



“Wrinkles  
should merely  
indicate where  
smiles have been.”

— Mark Twain, *Following the Equator*

# Your Ultimate Guide to Wrinkles

by Charles E. Crutchfield III, M.D.

“Wrinkle” is a four-letter word, claims one of my patients. It hasn’t always had such a bad connotation. In the past, wrinkles were often called character lines. They reflected a lifetime of experience and emotions.

Today, many people seem to be conflicted about the subject. On one hand, they resent the importance our culture places on looking youthful. But with the other hand, they’re buying up so-called wrinkle creams by the boatload and organizing Botox parties.

The editors at *My Family Doctor* believe in embracing the way you look, recognizing that wrinkles are signs of a life lived. At the same time, they realize that you’re being bombarded by advertisements, friendly recommendations and all sorts of make-up-counter claims about wrinkle-related products. So they’ve asked me to present you with the facts. Do with them what you will.

## Where They Come From

Wrinkles are a result of many factors: sun exposure, facial expressions, genet-

ics, environmental pollutants such as smoking, and various lifestyle-related aspects, including sleeping on one side of the face. (Many times, patients tell me they have more pronounced lines on one side of the face than the other. When I ask which side they sleep on, they inevitably realize it’s the one with more wrinkles!)

There are essentially two types of wrinkles: those in the muscles and those in the skin.

“Dynamic wrinkles” are caused by muscle contraction. When you’re younger, you can create wrinkles by doing things like smiling or frowning your eyebrows. When you relax your face, the lines go away. Over time, though, just like a shirt lying on the ground will develop wrinkles, those facial lines tend to become more permanent.

How to prevent them, get rid of them and just plain forget about them.

“Static lines” are wrinkles associated with changes in the skin itself as it becomes wiser and more mature. Damage from things like the sun and cigarette smoke, along with unavoidable genetics and plain old aging, cause a few important wrinkle fighters to diminish over time, including collagen and elastin (proteins that provide strength and flexibility), hyaluronic acid (a gel that helps moisturize your skin) and that thin layer of fat directly beneath your skin. Add gravity into the mix, and you can see why skin really doesn’t have a choice but to wrinkle and sag.

## How to Stop Them

It’s been banged into your head for years: Wear sunscreen! But there are two tricky things about sun exposure. First, 80 percent of a person’s total life-

Hydration is key to low-key wrinkle fighting.



“Years may wrinkle the skin, but to give up enthusiasm wrinkles the soul.” —Samuel Ullman, “Youth”

time sun exposure occurs by age 18. By the time you're mature or wise enough to understand the importance of sun protection, you've already soaked up the majority of your rays!

Secondly, the sun's effects may not appear for years, but they could last a lifetime—and not just in the form of wrinkles. When I see patients with skin cancer, it's really the result of a lifetime of sun exposure, not necessarily the sun they got in the previous week or the previous summer season.

This is why it's so important for parents and grandparents to educate younger family members on the impor-

tance of proper sun protection—and to protect children if they aren't capable of understanding its importance. (By the way, this also applies to vision. Wearing sunglasses with 100-percent UVA and UVB protection from childhood on can help prevent many eye complications later in life.)

That said, you still have 20 percent of your sun exposure left after age 18, so you're not off the hook. Sunscreens I recommend for my patients include those made by Vanicream and SkinCeuticals. Many companies also design products especially for children, including Coppertone and Bullfrog.

### Banishment, Step One

Once you've got 'em, that doesn't mean you have to flaunt 'em (unless you want to). Hydration is key to low-key wrinkle fighting. It won't make a huge difference, but it has the added benefit of helping you maintain a normal skin tone and healthy appearance.

For **washing your face**, I recommend using a gentle cleanser such as those made by Dove, Cetaphil or Vanicream. These have little or no detergents (which can strip away natural oils that provide hydration, lubrication and protection) and increased moisturizers.

Then, gently pat dry, and try an **emollient moisturizer**, which will both seal in the moisture you've gained from the shower and provide additional hydration. Some newer, technologically advanced emollients, such as CeraVe, contain superrich moisturizers called ceramides that provide ongoing mois-

## SUNNY TIPS

### Choose a sunscreen with...

- a sun protection factor (SPF) of 15 or higher (preferably 30).
- ultraviolet A (UVA) and ultraviolet B (UVB) protection.

### Apply it...

30 minutes before sun exposure and approximately every hour thereafter (more frequently if you're sweating or swimming). Use a liberal amount.

### “SPF” refers to...

the amount of time you can stay in the sun without getting burned. For example, if you could normally stay out for 15 minutes before burning, an SPF of 10 would allow you to stay out 10 times longer.

turization throughout the day.

In addition to hydrating, you may want to try an **antioxidant**.

Floating around in your body are free radicals—oxygen molecules missing one electron. These little thieves steal other molecules' electrons. Those molecules steal other electrons, and a damaging chain reaction continues.

Scientists believe that antioxidants are the giant sponge police, soaking up the energy free radicals have and protecting the body from the damage they cause, probably including cancer and wrinkles. Antioxidants abound in many fruits and vegetables, and now you can even put them directly on your skin.

