



Women's Resource Center  
at MountainView Regional Medical Center

## Health**Tips:** New Options for Smoothing Wrinkles

Mirror, mirror on the wall....Although most women have no illusions about being the fairest of them all, it's normal enough to experience a little angst as wrinkles begin to make their mark with passing years. Fortunately there are many new products for home use that can help erase wrinkles and other skin problems as well as a new generation of high-tech options at your dermatologist's office that don't require cutting or harsh lasers.

Although we tend to associate lines and wrinkles with aging, the damage caused by tanning and sun exposure begins to show up as early as the 20s, when turnover of skin cells begins to slow down. By the 30s the collagen and elastin, which help keep skin plumped up and smooth, have begun to degenerate. As a result, 30-somethings find themselves beginning to agonize over fine lines, dark spots and enlarged pores.

Compare the skin on the underside of your arms or breasts with the skin on your hands and face. All of the skin is the same age, yet the color and texture are remarkably different. Some skin changes are the result of aging, but many of the wrinkles and lines come from sun damage, which is compounded for women who smoke. So the first steps for women of any age are to use a sunscreen every day and to avoid smoking.

Collagen, a protein found in joints and ligaments throughout the body, is the framework that keeps our inner layers of skin firm. Many skin care products and procedures available from dermatologists are designed to stimulate collagen production and firm up supporting structures in skin layers. Others replenish vitamins or other skin nutrients.

### **Home Remedies**

Since the advent of alpha hydroxy acids a few years ago, skin creams and lotions, shown by controlled studies to improve skin texture and quality, have flooded the market. Some of the active ingredients proven to affect the biological functioning of skin are listed below.

Retinol, a vitamin A derivative, is available in both prescription and over-the-counter products. It promotes faster cell turnover and can markedly improve fine lines and acne. Because they increase sensitivity to sun exposure, retinol-based products are usually applied in the evening and it's essential to always use a sunscreen the next morning.

Pentapeptides, found in amino acids in the skin and now incorporated into skin creams and lotions, were shown in a study conducted by the National Institutes of Health to slow collagen breakdown and increase its production.

Alpha and beta hydroxy acids are found in countless face and body washes, lotions and gels.

Alpha hydroxy acids have either glycolic or lactic acid as their active ingredient and come in strengths ranging from 10 percent to 5 percent. Beta hydroxy acids use salicylic acid in strengths ranging from 2 percent to .5 percent. These acids work as exfoliants, loosening the bonds that stick dead cells to the surface of the skin.

Chemical peels that can be bought for at-home use work in essentially the same way as AHAs and BHAs, but they're more potent so give quicker, more dramatic results. For very rough, dull skin, an at-home peel can give good results.

Coenzyme Q-10, found in a number of over-the-counter products, is a naturally occurring enzyme found in the body's cells. With aging, cells tend to lose Q-10 and to be more prone to developing fine lines and wrinkles. Using a cream with coenzyme Q-10 will reduce wrinkles and increase skin elasticity.

Copper peptides are showing up in a number of cosmetic products designed to decrease wrinkles and increase skin firmness. Copper peptides speed the formation of collagen and elastin.

### **A Visit to Your Dermatologist**

Dermatologists and cosmetic surgeons have an expanding array of options for sagging and wrinkled skin.

Botox and other fillers can be injected to plump up wrinkles and fill lines. A toxin that temporarily paralyzes facial muscles, Botox works well on frown lines and crow's feet, but can't be used on smile lines and creases around the mouth.

A number of dermal fillers are available that can be injected to plump up the skin from within. Materials used include cow collagen, liquid silicone and plastic microbeads.

Fillers sold under the names CosmoDerm and CosmoPlast are made from human cells grown in a lab and are being used successfully. Treatments last from four to six months and cost about \$600.

Hyaluronic acid, sold in a synthetic version under the trade name Restylane, has been well accepted for its ability to keep skin looking full and supple. Treatments last six months to one year and cost from \$550 to \$600.

Carbon dioxide laser treatments that remove the top layer of skin and require a 7- to 10-day recovery are now often replaced with newer lasers able to work beneath the skin surface to create smoother, tighter skin with little pain and no unpleasant side effects.

By working at a deeper level, the Smoothbeam laser and others like it, are able to stimulate collagen production with little pain and only a bit of redness for a few hours after the procedure.

The new lasers can reduce wrinkles by 25 to 75 percent after three to five sessions at a cost of \$300 to \$500 per session for the area treated.

Radio waves are also being used to penetrate beneath the skin's surface to contract and tighten skin.

ThermaCool technology can increase skin firmness by 25 to 50 percent for up to two years at a cost of between \$1000 and \$2000.

