

See what you *can't* see in the mirror



Standard Photo

UV Photo

UV photography provides an effective way to show the full extent of the sun's impact on their skin. The selective absorption of UV light by epidermal melanin makes it easy to capture an image of the mottled hyperpigmentation that is characteristic of photodamage. The results can often be quite shocking for patients, heightening their awareness of the need for sun protection and raising a desire for treatment.

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<http://www.skincarephysicians.com/agingskinnet/BasicFacts.html>

What is Aging Skin?

We begin to age the moment we are born, and throughout our lives the effects of aging are evident in our bodies. Up to about age 20 years, the most visually prominent effects of aging are in growth and development. Beginning in our 20s, the effects of aging begin to be visible in the skin.

Genetically programmed chronologic aging causes biochemical changes in collagen and elastin, the connective tissues that give skin its firmness and elasticity. The genetic program for each person is different, so the loss of skin firmness and elasticity occurs at different rates and different times in one individual as compared with another.

As skin becomes less elastic, it also becomes drier. Underlying fat padding begins to disappear. With loss of underlying support by fat padding and connective tissues, the skin begins to sag. It looks less supple, and wrinkles form. The skin may be itchy with increased dryness. A cut may heal more slowly.

Simultaneously with genetically programmed aging, the process of [photoaging](#) may be taking place. Photoaging is the effect of chronic and excessive sun exposure on the skin. Cigarette smoking also contributes to aging effects by the biochemical changes it brings about in skin tissues.

Photoaging interacts with chronologic aging and may appear to hasten the process of chronologic aging. In fact, photoaging may be responsible for the majority of age-associated changes in the skin's appearance: mottled pigmentation, surface roughness, fine wrinkles that disappear when stretched, "age" or "liver" spots ([lentigines](#)) on the hands, and dilated blood vessels. Chronic sun exposure is a major risk factor for skin cancers—[basal cell carcinoma](#), [squamous cell carcinoma](#) and [melanoma](#).

The effects of photoaging accumulate over years of chronic sun exposure. At first, the effects may be invisible to the casual glance, even while they are on the increase. Photos taken with ultraviolet light will dramatically reveal the accumulative effects of chronic sun exposure. In the following series of photos the accumulative effects of chronic sun exposure are clearly seen. In

each set of photos, the two pictures on the left were taken in ordinary light, the picture on the right in ultraviolet light:



At age 18 months, sun damage is not yet apparent.



At age 4 years, early sun damage is evident in freckling across the nose and cheeks.



At age 17 years, a teen-ager has significant sun damage due to deliberate tanning on the beach or in tanning salons



In a woman 37 years old, subsurface sun damage is clearly visible in ultraviolet light



At age 52 years a woman has "old-looking" skin in visible light and significantly sun-damaged skin in ultraviolet light



A 64-year-old beach community resident has skin that chronicles a lifetime of chronic sun exposure. The skin is dry, inelastic, heavily mottled, with wrinkles

(Photos provided courtesy of David H. McDaniel, M.D.)

As skin ages and accumulates sun damage, a number of lesions (sores or spots on the skin) become more common. These include:

- **"Age" and "liver" spots (lentigines)**—flat, brown areas with rounded edges usually found on the face, hands, back and feet. They are age-related and photoaging-related, and have nothing to do with the liver. While they are unsightly, they are not dangerous. However, a large, flat, dark area with irregular borders should be examined by a dermatologist to make sure it is not melanoma.
- **Actinic keratoses**—thick, warty, rough, reddish growths on sun-exposed areas of the skin. They may be a precursor to squamous cell carcinoma.
- **Seborrheic keratoses**—brown or black raised spots, or wart-like growths that appear to be stuck to the skin's surface. They are not cancerous or precancerous, and are easily removed.
- **Cherry angiomas**—harmless, small, bright red domes created by dilated blood vessels. They occur in more than 85% of middle-aged to elderly people, usually on the body. A dermatologist can remove them.
- **Telangiectasias ("broken capillaries")**—dilated facial blood vessels, usually related to sun damage. A dermatologist can treat them.
- **Bruising**—often a result of skin having lost its fat padding and becoming more susceptible to injury. Some drugs may cause bleeding under the skin. Bruises that persist should be examined by a dermatologist.
- **Wrinkles**—changes in the elastic tissue from exposure to sunlight, effects of gravity, or motion factors in the skin. A dermatologist can treat wrinkles with dermatologic surgery.
- Skin diseases more common in older people include shingles, leg ulcers, and seborrheic dermatitis.

Is That Lesion a Symptom of Something Dangerous?

