Wrinkles No More!

Don't Be Fooled By Scam Anti-Aging Creams and Products That Claim Miracles. Use These Effective Tips to take years off your face!

By: Rachel Vrabel
http://www.WomensBlogTalk.com
Table of Contents

Chapter 1: Understanding Your Skin ........................................................................................................3
Chapter 2: The Cause of Wrinkles .........................................................................................................5
Chapter 3: Natural Home Remedies .....................................................................................................9
Chapter 4: 8 Foods That Fight Wrinkles............................................................................................11
Chapter 5: Surgical Procedures to Eliminate Wrinkles......................................................................15
Chapter 6: Non-Surgical Wrinkle Treatments ......................................................................................18
Chapter 7: Wrinkle Creams..................................................................................................................31
Chapter 8: A Couple of Great Products ...............................................................................................44
Chapter 9: Preventing Wrinkles in the Future ......................................................................................46
Chapter 1: Understanding Your Skin

If we're going to fight the good fight against aging skin and the wrinkles that come along with it, the best place to start is with a solid background of understanding what skin is and how it works. It may seem like a silly question: "What is skin?" But it's really at the root of it all, and knowing the answer to this question can go a long way toward helping you know what products, ingredients, and procedures are the best to take you through the years gracefully.

Not all skin is created equal. Look at a baby's skin. It's soft, smooth, dewy, and flawless. It's plump and resilient. That baby will laugh and cry, and screw her face up into all sorts of complicated contortions. But each and every time, her skin bounces back to flawless. Not so much the case when that baby turns forty. The forty year old's skin acts like your face in that old wives' tale about what happens if you make a face for too long. It stays that way.

Before we get ahead of ourselves, let's take a step back to basics and answer that question: What is skin? First of all, coming in at approximately 20 square feet, it's the largest organ in the human body. Its anatomical function is to secure and protect the body from the dangers and whims of the environment. It also helps it maintain a uniform temperature and houses the sensation of touch. Simply put, skin is a barrier between the body and the environment.

Our skin is made up of three layers. They each have a different composition and a different function.

(Here comes a little anatomy lesson, so feel free to doodle and take notes or take a quick nap as you see fit.)

1. **Epidermis**

This is the outermost layer, and it's primarily responsible for the protection component. It's made up mostly of epithelial cells, which are filled with Keratin. These are formed at the bottom of the epidermis and travel outward for about a month. As the cells travel, they flatten and eventually die. The very top layer of the epidermis is actually just these dead skin cells waiting to be shed, which happens about every two weeks.

There are two types of cells in the epidermis. The function of about 95% of epidermal cells is to constantly be creating new cells. The rest are called Melanocytes. These are responsible for producing melanin. Melanin is the pigment in your skin. It provides some degree of protection from the damages of the sun's rays, though this protection is far from complete.
The Epidermis is the part of the skin we see, but how it appears is in large part based on the health, condition, and phase of life of the other two layers.

2. **Dermis**

The dermis is directly beneath the epidermis, it's made up primarily of connective tissue, and it houses sweat glands, and hair follicles. There are several different types of connective tissue that include collagen for strength, elastin for elasticity, and glycosaminoglycans like hyaluronic acid for hydration, cell production, and movement.

The epidermal-dermal junction is there to connect the dermis and the epidermis. It also provides the vital functions of exchanging nutrients and waste products between the two layers and serving as the primary mechanism for cellular communication.

3. **Subcutaneous Tissue**

Also known as the hypodermis, this is the innermost layer of skin. It mainly consists of fat tissue and is used to regulate body temperature and provide insulation and protection for the organs of your body. As it relates to the health and components of your skin, the subcutaneous tissue contains collagen and provides nutrients through its network of blood vessels.

Okay, now that we have this brief bit of groundwork laid, let's dive into the matter at hand. Just where exactly are these wrinkles coming from?
Chapter 2: The Cause of Wrinkles

Bear with me just a bit longer here. We're not quite done with the sciency bit. To some extent, wrinkles are a fact of life. Skin changes with age, and those changes are generally not positive ones. Certain biological facts need to be understood and to some extent accepted.

Natural Causes of Wrinkles

Sooner or later, everyone will encounter some wrinkles. That's because to some degree, they represent a natural and inevitable step in the human aging process. Let's revisit that baby again for a minute. When she smiles, the skin at the corner of her eyes will show a little crease. But the moment she no longer finds your goo-goos and gaa-gaas captivating and the smile disappears, that little crease is gone too. And it leaves no trace. Babies sure are lucky!

That's because the baby's skin has loads of collagen and elastin, making it smooth, supple, strong, and resilient. But once she reaches the age of 29, her skin will begin losing collagen by 1% a year. That might not sound like a lot but if you think back to your Economics 101 days, you may remember that the principle of compounding interest means that that 1% multiplies quicker than you think.

