene

You might have heard of lycopene in reference to the benefits of cooked tomato products like pasta sauces, stewed tomatoes, and ketchup even. Homemade is best for these cooked tomato products, or if store bought look for products with the least amount of ingredients. There is definitely truth behind the proclaimed health benefits of cooked tomato products especially with regards to lycopene. Lesser amounts are found in other red colored foods, but just as with beta-carotene it is preferable to find this compound in your food rather than solely as a single nutrient in in a supplement. Research has shown lycopene to be a strong antioxidant which may benefit by preventing cancer of the prostate, lung, stomach, and possibly many others. Healthy volunteers in a clinical trial who were given lycopene rich food products like tomato paste and tomato extract for 10-12 weeks, showed a significant decrease in the severity of sunburn by about 40%. Other trials done for 4 weeks did not show a significant result.

Food sources of lycopene:

- Guavas
- Watermelon
- Cooked tomatoes
- Papaya
- Grapefruit
- Cooked red bell peppers
- Cooked asparagus
- Purple cabbage
- Mango

Vitamin A

Beta-carotene mentioned above is a pre-cursor to vitamin A. Thus, if we ensure plenty of beta-carotene rich foods in our diet, then we are bound to be on the road to having a good supply of vitamin A. Vitamin A is a strong antioxidant that can potentially prevent the free radical damage posed by UV rays. Vitamin A (retinol) is both immunomodulating and cardioprotective as well as being a super antioxidant. However, large doses can be harmful, so again try to get the bulk of this nutrient in colorful fruits and veggies.

Food sources of vitamin A:

- Sweet potato
- Carrots
- Butternut squash
- Spinach
- Cantaloupe
- Lettuce (not iceberg)
- Red bell peppers
- Broccoli
- Grapefruit

Vitamin C

Vitamin C is probably one of the most well-known antioxidants. It is a water-soluble antioxidant and is biosynthesized in all green plants which is one of the best sources to acquire

this vitamin. Also known as ascorbate, it actually protects plants from UV damage during photosynthesis. As we know, we are what we eat! By eating plants high in vitamin C, we are also protecting ourselves from harmful UV free radical damage. Research has specifically found the benefit of vitamin C for sun protection is best when in combination with Vitamin E, both topically prior to sun exposure as well as taken orally. In studies done on pig skin, topical application of vitamin C and E enhanced sunscreen effectiveness and showed a 4-fold protection to skin compared to only 2-fold when given individually.

Food sources of vitamin C:

- Guavas
- Bell peppers
- Kiwi
- Strawberries
- Oranges
- Papaya
- Broccoli
- Tomato
- Kale

Remember when it comes to fun in the sun, stay hydrated and cover up as much as possible when taking a break. We want a little bit of sun exposure to make our vitamin D, so get out when the sun is not too intense, and at other times use quality sun blocks with titanium oxide and zinc oxide. Enjoy the delicious, colorful fruits and veggies as the perfect snack, and have fun!

References:

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