Symptom	May Indicate
A scaly red spot	Skin cancer
A change in color, shape or size of a mole	
Any new skin growth	
Bleeding in a mole or other growth	
Excessive dryness and itching that doesn't respond to moisturizers	Dermatitis, psoriasis, other skin disease
Vague or sharp local pain or headache, followed by formation of blisters on the skin	Shingles
Bulging or tender veins in the legs	Varicose veins, associated with spider veins
Any sore on any part of the body that fails to heal	Skin cancer, diabetes, circulatory problems

Prevention of Photoaging

While you can't slow down or stop the effects of chronologic aging, you can do something to inhibit the skin damage caused by excessive and chronic sun exposure. To avoid skin damage from sun exposure, always use a sunscreen with an SPF rating of 15 or higher, a hat with a brim, and protective covering of arms and legs. Don't deliberately sunbathe, and limit sun exposure during the 10 AM to 4 PM hours of greatest sun intensity. Avoid deliberate tanning in tanning salons or under sun lamps. If your skin is already sun damaged you can still benefit from these measures. The skin damage caused by long-term cigarette smoke is avoided by smoking cessation.



A suggestion from your SHAKLEE Distributor

SHAKLEE Corporation provides a line of high-quality skin care products with an unprecedented seven patents, including three for VITAL REPAIR+. The line is called Enfuselle.

Enfuselle products have been clinically tested at the independent laboratories of the California Skin Research Institute for safety and performance. Patented formula Enfuselle Vital Repair+ exhibits significant antioxidant activity in cell cultures of human skin cells exposed to ultraviolet (UV) light. Enfuselle products containing sunscreen agents provide waterproof protection against UV light. Vita Repair+ in Enfuselle formulations provides antioxidant activity when applied to human skin.

[Enfuselle Time Repair A.M.® SPF 15](#), [Enfuselle C+E Repair P.M.™](#), and [Enfuselle Moisturizer](#) each dramatically improve the skin by increasing skin resilience, reducing the appearance of fine lines and wrinkles, and significantly improving other critical properties of all skin types.

Likewise, [Enfuselle Calming Complex](#) dramatically reduces fine lines and wrinkles and significantly improves the skin.

[Enfuselle Eye Treatment](#) dramatically improves the texture and resilience of eye-area skin.

[Lip Treatment SPF 15](#) protects and heals.

[Enfuselle Infusing Mineral Masque](#) dramatically improves the texture of the skin in 10 minutes.

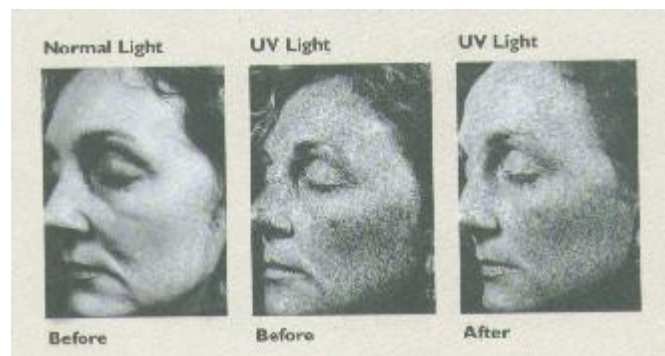
[Refining Polisher](#) rejuvenates, exfoliates, and protects from head to toe.

[Enfuselle Shower Gel](#) rejuvenates with essential sea minerals, hydrates with sea-botanical extracts, and protects with triple patented Vital-Repair+®.

[Enfuselle Hand & Body Lotion](#) is clinically proven to provide an instant moisture surge and continued release for up to six hours. Patented Vital-Repair+® helps reverse UV-induced signs of aging, while pro-vitamin B5 strengthens nails. Added bonus: a botanical prebiotic that creates a healthy environment on the skin to strengthen its natural protective system.

[Acne Clarifying Complex™](#) uses naturally derived salicylic acid to penetrate pores, clearing up blemishes and protecting against future breakouts. Plus, patented Acne Clarifying Complex promotes a healthy oil/moisture balance so, over time, skin looks cleaner, clearer, and smoother. Even if you don't experience acne, it helps to control shine and provide a matte finish. Ideal for both teens and adults, it contains targeted botanicals, including extracts of licorice, burdock, watercress, tea tree oil, and manuka oil, as well as vitamins B6, A, and E, and zinc gluconate.

[Enfutox™ Instant Firming Serum](#) is a toxin-free, pain-free, and worry-free approach to visibly improving your skin's quality and appearance. With continued daily use, the peptides in this scientifically advanced formula help give you younger-looking skin. And to slow the visible signs of aging and help the skin fight free radical damage, it also has triple-patented, antioxidant-rich Vital Repair®.



To reveal the sun's true damage, we took these photos with normal and UV light. After the subject used the Enfuselle skin care system for three months, the sun's damaging effects and visible sunspots were significantly minimized. The Enfuselle skin care system includes 3-patented VITAL REPAIR +.

The fairer we are, the higher the risk from even minimal exposure. Enfuselle products heal and repair the skin by feeding and nourishing it with safe plant nutrients. Regular use helps to reverse the skin damage that often is not apparent during the early stages. See for yourself what can happen when these are used at any age!

For more information: