# **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.

