



## Antioxidant Line

Sun protection must be considered an essential element of every Skin Care Management System. For sunscreen to be truly efficacious, it must contain a critical balance of agents that can adequately protect the skin from damaging UVB and UVA rays through the entire UV spectrum. Protection can be greatly enhanced by the addition of topicals and antioxidants that can further protect the skin's immune function, prevent damage to DNA and further enhance photo-protection.

The Jan Marini Skin Research Antioxidant Line features state-of-the-art full-spectrum sun protection to cover both UVA and UVB rays. In addition, our unique sun protection formulas combine cutting-edge microscopic sponge encapsulation technology, powerful antioxidant components and a superb hydrating complex for extraordinary skin protection and rejuvenation.

We must continually remind ourselves that skin aging is not a process associated with the chronological number of the years we have lived. More correctly, it is not the years that matter nearly as much as the skin's cumulative exposure to sunlight and other environmental factors. As much as 90% to 95% of what we perceive as inevitable aging is sun damage and it only takes casual exposure over the years to produce these changes. Most of this damage occurs before the age of 10 and at least 80% before the age of 18. It takes 10, 20, and even 30 years and longer for this damage to show up meaning sun protection today helps prevent signs of aging in the future.

As the skin is subjected to these assaults, it loses its ability to reproduce exact copies of healthy cells, prevent the breakdown of collagen and elastin, repair tissue rapidly, and prevent the attack of lipids in cell membranes. Finally, the skin gradually breaks down, in general, because of free radical damage.

It has only been within the last 100 years that we have chosen to drastically increase our sun exposure, common after tanning became fashionable in the 1920s. The CDC reports that skin cancer is the most common form of cancer in the U.S. Malignant melanoma, the most deadly and often fatal form of skin cancer, is the second most frequently reported cancer in women in their 20's, and

third only to breast cancer and thyroid cancer for women in their 30's. Malignant melanoma is one of the few forms of cancer actually on the rise while other forms of cancer are starting to show a decline in occurrence. Ninety percent of all melanomas are UV sun exposure related.

Ultraviolet light is split into three bands - UVA, UVB and UVC. UVA is the band of light closest to visible light and UVC is furthest from visible light. It is critically important for a sunscreen to not only protect against UVB, but also protect against UVA. UVB is the range of UV damage that leads to sunburns and is the band of light tested for SPF. UVA protection is closer to visible light and is not included in SPF ratings. This means a high SPF sunscreen may not provide protection against UVA. Light exposure in the UVA range causes free radical oxygen formation leading to inflammation, sun damage and increases risk for certain kinds of cancer. UVC protection is not necessary as earth's atmosphere is extremely good at stopping this light, providing protection.

Jan Marini's antioxidant sunscreen protects against both UVA and UVB providing full spectrum protection. Additionally it contains antioxidants to help the skin protect itself from damage. No matter what the SPF, some light is going to reach the skin and potentially create free radicals. Antioxidants have been shown to scavenge free-radical oxygen molecules thus protecting the body from their damaging effects.