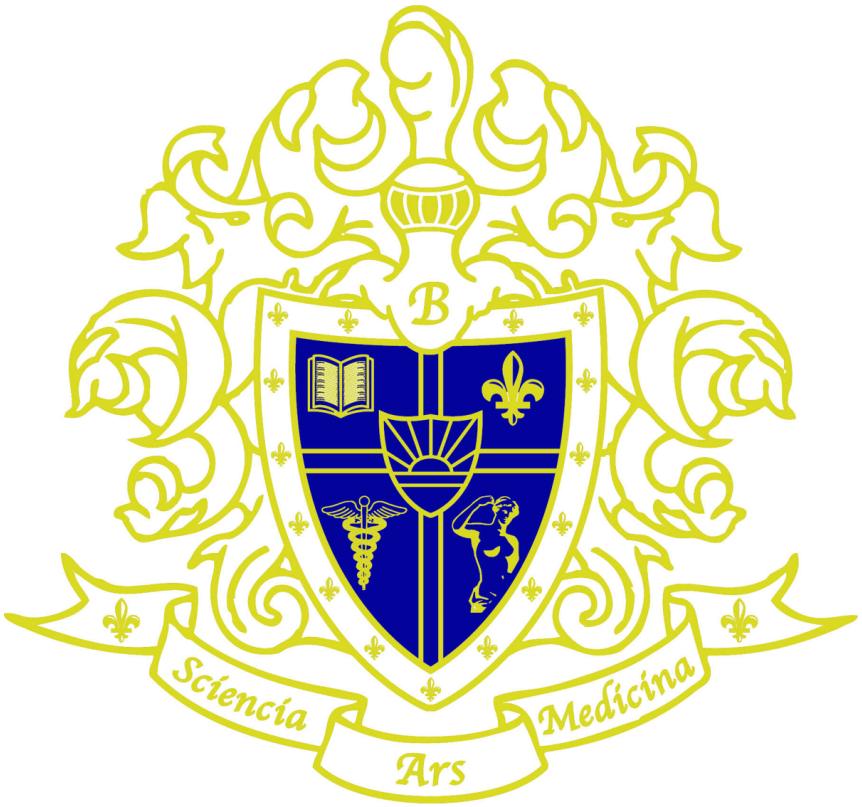
SUMMER SUN TIPS



Beeson Cosmetic Surgery

Sunscreens

Sunlight is beneficial and life giving. It has always been advocated and recognized as a tonic for the psyche. A "healthy-looking tan" has long been considered aesthetically pleasing. In addition, sunlight stimulates the body to manufacture vitamin D. While we cannot avoid the sun, we must realize that exposure can be damaging to our skin. The damaging effects of sunlight are cumulative. The early effects are sunburns. The later effects can be advanced skin aging and skin cancer. Recent medical studies have shown an alarming increase in the number of skin cancers in young adults. This points out the importance of sun protection for all age groups-not just elderly. Sunlight consists of two types of harmful ultraviolet rays- ultraviolet A (UVA) and ultraviolet B (UVB). UVA rays can pass through window glass and are able to penetrate deep into the dermis. UVA rays can cause suppression of the immune system, which interferes with the immune system's ability to protect you against the development and spread of skin cancer. UVA exposure also is known to lead to signs of premature aging of the skin such as wrinkling and age spots. The UVB rays are the sun's burning rays and are the primary cause of sunburn. They can be blocked by window glass. A good way to remember it is that UVA rays are the aging rays and UVB are the burning rays. Excessive exposure to both forms can lead to the development of skin cancer. The Food and Drug Administration (FDA) has declared ultraviolet (UV) radiation from the sun and artificial sources, such as tanning beds and sun lamps, as a known carcinogen (cancer-causing substance).

Natural Defenses of Skin Against Sunlight

One of the important functions of our skin is to protect internal organs and the inner layers of the skin itself from damaging solar radiation. The skin has five defense mechanisms, which it uses. There are biological and consist of complex chemical reactions in the dermis which protect skin from radiation damage, and two have to do with the skin texture and appearance. With increased sun exposure, the top layer of the skin (stratum conium) thickens. Sometimes this results in the buildup of scaly, crusting areas called keratosis or "age spots". The most important defense mechanism of the skin is a buildup of melanin pigment, which absorbs and filters ultraviolet radiation, i.e. "a tan". In fair skinned individuals, young children, and the elderly, these natural defenses may be inadequate and artificial defenses such as topical sunscreens are needed.

Skin Types

Your personal history of sun burning or tanning for the past few years following the first 45-60 minutes of exposure to mid-day summer sun is helpful in classifying you into one of the six sun-reactive skin types [I-VI].

Type I skin is white in color and is very sensitive to the sun. This individual always burns and never tans.

Type II skin is white in color and is very sensitive to the sun. This individual burns easily and minimally tans.

Type III skin is white in color and is sensitive to the sun. This individual burns moderately and tans gradually (light brown)

Type IV skin is light brown in color and is moderately sensitive to the sun. This individual burns minimally and tans well (moderate brown)

Type V skin is brown in color and is minimally sensitive to the sun. This individual rarely burns and tans profusely (dark brown).

Types VI skin is chocolate brown or black in color and is insensitive to the sun. This individual never burns and is deeply pigmented [black].

