

The relationship between the sun and wrinkles

Many may not be aware, but the sun and wrinkles are closely related with each other and reading further will help you piece together the relationship between the sun and wrinkles.

It is a fact that exposure to ultraviolet light, whether UVA or UVB, that is derived from sunlight, accounts for 90% of the symptoms of premature skin aging.

Since most of the photoaging effects occur by the age of 20, the amount of damage to the skin caused by the sun is determined by the total lifetime amount of radiation exposure and the pigment protection.

Among the changes in the epidermis caused by continued exposure to the sun include, many harmful, thinning of the epidermis and the growth of skin lesions such as actinic keratoses, squamous cell carcinomas and basal cell carcinomas,

Prolonged exposure to the sun cause collagen in the dermis to break down at a higher rate than just chronologic aging.

Collagen fibers get damaged by sunlight and causes the accumulation of abnormal elastin and when this sun-induced elastin accumulates, enzymes called metalloproteinases are produced in large quantities.

Under normal conditions, metalloproteinases are responsible for fixing sun-injured skin by manufacturing and reforming collagen.

However, this process does not always work well and some of the metalloproteinases actually break down collagen, resulting to the formation of disorganized collagen fibers known as solar scars.

And when the skin repeats this flawed rebuilding process, wrinkles develop.

As the sun continues to be the principal suspect in causing wrinkles, the most important skin-care product available to prevent wrinkles is sunscreen, but most people do not use sunscreen correctly.

It would be best to consider the important factors with sunscreen use, especially with the spectrum of UV radiation absorbed, the amount of sunscreen applied, and the frequency of application.

As mentioned earlier, the sun gives off ultraviolet (UV) rays that can be divided into categories based on the wavelength.

UVC radiation is absorbed by the atmosphere and does not cause skin damage, while UVB radiation affects the outer layer of skin, the epidermis, and is the primary agent responsible for sunburns.

UVB does not penetrate glass and the intensity of UVB radiation depends on the time of day and season.

UVA radiation, on the other hand, penetrates deep into the skin and works more efficiently and cannot also be filtered by glass, but overexposure to UVA can also be dangerous.

The intensity of UVA radiation is more constant than UVB without the variations during the day and throughout the year.

Regardless of their wavelengths, both UVA and UVB radiation can cause wrinkles as it breaks down collagen, creating free radicals, and inhibiting natural repair mechanisms of the skin.

A classification system of sun-sensitivity is the Skin Phototype (SPT) classification, which is being used to determine the potency and spectrum of protection that sunscreen formulations help protect from these radiation, as well as inhibit, if not minimize, wrinkles.

People with skin types I and II are at the highest risk for photoaging effects including wrinkles and skin cancer, thus the proper use of sunscreen to block both UVA and UVB radiation is an important in the battle against wrinkles.

As promised, the relationship between the sun and wrinkles has been established and the age old adage still holds true that says, an ounce of prevention is better than a pound of cure.