The collagen loss, coupled with an equally age-related loss of elastin and moisture, leaves skin thinner, drier, less supple, and more prone to wrinkles and sagging.

It's simply genetics, and as such, this aspect of how wrinkly your skin will get is largely the luck of the draw. Some skin retains moisture better. Some skin loses collagen more slowly. This (and that all-time favorite – the fast metabolism) is what we mean when we say someone has good genes.

Not So Natural Causes of Wrinkles

Simple aging aside, there are plenty of other reasons we get wrinkles. Some are squarely within our control. Others are a little more iffy.

1. Pollution

Pollutants and toxins in the environment and air around us play a big role in our skin's aging process, and there isn't much we can really do about that. Clearly, it's worse in
urban areas, but career and family concerns are likely to outweigh anti-aging concerns when it comes to choosing a place to live. Smog, dirt, and dust will leave your pores congested and your skin looking dull and lifeless. And the free radical damage caused by toxins in the air will lead to oxygen depletion and damaged skin cells that are less able to produce collagen.

**What is Free Radical Damage?**

I think it's time for a little aside to discuss a term that you've probably heard but maybe not fully understood - *free radical damage*. If you've ever read anything about anti-aging skin care, you're familiar with the term. The simplest way to explain it is this. Most of the time, when a chemical reaction occurs, there is a by-product. This by-product is often a chemical particle that's missing an electron and therefore is unstable, or a free radical.

Chemical particles want to be stable, so the unstable one goes in search of an electron to stabilize itself. It takes the electron from another particle, a stable one, causing that one to become unstable (a free radical). And the process repeats itself thousands of times over.

Each of these chemical particles is damaged in the process, and when we're talking about strands of collagen, these damaged strands are less capable of doing their job of maintaining strength in your skin, and less capable of producing more collagen.

You probably can't completely eliminate pollution in your life, so your best defense is to keep your skin clean, exfoliated, and hydrated in attempt to free yourself of whatever damage you may pick up during the day.

2. **Facial Expressions**

When we laugh, smile, frown, cry, or even gasp in surprise, our expressions create temporary lines and creases in our skin. And unlike that of the baby, our skin doesn't bounce back quite so well. Over time, repeated expressions create permanent creases where they most often occur.

Now, I guess you can say that this one is within our control, but I don't know if too many women are willing to give up all expressions of happiness for the sake of ageless skin. (We'll talk about Botox later.)
3. **Smoking**

   If you smoke, and you haven't found enough reasons to quit yet, here's one more. Smoking causes wrinkles. For one thing, smoke is a pollutant, and it acts like other environmental pollutants. But smoking goes further by decreasing the flow of blood to the skin, so it's getting less oxygen and nutrients, and producing less collagen.

4. **Poor Nutrition**

   We're finding out more and more that what you eat is one of the most important factors determining your health. And the health of your skin is no exception. Some foods, like highly processed white sugars, cause what's called "glycation". This is when a molecule grabs onto a protein, turns it to the dark side, and makes it attack other proteins. Okay so we veered from the scientific explanations a bit, but you get the general idea.

   Additionally, the importance of antioxidants is becoming more and more widely purported. If your diet lacks in these (which come primarily from fruits and vegetables), you're leaving yourself more vulnerable to skin damage than you need to be.

5. **Sun Exposure**

   We decided to save the "best" for last. Exposure to the damaging rays of the sun is far and away the primary cause of wrinkles. Tanning itself is really just the evidence that you've done damage to the support structure of your skin. The irony is that by the time we start to worry about wrinkles, the damage has already been done - long ago. That's why it's so important to get the word out to all your kids, grandkids, nieces, nephews, and neighbors that sunscreen is not negotiable.

   In fact, it is thought that as much as 80% of what we think of as normal skin aging is actually caused by exposure to the sun. There are two different kinds of UV Rays we need to concern ourselves with:

   - **UVB** rays affect the epidermis and cause sunburn.
   - **UVA** rays go deeper into the dermis and cause most of the damage that leads to premature aging.
UVA Rays cause aging in a number of ways:

- **Collagen Breakdown.** UVA radiation produces an overabundance of the enzyme that causes collagen to breakdown. And we know that collagen is the support structure of the skin. When that scaffolding breaks down, you get sagging and wrinkles.

- **Free Radicals.** That's right. Free radicals are caused by UVA rays as well as pollution. And as we learned earlier, these pesky molecules wreak havoc on existing collagen and make it harder to produce new stuff.

- **Age Spots.** Sun exposure ages you by causing more than just wrinkles. It also leads to age spots or hyperpigmentation. Melanin is the naturally occurring pigment that protects your skin from some of the sun damage it experiences. But if your body makes too much of it, you'll end up with age spots or splotches and uneven skin tone.