Sun Protection Factor (SPF) of Sunscreens

SPF stands for sun protection factor. Sunscreens are rated or classified by the strength of their SPF. The SPF numbers on the packaging can range from as low as 2 to greater than 50. These numbers refer to the product's ability to deflect the sun's burning rays (UVB). The sunscreen SPF rating is calculated by comparing the amount of time needed to produce sunburn on sunscreen-protected skin to the amount of time needed to cause sunburn on unprotected skin.

On June 14, 2011, United States Food and Drug Administration [FDA] issued new regulations for labeling sunscreens which will take effect in 2012. Previously, sunscreens contained a Sun Protection Factor rating [SPF value] which measured only UVB protection. The new labeling requirements are for a broad-spectrum SPF value that will cover both UVB and UVA protection. Sunscreens that past designated test levels for both UVA in UVB protection we will be able to use a label "Broad-Spectrum]. These sunscreens will need to have an SPF value of fifteen or hire and will be older claim that they reduce the risk of skin cancer and early aging when used as directed. Sunscreens with an SPF rating of 2-14 are not viewed as being "broad-spectrum" and can claim only sunburned protection. Sunscreens will no longer be able to claim that they are "waterproof" or "sweat proof". They are only able to show water resistance claims for forty minutes or eighty minutes if they are able to pass certain standardized test. No sunscreen label can claim provide some protection for more than two hours without reapplication. The highest SPF rating it can be listed on the label is SPF 50+ per the FDA reaffirmed that there were no safety issues with nanoscale titanium dioxide and zinc oxide as active sun screen ingredients.

Topical Sunscreens and Sun Blocks

Topical sunscreens are available in the form of clear or milky lotions, gels, creams or ointments. Most of them are colorless, non-irritating, and non-staining. Many contain P-amino benzoic acid [PABA]. While PABA is an excellent sunscreen, it can be irritating to the skin for some people. Patients with hypersensitivity to hair dyes, sulfonamide antibiotics, and those taking certain antihypertensive or diuretic drugs [blood pressure medicine] should not use sunscreens containing PABA in order to avoid possible skin irritation [photo contact or eczematic dermatitis].

A second type of topical sunscreen is opaque and serves to reflect and block penetration of the sun's rays. They adhere well to the skin and are not easily washed off after the stress of sweating or swimming. Zinc oxide is an example of an opaque sunscreen. They are applied as a thick layer to the skin and are often white or colored. There are new colorless or transparent formulations currently available. However, many patients find this type of sunscreen cosmetically unacceptable and massy to use. However, they are excellent for fair-skinned individuals who are constantly exposed to the sun. It is advisable to apply opaque sunscreens to areas such as the bridge of the nose, shoulders, lips and ears when long duration of sun exposure is anticipated.

How to Apply Sunscreens

The type of sunscreen we used and how use it can vary from person to person. Many find it preferable to apply the sunscreen at night for several days prior to periods of increased sun exposure. This allows the sunscreen to penetrate into the skin more effectively. The sunscreen should again be applied 30-40 minutes before actual sun exposure. It should then be reapplied every two hours and after swimming or vigorous physical activity where there is

profuse sweating. Even so-called "water-resistant" sunscreens may lose their effectiveness after 40 minutes in the water. Sunscreens rub off as well as wash off, so if you've towel-dried, reapply sunscreen for continued protection. Don't forget that lips get sunburned, too, so apply a lip balm that contains sunscreen with an SPF of 30 or higher.

It is important to apply the proper amount of sunscreen. A "shot glass size" of sunscreen is needed to provide proper coverage for the average individual. Studies have shown that most individuals apply less than 20% the amount of sunscreen that is needed for proper protection. Alcoholic lotions of sunscreens and gels are not recommended for children under twelve years of age or those individuals who have sensitive skin.

Ingredients to look for on the sunscreen label to ensure broad-spectrum UV coverage include:

- Avobenzone
- Cinoxate
- Ecamsule
- Menthyl anthranilate
- Mexoryl XL
- Octocryene
- Octyl methoxycinnamate
- Octyl salicylate
- Oxybenzone
- Sulisobenzone
- Titanium dioxide
- Zinc oxide

Tips for Smart Sunning

Minimize Exposure: The effects of the sun are greatest between 10:00 AM and 2:00 PM. Therefore, plan your outdoor activities in the morning or late afternoon. Be sure to wear a hat, polarized sun glasses to protect your eyes and protective clothing while outdoors.

Beware of Reflective Surfaces: Sand and water can reflect from 10% to more than 50% of the sun's rays.

Sun Tips

- Wear protective clothing when going outside [clothing with UPF 50].
- Wear a hat.
- Use polarized sunglasses to protect your eyes. Consider wrap-around sunglasses that cover the crow's feet areas.
- Avoid outdoor activities during the peak sun exposure hours of 10:00 AM to 3:00 PM
- Rinse your skin after swimming in pools as chlorine can dry out and irritate your skin
- Spritz your clothes with your fragrance rather than your skin. Psoralens in perfume can permanently stain your skin when they react with the sun.
- Increase hydration both inside and out. Drink water to keep your body hydrated and use a water spritz to moisturize your skin externally.
- Do not apply self-paced tanner immediately before going outdoors. DHA [the ingredient responsible for the faux glow] has been shown to create free radicals when exposed to UV light. It may be preferable to able at night.

If you obtain too much Sun Exposure

- Apply a lotion with aloe to soothe and hydrate the sun damaged skin
- Drink green tea and take two 500 mg tablets of vitamin C to help reduce the free radical damage to your skin
- Take ibuprofen every 4 hours to reduce discomfort