Dermatologists also offer microdermabrasion and chemical peels at varying strengths to treat conditions ranging from long-term sun damage, wrinkles and pre-cancerous cells. A light peel can be repeated every six weeks or so but the effects of medium and deep peels, which leave skin red for up to three months, can last for months or even years.

Dermatologists and cosmetic surgeons have a wealth of offerings but any woman considering a procedure should recognize that complications can and do occur. Make it your job to be well-informed about the procedure, any possible risks, what level of pain to expect and how you will look and feel in the days and weeks to follow. For many procedures the skill of the physician may affect your results, so choose someone with a high level of experience and expertise. It's your face and in most cases the procedure is elective.

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**Smoke Gets in Your Skin**

Smoking is as hard on the outside of your body as it is on your heart and lungs. Next to excessive sun exposure, smoking is the worst thing you can do to your skin. It robs skin of oxygen and essential nutrients, plus it unleashes harmful free radicals.

The mechanics of smoking also take a toll. The pursing of lips, sucking in of cheeks and other facial moves give rise to fine lines around the mouth and eyes, and deep wrinkles in the cheeks.

[SOURCE: "Anti-Aging Tips for Wrinkles Issued from Cosmetic Surgery Group," *Medical Devices and Surgical Technology Week*, October 10, 2004]

**Peel off the Years**

Exfoliation is a natural process in which dead cells are regularly sloughed off from the epidermis to uncover smoother, newer cells underneath. But with aging, cell turnover slows and dead cells build up on the skin surface, making skin look dull and rough.

A host of products are now available, both over-the-counter and by prescription, to help speed exfoliation and bring fresher looking skin to the surface more rapidly.

Mild exfoliation will brighten skin but won't address wrinkles. Medium and deep professional peels penetrate beyond the outer layer of skin and can improve the appearance of wrinkles and lines.

## Cream Fights Cancer

A skin cream recently approved for use in Australia goes beyond beauty concerns to actually treat skin cancer. Marketed in Australia under the trade name Aldara, the cream works by activating the body's immune system to fight superficial basal cell carcinoma.

The cream was originally used to treat genital warts.

*[SOURCE: "Jan's Treatment to Give Skin Cancer A Creaming," Australasian Business Intelligence, September 3, 2004]*

## Beauty on a Budget

Many of the highly touted anti-aging skin creams come at a hefty price, especially if you buy them from cosmetic counters at upscale department stores.

But in many cases the same active ingredients can be found in less expensive versions in the aisles of your local drug store.

Pharmacists, who are knowledgeable about prescription-strength skin care products, are a good source of information on over-the-counter products and may be able to recommend a choice that will meet your needs.

## Vitamins for Your Skin

Vitamins A, C, D and E all play an important role in maintaining healthy skin and are now found in numerous skin creams and lotions.

Vitamin A is necessary for smooth, moist skin. Synthetic vitamin A compounds such as retinoids are used to treat acne, wrinkles and brown spots caused by excess sun exposure.

Vitamin C can help improve the overall tone and texture of skin making it appear smoother and more youthful.

Vitamin D is manufactured by the body in response to exposure to sunlight. Vitamin D works as an antioxidant, keeping skin cells healthy and protecting them from carcinogens.

Vitamin E also works as an antioxidant and is believed to protect skin from damage by mopping up free radicals.

*[SOURCE: Angela Dyer, "Touting Topicals: Arm Yourself with Essential Information to Look Younger, Banish Blotches, Or Wipe Out Wrinkles," Cosmetic Surgery Times, May 2003]*

## Copper Peptides Pep Up Skin

Physicians have long known about the power of copper to heal chronic wounds and ulcers. Now copper peptides are being used to treat wrinkles and fine lines as well as to help healing after laser skin resurfacing.

Studies show that copper peptides stimulate collagen formation and elastin production, the structural supports for the second layer of skin. They also show promise in decreasing skin blotchiness and increasing firmness and tone.

Copper peptides are relatively inexpensive and have the advantage of being gentle, making them a good option for those with sensitive skin who react to some of the other more irritating topical products on the market.

*[SOURCE: "GHK Copper Peptides Complex Plus Retinol Introduced for Wrinkles," Women's Health Weekly, April 15, 2004]*

## Fight Dry Winter Skin

Three of every four persons living in the northern half of the United States suffer from dry skin in the winter. A mild case can lead to itching and flaky skin, but if skin loses too much moisture, scaling and cracking can occur which can lead to irritation and possibly infection.

To treat dry skin try to increase indoor humidity, limit time in the shower or bath, use warm rather than hot water to bathe and use both a skin softener as well as a moisturizer after bathing.

*[SOURCE: Michael Greenberg et al, "Dry Skin: Common Causes," JAAPA – Journal of the American Academy of Physicians Assistants, September 2004]*