Sad as it may be to say and to hear, the sun is not your friend when it comes to skincare. And in this case, though there are some things you can do to try to stem the tide a bit, (and we'll get to them soon), the best things you can do is avoid it altogether by taking preventative measures early and often.

Now that we know a little about the skin, and we've covered all the depressing parts about how wrinkles are inevitable and hard to defeat, let's get to the good part. While the aging process is for the most part natural and inevitable, there are plenty of ways to slow it down and help make its toll on your face a little less visible. Some are easy. Some are hard. Some are cheap. Some are expensive. We'll cover them all so you can be armed for the next several decades with everything you need to face the ravages of Mother Nature.
Chapter 3: Natural Home Remedies

Unless you've been living under a rock for... oh, say 15 years or so, you know there's a big push toward natural alternatives to chemical and medical procedures for all kinds of ailments. Clean eating for an irritable bowel, herbal supplements for arthritis symptoms, and yes even home remedies as anti-wrinkle skincare.

I've put together a few of my favorites for you here. Try the ones that appeal to you. Leave the others alone. Some things are just not for everyone.

1. **Drink plenty of water.** This is probably one of the most important things you can do for your skin. It helps in so many ways. First of all, it keeps your skin (as well as the rest of you) well hydrated. Second of all, it helps remove toxins from your skin. As we talked about before, toxins lead to free radical damage, so anything that reduces these is good medicine. Try it for a week. Drink at least 8 glasses a day. You'll be amazed at how clean, smooth, and radiant your skin will look and feel.

2. **Exercise.** I know, this is starting to sound like a diet book not a skin care book. But bear with me, and I'll explain. When you exercise, you get your blood flowing. Skin gets oxygen and nutrients from blood. Also, if you're exercising, you're sweating. And if you're sweating, you're removing toxins. So exercise and water make a powerful one-two detoxifying punch.

3. **Regular gentle facial massage.** This is another way to get your circulation going. Again, your skin needs oxygen and nutrients, and these are delivered through blood. The massage also helps to firm and tighten skin in the fight against gravity. Always make sure to work gently upward with your fingers. This assures that you're always lifting, never pulling down.

4. **Wash your face with oil.** Say what? How is this even possible? As long as you don't have oily skin, you don't need to fear this kind of cleansing. Mix a couple drops of Frankincense or Carrot Seed Extract into a couple tablespoons of olive oil. Gently massage it in, then wipe off with a damp cloth. The oil will pick up and remove dirt and makeup, and you're left with soft, radiant skin.

5. **Egg Whites.** This is more of a temporary fix than anything else. But that's not necessarily a bad thing. We ladies know that at times, temporary is all we're looking for, don't we? So if you're going out tonight and want to look your best, whisk up two egg whites until they are frothy, like you're making meringue. Apply the froth to your face and let it sit there for half an hour. (Make sure you've got a towel handy and a way to rest your neck backward 'cause
this stuff drips quite a bit.) When time is up, rinse with lukewarm water and pat dry. Apply moisturizer under your makeup, and your face will be smooth, tight, and wrinkle-free for the night.

6. **Dr. Oz mask.** Speaking of homemade food masks that fight wrinkles, Dr. Oz has one that he recommends on his show. Mix together a ¼ cup of yogurt, ½ a ripe banana (mashed) and a teaspoon of honey. Spread it on your face and spend the next 15 minutes trying not to lick it off. The idea is that the lactic acid from the yogurt exfoliates while the honey moisturizes. (I guess the banana is there to build character while you learn to resist its yumminess!)

7. **Get enough sleep.** Lots of bad things happen when you don't get enough sleep. One of them is that your skin gets dull, lifeless, stressed, and wrinkled. Human Growth Hormone (HGH) is released when you sleep. HGH stimulates the growth and regrowth of body tissue. If not enough is secreted during sleep, your skin is not regenerating the way you want it to. And if you're not getting enough sleep, you're not secreting enough HGH. Another secretion affected by sleep is cortisol, the stress hormone. This one works in reverse. A lack of sleep triggers this one, and it throws hormones and other chemical reactions in the body out of whack.

8. **Sleep on your back.** This is tough for some of us diehard side sleepers. But it makes sense. If you're on your stomach or side with your face smushed into the pillow, you're creating lines. Work on training yourself to sleep on your back, and your face will thank you. Your back and hips may too.

9. **Take your vitamins.** Skin needs nutrients for cell regeneration. The B-Complex Vitamins and Vitamins A, C, and E are all necessary nutrients as well as antioxidants so you're taking care of two healthy skin requirements at once.

10. **Papaya mask.** This home remedy has been used for centuries by Asian women. Papaya contains a very particular enzyme called Papain. It's used as an exfoliator because it breaks up dead layers of skin and they come off when you rinse. Even though they didn't have them centuries ago, these days, we put the ripe papaya in the blender and apply the puree to the skin for about 20 minutes before rinsing it off to reveal fresh new skin.

11. **Olive Oil as moisturizer.** There are lots of great reasons to use olive oil. It penetrates skin really well for one thing. For another, it's loaded with free radical-fighting antioxidants. And there's more. Olive oil also stimulates the production of collagen and elastin. One recipe I found that looks good is that you mix a tablespoon of olive oil with a few drops of lemon juice. The lemon juice provides a bit of exfoliation, helping the olive oil do an even better job than it would alone.
Chapter 4: 8 Foods That Fight Wrinkles

There's a lot to be said for these natural wrinkle remedies. And if you notice, they're all healthy in a general sense as well as for your skin. It's one of the reasons natural holistic remedies have become so popular. So many chemical solutions work great at their given tasks, but are irritating or even harsh to the rest of your body. Not the case with these ideas. Some are common sense. Some are a little off-the-beaten path. But none of them will cause unintended or unwanted consequences.

In keeping with the idea of natural ways to treat and prevent wrinkles in aging skin, I've put together a list of foods that help with either reversal, prevention, or both. There's just more of an understanding these days that it's all connected. The healthier we are on the inside, the clearer, smoother, brighter, and more radiant our skin looks on the outside.

Good overall nutrition bolstered by some specific foods particularly well suited to wrinkle prevention are the twin concepts that connect the food you eat to the health of your skin.

1. **Blueberries for the antioxidants.** The benefits your body receives when you ingest a significant amount of foods containing antioxidants are many, and the research just keeps finding more. First of all, let's not leave out the fact that these nutrients and enzymes may help prevent cancer, heart disease, stroke, Alzheimer's disease, Rheumatoid arthritis, and even cataracts.

   As far as skincare goes, we've talked about the benefits of antioxidants a great deal already. What they do is neutralize damaging molecules so they can't do any more damage. They also have some degree of success repairing the damage already done.

   Blueberries are only one of hundreds of plant foods you can eat to get your daily intake of antioxidants. As for fruits, the best (other than blueberries) are cranberries and blackberries. For vegetables, go with beans, artichokes, Russet potatoes, and kale. With nuts, the best are pecans, walnuts, and hazelnuts.

   Generally speaking, if you eat a diet consisting of lots of different varieties of fruits and vegetables, you should be getting what you need.

2. **Salmon for the omega-3 fatty acids.** Omega-3s are good for your skin in so many ways, it's tough to even remember them all. They support the skin's barrier function. They have an anti-inflammatory effect. They facilitate inter-cellular communication. They improve symptoms of acne, psoriasis, and dermatitis.

   As far as wrinkles are concerned, we haven't even gotten to the tip of the iceberg yet. Omega-3s mitigate the effect of UV rays on skin (with its antioxidants) and helps skin retain its thickness as
you age.

If Salmon makes your skin crawl (in addition to making it soft), you can get your omega-3s from walnuts, trout, flax seed, tuna, anchovies, or sardines.

3. **Strawberries for vitamin C.** Studies have shown that there's a correlation between increased levels of vitamin C and a decrease in the appearance of wrinkles and dryness in the skin. The thinking is that vitamin C has a bunch of great benefits for the skin. It's an antioxidant. It encourages collagen production. It's an anti-inflammatory.

Of course there are plenty of vitamin C sources besides strawberries. There's kiwi, pineapple, tomatoes, potatoes, broccoli, limes, lemons, and oranges.

4. **Oysters for the zinc.** Zinc has been shown in scientific studies to be important to the collagen production process. Though the exact way it helps hasn't yet been figured out, it has been demonstrated that an increase in zinc intake correlates with an increase in collagen production. You need collagen because it's the basis of the skin's support structure. As you lose more and more collagen with age, your skin starts to sag from the loss of firmness. Anything that helps replace lost collagen will help your skin look younger and firmer, with fewer lines and wrinkles.

If you don't like oysters, other good zinc sources are beans, nuts, and lean meats.

5. **Tomatoes for the Lycopene.** Lycopene is an antioxidant. We already know that antioxidants protect skin against free radical damage, but Lycopene goes beyond that by specifically protecting skin against sun damage. While it doesn't replace sunscreen, lycopene reduces the damage that sun does to your cells. Study participants were exposed to ultraviolet light before and again after eating 4 tablespoons of tomato paste a day for 3 months. After the tomato paste, there was a 30% reduction in measured sun damage.

If tomatoes aren't your thing, you can get lycopene from grapefruit, watermelon, chicken, asparagus, parsley, red cabbage, or carrots.

6. **Oatmeal for the low glycemic index.** It may not seem to make sense at first, but it actually does. Carbohydrates are distinguished by how quickly they affect blood glucose levels. Generally speaking, the more highly processed the food, the higher the glycemic index. This means that blood glucose levels rise and fall very rapidly. Well, among a multitude of other health problems, these spikes and drops lead to inflammation, which leads to wrinkles and aged skin.
Whole grains are carbohydrates that come with a much lower glycemic index. This prevents the inflammation response that would lead to skin damage and aging.

Oatmeal is just one of many examples of whole grain foods you can eat. There's whole wheat pasta, multigrain bread, brown rice, and quinoa as well.

7. **Turkey for the lean protein.** When you eat protein, it breaks down into amino acids during digestion. Since amino acids are the building blocks of cells, they help regenerate new skin cells and stimulate production of new collagen and elastin.

If you don't like turkey, there are plenty of other lean protein options like egg whites, fish, beans, quinoa, and nuts.

8. **Water for hydration and detoxification.** I don't know if water qualifies as a food, but it definitely deserves a spot on this list of things to ingest if you want great skin that looks years younger than your birth date says you are. We talked about it before, but it's worth repeating. Drinking lots of water may be the best thing of all that you can do for your skin.

I'm sure you've seen some of those "top beauty secrets" lists in magazines. They ask a model or celebrity what her top beauty secrets are. One tops almost every list I've ever seen, and I've been reading those magazines in the grocery store line for a lot of years. Surely enough time as gone by for something newer-fangled to replace this old dinosaur beauty secret. But nothing has. Hands down, drinking lots of water tops all the lists.

As you age, your body has trouble retaining as much moisture as it once did. Replenishing it with enough water will help counteract that lack. Drinking enough water also helps you flush toxins out of your system, which improves the look, tone, and texture of skin.

While any hydrating liquid is better than none, there is no real substitute for water. Almost any other beverage, with perhaps the exception of herbal or green tea, will have additives that detract from the benefit of pure and simple water.

**And 1 Food to Avoid**

Have you seen the latest headlines? "Sugar Causes Wrinkles!" Right there, plain as day, for all to see. If you're like me, you were hoping that this was just speculation. Maybe a
gimmick put out there by health nuts to make you stop eating all that sugary crap. Because maybe if weight gain didn't deter you, wrinkled skin would.

But alas, no such luck. It turns out it's true, and it even has a scientific name - Glycation. When sugar gets in your bloodstream, it attaches to the proteins already there and forms new molecules called Advanced Glycation End Products (or - get this - AGEs for short). The more sugar you ingest, the more AGEs are formed. These AGEs damage other proteins at an alarming rate. Collagen and elastin, necessary of course for younger-looking skin, are among the hardest hit. And to make matters worse, even the collagen that these AGEs don't destroy gets transformed into weaker, more fragile forms, that simply die off a little later.

Scientific research is finding that AGEs are related to a whole host of problems associated with aging, from cataracts to memory loss. So it would seem that lowering your intake of sugar, especially low glycemic index sugars, would be a good idea if you want to slow the aging process in general and wrinkled skin in particular.
Chapter 5: Surgical Procedures to Eliminate Wrinkles

There are all sorts of ways to fight wrinkles and look younger, and they fall on all points along the continuum of cost, simplicity, and effectiveness. There are $2 drugstore creams that pretty much just add a little moisture to your face. And then there are full on surgical procedures that cost tens of thousands of dollars, involve significant pain and healing time, and actually remove the wrinkles on your face. Most viable options land somewhere between the two extremes in both cost and effectiveness. The trick is for each of us to use all the tools at our disposal to figure out the best overall solutions for ourselves.

I'm going to cover the whole range of options in this report, starting with the big, expensive surgical procedures.

Facelift

Technically known as Rhytidectomy, a facelift is a full-fledged surgical procedure. It takes about 2 to 4 hours to complete. It requires anesthesia (usually a combination of local and a light general). It comes with a two to three week recovery period complete with pain, swelling, and bruising. And it costs anywhere from $10,000 to $30,000.

The surgeon will make an incision along the hairline and around the lower part of your earlobe. He'll than reposition some of the fat, skin, and connective tissue, pulling it tighter and reconnecting it in the newer, more flattering position. Wrinkles are smoothed and sagging skin around the jawline is lifted. Put in the most simplistic terms possible, what a facelift does is smooth the look of wrinkles and sagging by pulling skin tighter.

The best candidate for a facelift is someone who's skin is showing the signs of aging, but still retains a significant degree of elasticity. Generally speaking, this means people in their late 40s to Early 70s. One thing to consider when making the decision is that the benefits are expected to last about 10 years.