Topical antioxidants are the latest development in skin rejuvenation. The Food and Drug Administration has approved the prescription product tretinoin (Retin-A) to treat wrinkles, but over-the-counter products are

still controversial. Evidence about whether they prevent or reduce wrinkles is mixed. I believe they work, but I must caution that there are many, many products containing antioxidants out there, and not all of them are effective. One of the products I recommend is PreVage by Allergan and Elizabeth Arden.

The most important thing when picking a topical antioxidant is to understand whether it has been fully tested to determine if it works. (Keep in mind that even if a certain ingredient has been shown to work, it still has to be put into an appropriate vehicle that allows it to penetrate the skin effectively.) Contact the company, and request any clinical studies and trials. If they have none, avoid this product. If they are able to provide some, take them to your dermatologist or primary-care provider, who can review them critically.

## Banishment, Step Two

If you want to step your wrinkle-reduction regime up a notch, here are a few minimally invasive forms of skin ironing, so to speak.

# Wrinkles in a Nutshell

## Prevention:

- Wear sunscreen.
- Don't smoke.

## Appearance Reduction:

- Hydrate: Use a moisturizing soap to clean your face; then, apply an emollient moisturizer.
- Try the prescription antioxidant tretinoin (Retin-A) or an over-the-counter antioxidant product with reliable studies backing it up.
- Get an alpha-hydroxy acid peel, Botox and/or a filling agent.



**Alpha-hydroxy acid peels**, also known as lunchtime peels, cause dead skin in your epidermis (the top layer) to slough off, revealing newer, brighter skin. They may also work in the dermis (the bottom layer) to increase the production of collagen, elastin and hyaluronic acid.

I like to use the NeoStrata products because they actually invented the whole field of alpha-hydroxy acids and have plenty of clinical studies to back up their claims.

To get the most effective response to alpha-hydroxy acid treatments, you

need a product with a concentration of more than 12 percent. Strengths this great are only available through a physician's office.

Keep in mind that alpha-hydroxy peels make your skin much more sun-sensitive, so lather on the sunscreen.

**Microdermabrasion** is an excellent form of exfoliation, making the skin look and feel fresher. However, don't be fooled by salons or offices that tell you it will do everything but slice your bread.

Many dermatologists do recommend it to remove superficial lines, but in my

“With mirth and laughter let old wrinkles come.”

—William Shakespeare,  
*The Merchant of Venice*



experience, it's not effective on a long-term, significant basis. It is great to use in addition to certain other treatments because it allows topical preparations to penetrate the skin more easily and deeply.

**Botox** is a genetically engineered enzyme that causes muscle relaxation.



“Youth is not a time of life; it is a state of mind; it is not a matter of rosy cheeks, red lips and supple knees; it is a matter of the will, a quality of the imagination, a vigor of the emotions; it is the freshness of the deep springs of life.”

—Samuel Ullman, “Youth”

As we discussed earlier, some facial lines, especially crow's feet, smile lines, and lines on the forehead and between the eyebrows, come from muscular contraction. No topical cream or lotion will affect the muscles. You need a specific agent that will relax them.

To avoid giving you an expressionless face, a skilled dermatologist will use Botox to eliminate facial lines without relaxing other muscles of expression. That's one reason it's important to select an appropriate physician to perform this procedure.

**Filling Agents** fill in those static wrinkles we talked about—the ones that come from a decrease in the skin's supporting substances. It can also work on the wrinkles caused by muscle contraction, again filling in the wrinkles, not relaxing the muscles.

I like to use hyaluronic acid products, specifically Restylane. Unlike some other fillers, Restylane is synthetic (not derived from animals such as cows, birds or human cadavers). It lasts six to 12 months.

After these procedures, the next step up would be things like laser surgery and facelifts. Always choose a skilled physician, and be sure you understand any risks involved.

### Some Secrets Aren't Worth Knowing

Now you know what works. Keep in mind what doesn't work, as well.

I saw a commercial the other night that claimed to have a secret from the Orient: a new skin cream

## Product Guide

### In drug stores:

Bullfrog, Cetaphil, CeraVe, Coppertone, Dove, Vanicream

### In department stores:

Prevage ([prevageskin.com](http://prevageskin.com), \$150.00 for 1.7 ounces).

### From dermatologists:

Botox ([botox.com](http://botox.com)), NeoStrata professional line ([neostrata.com](http://neostrata.com)), Restylane ([restylane.com](http://restylane.com)), SkinCeuticals ([skinceuticals.com](http://skinceuticals.com)), tretinoin (Retin-A)

that had pulverized pearls in it. Now, I have to ask, what do pearls have to have with skin care? Absolutely nothing that I know of, but it sounds nice.

I also saw an ad demonstrating a skin cream with caffeine to “energize your skin.” Some of us love to have a cup of coffee to get things going, but this really has nothing to do with skin care.

Many department stores display products with high price tags and fancy bottles sold by people wearing white coats. Price, bottle and clothing have nothing to do with a product's effectiveness.

Great skin care can come from simple products that are effective. When you see an ad for something, simply call the company and ask if there has ever been a clinical study at a major university or a medical institution that demonstrates the product's effectiveness. If so, ask for a reference to share with your dermatologist.

## ABOUT THE DOCTOR

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