

A final component of the dermis is *melanin*. (Not to be confused with the hormone *melatonin*, the words share the Greek root for black or dark, *mela-*, also in melancholy.) Melanin is a black pigment which is common to all forms of animal life. It accounts for dark hair, skin, feathers, scales, etc. Melanin is made by cells called melanocytes and secreted into the lower layers of the epidermis and hair follicles. The larger and more productive the melanocytes, the darker our skin and hair.

The skin also regulates our temperature. It retains our body heat and cools us down by means of sweat glands when signaled by either external or internal temperature. (For example, exercise can raise our internal temperature as much as seven degrees.) Our skin can also display our emotional temperature by blushing, turning red with anger, pale with fright, or wet with anxiety. On the other hand, our physical well-being is registered with a healthy glow.

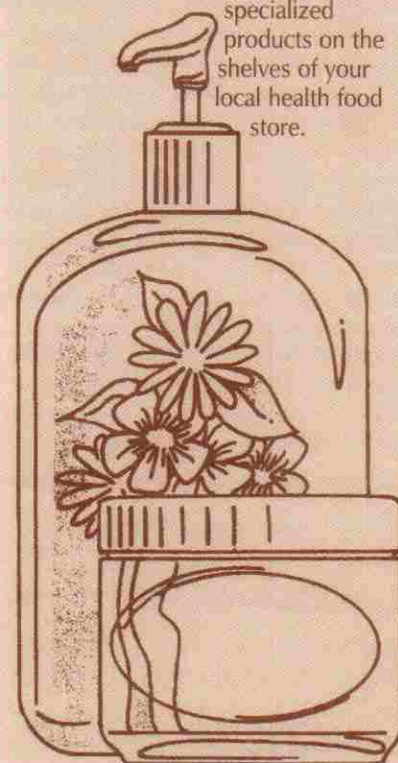
A word about *retinol*

The next big skin care ingredient is *retinol*.

An OTC cousin of Retin-A, the word is that it's the most effective skin ingredient you can buy without a prescription. Retin-A (short for the Rx product retinoic acid) has been on the market for over 20 years and was originally developed as an acne remedy. It restores radiance, retextures, gets rid of mottling, and removes precancerous lesions. After 8-12 weeks, it increases cell turnover. This allows better penetration for other beneficial ingredients like antioxidants and AHAs.

The most important thing about Retin-A is that it is the only cosmetic medication that works on a cellular level. It actually renews cells and normalizes the behavior of injured and sun damaged DNA. This is something even the deepest peel can't achieve. Albert Kligman, PhD, the "father of Retin-A," sang the praises of retinol in *W*. In the same article, Rhoda S. Narins, MD, associate clinical professor of dermatology at NYU Medical Center, commented, "There haven't been any long-term studies on retinol, but in the short term, it seems to effect the same change in the skin as Retin-A."

Found in only a few natural lines as yet, retinol is beginning to appear in specialized products on the shelves of your local health food store.



Be Skinny
 and use sunscreen
 liquid formulations
 over natural products
 water
 daily)
 elements
 with your skin
 smoke

filtering out UVB, the burning or tanning rays. SPF 15 allows us to be in the sun 15 times as long without burning as being out bare-skinned, and SPF 30, thirty times. However, SPF 30 does not block twice as many ultraviolet B rays. In fact, SPF is about the percent of rays that can still affect our skin. With SPF 15, six percent UVB still gets through. With SPF 30, that number is three percent. Although the comparison between blocking 94 and 97 percent of the UVB rays seems insignificant, it is not insignificant to your skin. Tanning and burning damage are cumulative. Furthermore, the worst damage comes from UVA, and mounting evidence shows that major damage occurs long before a burn appears.

Sunscreen labeled "broad spectrum" filters both types of rays. At this time, the only full spectrum ingredients approved by the FDA are zinc oxide, titanium dioxide, and avobenzone (also called Parsol 1789). In the personal care industry, zinc and titanium are known as "earth pigments". Zinc oxide is

currently considered to give the most complete protection. Plus, zinc soothes the skin. (It is the active ingredient in most diaper rash ointments.) If zinc oxide makes you think "Yuck," you should know there have been some changes. Recent developments have resulted in a technique for pulverizing and micronizing earth pigments. The result is tiny particles. When they are added to an emulsion, the resulting product has a much lighter feel and is easier to apply.

Here's some news. Within two years, new FDA regulations will bring all sunscreens under the rubric of OTC, over-the-counter medications. The terms *sunblock* and *waterproof* will no longer be used. All products will be referred to as *sunscreens*, and the terms *water resistant* or *very water resistant* will be used. In addition, all products containing an SPF higher than 30 (e.g., SPF 45) will be denoted as SPF 30+. Since there is truly no such thing as *sunblock* nor *waterproof*, the new terminology actually provides a more accurate product description.

In future, we can also look for creamier, more efficient sunscreens at lower prices. One of the reasons for increased effectiveness will be the addition of antioxidants and other nutrients. Andrew Scheman, MD, of Northwestern University Medical Center in Chicago, has reported that current necessary components of sunscreens render the vitamins, antioxidants, and AHA ingredients added to them chemically unstable. He notes, "When chemists solve that problem, we may have sunscreens that truly can do two jobs at once: block out the sun and fight free radicals." **The experts also predict that someday we'll have easy-to-swallow sunblock in a pill form that we can take along with our daily supplements.**

In the meantime, other personal care products do deliver the goods directly through the skin. As well, the fresh produce we eat and our daily antioxidant supplements do their bit to help protect our skin from damage and to support skin structure and function from the inside.

For the Purists

A skin care regime based on essential oils is purest, most natural of all. Complete information on doing this, no matter what your skin type, is available in *Essential Beauty* by Patricia Betty with David Andrusia. Owner of her own skin care and aromatherapy studio in New York, Patricia Betty shares her experience and that of her clients. Published by Keats (2000), the cost is \$16.95.