As is the case with most technologies, facelift technology has come a long way. It used to be just a pulling back of the skin. Now it is more comprehensive and at the same time more precise. Subcutaneous tissue is also cut and reconnected, while more attention is paid to the minimization of scars.
Facelifts are often combined with other surgical procedures designed to remove wrinkles and give you a more youthful appearance. We'll talk about these separately, however, because while they are often done together, they don't need to be.

**Forehead Lift/Brow Lift**

These two terms are sometimes used interchangeably, but they are not truly the same.

A brow lift is mainly meant to improve the appearance of the eyebrow line to give you a more youthful appearance. Incisions are made either just at the top of the eyebrows or higher up in the deep creases of the forehead. Skin and tissue are removed, pulled, and reconnected, lifting the eyebrow and giving the eye area a more youthful and refreshed appearance. One of the problems with this is that it leaves visible scars on the forehead. An attempt at camouflage is made, but the general consensus is that the attempt is not quite successful as it needs to be.

The forehead lift is more about removing the deep crease wrinkles of the forehead. Traditionally, this operation is called a "coronal forehead lift" and consists of a long ear-to-ear incision up over the very top of the forehead along the hairline. Forehead tissue is loosened and stretched upward, smoothing out the deep wrinkles and raising the brow in the process.

The positioning of the incision is designed to hide it in the hairline, but what often happens is that the hairline is moved slightly back up on the head. For some patients, this is not an improvement, nor is it acceptable.

Lately, more and more forehead lifts are being done endoscopically. Several small incisions are made and the procedure is performed with the help of an endoscope placed in through the small incisions. This method is less invasive, but it does not solve the problem caused by moving the hairline.

The cost of these procedures ranges from about $3,000 to $10,000 depending on which you choose. Pain and recovery time will vary as well. Local and/or general anesthesia might be used. Expect swelling and bruising to last about a week to 10 days, and expect the results to last around 10 years.
Eyelid Lift

The technical name for this one is Blepharoplasty and it's quite commonly performed. While it doesn't specifically address wrinkles, it is a cosmetic surgical procedure to make you appear younger and rejuvenated.

Blepharoplasty includes both upper and lower eyelid lifts. The upper is for lifting a sagging or hood-like eyelid. This condition can be hereditary and it tends to worsen with age. An incision is made within the natural crease of the eyelid. Tissue is removed, stretched, and reconnected, much in the same way as the other procedures.

A lower Blepharoplasty uses an incision just inside the lower lid. Excess fat tissue is removed, correcting hereditary under-eye puffiness, and to some extent fine lines.

The two procedures are often performed simultaneously, though many people choose to do only one because that's what suits their needs. The operation lasts anywhere from an hour to three hours, and recovery time includes swelling and bruising for about a week to 10 days. You may also experience some amount of dryness of the eyes. If that's the case, lubricating eye drops are often recommended.

The cost of these procedures varies a great deal depending on where you live and which procedure you choose. An upper or lower on its own will run you anywhere from $1500 to $3000, and if you get both procedures done together, expect to pay $5,000 to $8,000.

All these procedures (the facelift, forehead lift, brow lift, and eye lift) are to different degrees painful, invasive, and expensive. And they come with all the risks associated with surgery. But as long as your surgeon does his or her job correctly, these procedures do what they say they will do.

Now we're going to move on down the line and see if the same can be said for non-surgical treatments.
Chapter 6: Non-Surgical Wrinkle Treatments

There are a whole host of less invasive treatments that can make your skin look younger, smoother, softer, and more radiant, with fewer lines and wrinkles. Some are more effective than others, while some are more affordable.

Injectables

These in-office procedures are becoming pretty commonplace, and it makes sense. For a fraction of the cost, you can get real results that last as long as a year. This may explain why injectables are the fastest growing cosmetic procedures by far. Of course, there are several different categories of injectables, and we'll lay them all out here so you'll know which one (or ones) you're leaning toward when and if you decide to take the plunge.

Dermal Fillers/Wrinkle Fillers

According to the FDA's official position, these procedures are used to correct soft tissue contour defects, such as wrinkles and folds in the skin. Approved substances are injected into the fold or wrinkle to smooth and plump it out. Because these substances are made to be absorbed by the skin, the effects are temporary, usually lasting about 6 months to a year.

Some of the materials used in filler injections are:

Hyaluronic Acid

Hyaluronic Acid is naturally and abundantly found in the human body's vast connective tissue network. It's a heavy molecule that attracts and binds to many times its own weight in water. This has the dual effects of hydration and volumizing. It also has a positive effect on the body's own natural production of collagen.

As a filler, it is injected directly into the contours of the wrinkle or fold. The results are expected to last for six months to a year. The most common side effect is an allergic reaction.
Common brand names fillers that use hyaluronic acid as their primary ingredient are *Restylane* and *Juvederm*.

