# Being SunSmart

#### Why is Sun-Safety Important?

Your skin is the largest organ in the body and makes up the first-line of defence for the immune system. Keeping it protected from the harsh sun in Cayman is essential for skin cancer prevention and overall health. Over the past three decades, more people have had skin cancer than all the other cancers combined.

#### There are 3 Different Types of Skin Cancer:

- **Basil cell carcinoma-** Most common and correlated with sun accumulation over many years, extremely common here in Cayman.
- Squamous cell carcinoma- also correlated with sun accumulation over many years.
- **Melanoma-** The most life-threatening and is believed to be a result of brief, intense exposure- a blistering sunburn.

The sun's ultraviolet (UV) radiation is both a major cause of skin cancer and the best natural source of **vitamin D**. A healthy UV exposure balance helps maintain vitamin D levels and minimises the risk of skin and eye damage, sunburn and skin cancer.

#### Sun Protection

Too much of the sun's UV can cause sunburn, skin damage, eye damage and skin cancer.

Whenever UV levels are 3 or above. It is important to use a combination of 5 sun protection measures.

### 1. Slip on Sun-Protective Clothing



Cover as much of the child's skin as possible with cool, loose fitting clothes. The higher the UV protection (UPT) of the fabric, the greater the protection provided. If possible choose fabrics that are at least UPF 15 (good protection), but preferably UPF50 (excellent protection).

# 2. Slop on SPF30 or Higher, Broad-Spectrum, Water-Resistant Sunscreen.

Apply SPF30 or higher, broad-spectrum this indicates that a product is deemed effective against both UVB (Skin-burning) and UVA (skin-aging rays). The sunscreen needs to be water resistant sunscreen and it needs to be applied on all parts of exposed skin. Look for sunscreens that have been dermatologically tested for sensitive skin.

# 3. Slap on a hat



Our Cayman Prep tilly hats are perfect to protect children from our intense sun here in Cayman. Persistence is needed to teach children that a hat is part of their outside routine!

### 4. Seek Shade



Research has shown that natural outdoor play spaces with shrubs, uneven ground and low reflectance surfaces are not only better for sun protection but also stimulate more physical activity.

Shade alone can reduce overall exposure to UV radiation by about 75 %.

or best protection, choose shade that has extensive overhead and side cover and is positioned away from highly reflective surfaces.

even in the shade, the sun's UV can reflect from surfaces such as sand and concrete, so always use a hat, clothing, sunscreen and sunglasses. The shade moves with the sun, so follow the shade.

### 5. Slide on Sunglasses

If practical, encourage children to wear sunglasses when playing outdoors. Sunglasses and a hat provide very good eye protection. Look for sunglasses that:

- Are a close fitting, wrap-around style that covers as much of the eye area as possible.
- Are preferably marked eye protection factor (EPF) 10.
- Have soft elastic to keep them in place.

#### Sunscreen Tips:

- Test the sunscreen on a small area of baby/child's skin to check for any skin reactions.
- Use an SPF30 or higher, broad-spectrum, water-resistant sunscreen.
- Apply the sunscreen 20 minutes before going outside. When outdoors reapply every 2 hrs to all exposed skin, and after perspiring or swimming.

#### What Products are Best?

There are two basic kinds of sunscreens: chemical and mineral. Chemical sunscreens (containing the chemicals avobenzone, oxybenzone) work by absorbing UV rays while mineral sunscreens (containing titanium dioxide, zinc oxide) work by deflecting them. Following review of the literature and according and several research studies mineral sunscreens seem to rate better than chemical sunscreens for safety, are less toxic and they don't destroy our beautiful coral reefs.

The most common sunscreens on the market contain chemical filters. These products typically include a combination of two to six of these active ingredients: **oxybenzone**, **avobenzone**, **octisalate**, **octocrylene**, **homosalate** and **octinoxate**. EWG recommends that consumers avoid sunscreens with **oxybenzone**, as it is a hormone disrupter and skin allergen.

There has been a lot of discussion about the toxicity of certain chemicals in sunscreen. However, to date scientific evidence supports the benefits of always using sunscreen in the prevention of skin cancer and sunburn. This benefit outweighs any proven claims of toxicity or human health hazard from ingredients in sunscreens. A useful resource for sunscreens ratings include, the Environmental Working Group, Safe Mama and consumer reports for all rankings on sunscreens.

Parents please do your own research and choose a sunscreen that you are comfortable using on you and your family! Always be vigilant and see a dermatologist if you notice any skin changes.

#### Vitamin D

Too little UV from the sun can lead to low vitamin D levels. Vitamin D regulates calcium levels in the blood. It is also necessary for development and maintenance of healthy bones, muscles and teeth and for general health. Most vitamin D is made in the skin from exposure to the sun's UV. There are also very small amounts of vitamin D that occur naturally in fish and eggs. The body can only absorb a certain amount of vitamin D at a time. Prolonged sun exposure does not cause vitamin D to increase. Short periods of sun exposure may be more efficient at producing vitamin D. It has been suggested by some vitamin D researchers, for example, that approximately 5-30 mins of sun exposure between 10 am and 3pm at least twice a week to the face, arms, legs, or back usually leads to sufficient vitamin synthesis.

#### **UV** Index

The ultraviolet index is an international standard measurement of the strength of sunburn-producing ultraviolet (UV) radiation at a particular place and time. You can see sunlight and feel heat (infrared radiation), but you cannot see or feel UV radiation. It can be damaging to skin on cool, cloudy days and hot, sunny days. UV radiation comes directly from the sun. It can also be scattered in the air and reflected in the air and reflected by surfaces such as buildings, concrete, water and sand. In Cayman we have UV levels reaching above 11 which is extremely high so it's important and necessary to use a combination of sun protection measures to keep our children protected during outdoor play. Slip, slap, slop, seek and slide is necessary! The daily sun protection forecast is available free via the SunSmart app and Bureau of Meteorology websites.

#### Role modelling

Children often copy those around them and learn by imitation. Research shows that if adults adopt sun protection behaviours, the children in their care are more likely to do the same.