

# The Agave Apple

## Sun Protection

It's that time of year again! Temperatures are starting to rise, the clouds are starting to clear and protection from the harsh Arizona sun becomes more important than ever. So, for the first edition of the Agave Apple, I will be discussing proper sun protection, as well as common myths.

### Why should I protect myself from the sun?

Ultraviolet (UV) radiation from the sun is responsible for several acute and chronic negative effects on the human skin. Included in these are not only sunburns and increased risk of skin cancer, but also unwanted changes in skin pigmentation and wrinkles, referred to as photoaging. Sun exposure to your eyes can also increase the risk of cataracts, as well as the growth of non-cancerous lesions on the eyes that can cause irritation and reduce vision.

### Who should wear sunscreen?

Everyone over the age of 6 months is advised to use sunscreen daily, but it is especially important for those who have light skin types, have a personal or family history of skin cancer, or those who spend extended amount of time in the sun.

### What sunscreen should I buy?

With such a wide variety of sun protection available on the market today, it can often be hard to decide what to buy. It is always recommended to buy products labeled as "broad spectrum" in order to be protected against both UVA and UVB waves, both which are equally harmful. For everyday use, a daily moisturizer or after shave containing SPF 15 is generally sufficient when only a few minutes here and there are spent in the sun. For longer exposure, it is recommended that water and sweat resistant SPF 30, or higher, be used.

### What are some methods for protecting myself from harmful UV exposure?

While nothing can replace the use of sunscreen, there are many other things that can be done to protect your skin. Seeking shade, when possible, is among the best ways to avoid unnecessary exposure, especially between the hours of 10 am and 4pm, when the UV rays are strongest. Also, wearing brimmed hats and the use of sunglasses when both outdoors and driving can offer further protection of your face. Another option would be investing in some of the wide variety of photoprotective cosmetics, clothing and laundry alternatives available.

### Application of sunscreen. When and how much?

First, always remember to check the expiration date on your sunscreen. Sunscreen generally has a shelf life of 3 years, but this is reduced if it has been exposure to high temperatures. Sunscreen should be applied at least 15 minutes prior to sun exposure in order to obtain an adequate barrier. For an average adult, it is recommended to use at least 1 oz of sunscreen per application (approximately the size of a shot glass). If water activities or sweat producing activities are involved application of "water resistant" sunscreen should be done every 40-80 minutes.

## Common Myths About Sun Protection

### ***Dark skinned individuals do not need to wear sunscreen.***

Even dark skinned individuals can get sunburns and skin cancer. In fact, skin cancers represent 2-4% of malignancies among Chinese and Japanese, as well as 1-2% of malignancies in African Americans and Asian Indians. Even more concerning, is that mortality rates from skin cancers are disproportionately higher in darker skinned individuals.

This also brings up the common misconception that tanning helps protect your skin from further damage. In fact, tanning does very little to protect your skin from continued damage. Also, this "initial tan" is often obtained through the use of tanning beds, which expose you to the same harmful UV rays as the sun.

### ***Most of our sun exposure is as children, so its too late now.***

While it is true that the risk of skin cancer related to sun exposure is based on a cumulative effect of lifetime exposure, on average we receive less than 25% of total lifetime exposure prior to the age of 18. Actually, it is men over the age of 40 who spend the most amount of time outdoors and are often exposed to the highest annual doses of UV rays.

### ***If it is cold or cloudy outside, or if you are only outside for a short amount of time, you don't need to wear sunscreen.***

Surprisingly, up to 40% of the sun's UV rays reach the earth on a COMPLETELY cloudy day and skin can be damaged from the sun in as little as 15 minutes. These are common misconceptions that lead to

### ***If you wear sunscreen you are at risk for Vitamin D deficiency.***

It is true that sun exposure is necessary for the synthesis of Vitamin D in the skin and there is still some controversy over if the use of sunscreen effects this synthesis. To date, there have been no studies that have shown that the use of sunscreen in real-life scenarios significantly decreases the production of Vitamin D by our skin. If low Vitamin D is a concern, oral supplementation has found to be a safe, well tolerated, and inexpensive alternative to sun exposure.

Interested in learning more? Below I have listed some reputable websites containing more information on skin cancer and sun protection.

[www.who.int/uv/sun\\_protection/en](http://www.who.int/uv/sun_protection/en)

[www.skincancer.org](http://www.skincancer.org)

[www.cdc.gov/cancer/skin](http://www.cdc.gov/cancer/skin)