**Synthetic Fillers**

The primary advantage of this type of wrinkle filler is that the benefits tend to last longer. Some promise to be permanent. In terms of wrinkle-filling, these work the same way as the natural fillers do. They are injected into the contour of the wrinkle or fold, filling it in and plumping it out.

On the downside, synthetic fillers may come with some more consequential side effects. They tend to cause temporary pain, swelling, and bruising. But more importantly, they can cause permanent clumps and bumps under the skin at the injection side. There's also a risk of allergic reaction.

Some brand names for these synthetic fillers are *Scluptra* and *Radiesse*.

**Collagen Fillers**

Collagen was the first injectable to be FDA approved, and at that time, it was pure collagen taken from a cow. These days, it starts with a human collagen culture and is grown in a lab from there.

The biggest advantage of collagen injections is that many people believe they look more natural than the other kinds. The biggest drawback is that the benefits don't last as long. The side effects are the same as for the others – temporary soreness and bruising as well as a potential for allergic reaction.

*Cosmoderm* is a common brand name that uses collagen for its injections.

**Autologous Fillers**

This is a fancy name for using fat from your own body to fill in the wrinkles on your face. You can think of it as a way to kill two birds with one stone. It is, in
effect, two procedures. First you have the liposuction performed. This is when the fat is removed from your tummy, hips, thighs, or buttocks. Then they inject some of this fat into your wrinkles.

The advantage of this method is that there is no risk of allergic reaction or that your body will reject the filler. Also, you'll usually have some fat left over that can be stored and used for touch-ups.

But there are disadvantages as well. For one thing, some of the fat cells won't make it through the procedure. This means that your doctor will have to overfill the area with the idea that much of what is injected will be re-absorbed. The upshot is that at first, you'll look a little puffy and strange. After a while, things settle down, and you look normal, only with fewer lines and wrinkles.

The cost for wrinkle fillers can run anywhere from about $500 to $2,000 depending on the type of filler you choose, the extent of the work being done, and the professional doing the work.

And that brings me to our next topic of discussion about wrinkle fillers. I cannot say it strongly or clearly enough. Be careful! While safety is generally not an issue with these procedures, plenty of things can and do go wrong. The internet is crawling with stories of botched lip injections that leave these women with the dreaded duck lips. Do your homework. Find a reputable doctor willing to show you his work, and make sure he uses an FDA approved injectable for the purpose it was meant to be used.

**Botox**

Botulinum Toxin is the full name, but we all know it simply as Botox. This miracle poison wrinkle prevention method has only been approved for use on wrinkles since 2002, but it's taken the cosmetic procedures universe by storm. It is projected that in 2018, the world market for facial cosmetic procedures will be valued at $4.7 billion. Half of that is projected to be for Botox alone.

**What is Botox?**

Botulinum Toxin is indeed a poison. It's produced using the Clostridium Botulinum bacteria. If ingested in large amounts, it causes a general paralysis
called Botulism. When injected into your skin in very tiny amounts, it blocks the nerve signal between one very specific muscle and the brain, so the brain can no longer tell that muscle to contract.

Over it's young lifespan, Botulinum Toxin has had several medical uses. First, in 1986, it was used to treat patients with strabismus (cross eyes) and uncontrollable blinking (eye spasms). It is now used to treat several upper motor neuro-muscular disorders, such as cerebral palsy, excessive sweating, and chronic migraines.

**Botox and Wrinkles**

Back when Botox was mainly being used for excessive blinking, a husband and wife/ophthalmologist and dermatologist team published a study about the effect of Botox on glabellar frown lines, the vertical lines above the bridge of the nose, between the eye brows. Other groups were also discovering the same thing. Studies for safety and efficacy were quickly conducted, and in 2002, Botox was approved for cosmetic use.

Here's what it does. When Botox is injected directly into the muscle, it breaks the nerve connection between the brain and that muscle. So by injecting the tiny amount of Botox into those carefully chosen muscles related to facial expression lines and wrinkles, those muscles can no longer contract. So the wrinkles and lines are no longer formed.

**The Benefits of Botox**

It's hard to avoid the Botox devotees. It seems like everybody's doing it. Well, there are a few reasons why it's caught on so quickly and so completely.

- First of all, the procedure is quick, convenient, and it requires no recovery time at all. What small amount of swelling or discomfort involved is gone within a couple hours.
- Second of all, it works. Three days after your treatment, the wrinkles or lines in question will have been smoothed.
- Thirdly, Botox injections are more affordable than other types of effective treatments.
The Drawbacks of Botox.

Of course, there are some downsides to consider when you're thinking about Botox.

- For one thing, it's poison. Let's not forget about that simple fact.
- Secondly, it's more temporary than wrinkle fillers. Botox needs to be repeated about every three months if you want to maintain the effect. This means that when you're comparing prices, you need to consider the number of repeat procedures you'll need over a given period of time.
- Lastly, though uncommon, there are some potential side effects like temporary facial pain, flu-like symptoms, and facial muscle weakness.

The Cost of Botox

Doctors generally charge for Botox procedures by the "unit" of Botox used. The range is generally about $10 to $15 per unit. To give you a better idea of what that means to you, an average treatment for those "eleven" lines between your eyebrows (glabellar frown lines) uses 20 units. So that means to get rid of those lines, a Botox treatment will cost between $200 and $300. A bigger treatment area will of course run you more.

Be prepared when you go in. They are likely to try to sell you on more treatments than you were planning on. That may be just what you want, but it could get pretty expensive pretty quick.

Chemical Peels

Moving away from procedures that need to be performed by doctors, we enter the realm of chemical peels. You can get this kind of treatment at a skincare salon or an aesthetician's office, or it can be performed by a doctor as well. Chemical peels have fallen out of favor a bit since the onset of laser treatments (which we'll talk about a little later on), but they have by no means been completely overtaken.

The goal of a chemical peel is to exfoliate that top layer of skin that's been damaged by the
Environment, lifestyle choices, and the sun. When that top layer is gone, the newly revealed top layer of the dermis is what appears. This skin is smoother, more even toned and textured, and shows fewer lines and wrinkles. The exfoliation of the top layer also stimulate an increase in collagen production, so skin becomes stronger, firmer, and more resilient.

What happens with a chemical peel is basically a carefully controlled burn. A short time after your skin is burned, the top layer begins to peel off. This process can take several days. It sounds painful and damaging... and it is. Of course, how painful and damaging, as well as how effective, depends very much on the type and intensity of chemical peel you choose. With all peels, there is a degree of discomfort and some healing time.

**AHA Peels**

Alpha hydroxy acid peels are considered to be superficial to medium peels, as opposed to deep peels. They use a concentration of 30% to 70% glycolic acid as their peeling agent. The best results are achieved after a series of repeated treatments over several months. If all goes well, you can expect an increase in collagen and elastin and better tone and texture, with fewer wrinkles and acne scars.

Being a superficial to medium degree peel, the level of discomfort is on the low side. But your skin is still vulnerable and tender, and very photosensitive. Always make sure to wear sunscreen while you're being treated with a peel.

**BHA Peels**

Beta hydroxy acid peels are also superficial to medium strength peels. They typically use salicylic acid as their peeling agent. They work a lot like the AHA peels, but tends to be less irritating and therefore more suitable for sensitive skin. They are also more suited to oily or acne prone skin because they are soluble in oil.

The expected results are very similar to the AHA peels. Choosing between these two is really just a matter of preference for your skin type, and something you would want to discuss with your skincare professional.
TCA Peels

Trichloroacetic acid peels are what you may know better as the "Blue Peels". These are medium strength peels. That means that your results will be better and more comprehensive, and your recovery time will be longer. TCA peels leave you with improvements in tone and texture, increased collagen production, and they have a better track record of minimizing the appearance of fine lines and wrinkles.

Now, we don't want to gloss over the recovery process here. It's not pretty. Your face will be red, flaky, and peeling off for a couple of weeks time. It gets better as time goes by, but don't plan any big events anytime soon after your procedure.

Phenol Peels

These are the big daddy deep peels you've been waiting to read about. A phenol peel is serious business. This one has the most noticeable results. Because the treatment goes deep, it is capable of addressing more severe sun damage than the others. When all is said and done, the results are impressive.

But you may not be interested anymore once I tell you that it can take up to 6 months to recover from a Phenol peel. Immediately after the procedure, you'll have severe burns that will ooze, blister, and scab. After about 3 weeks of that, your skin will move on to sort of a state of perpetual sunburn, where your skin is red and tight. This state may last 3 to 6 months longer.

I'll tell you, with a recovery period like that, the results had better be spectacular. Well, here's the thing. They may actually be disastrous. Sometimes, skin gets bleached by a phenol peel, which is especially noticeable if you don't have very fair skin to begin with. There are lots of stories about women who ended up with permanent demarcation lines between the dark and light areas of their faces.

Cost of Chemical Peels

As you might imagine, the cost of chemical peels can vary wildly depending on the type and concentration you choose. The cheapest kind of peel is a glycolic acid peel. These cost about $50 to $100 a pop, but you'll probably need four to six peels, each spaced two or three weeks apart.
Other medium peels that use higher concentrations of acid require fewer treatments, but cost quite a bit more. A 25% TCA peel may cost as much as $500, and you can expect to need two treatments to achieve your desired results.

Then there's the deep, phenol peel that you only do once (thank goodness!) that costs about $4,000 to $6,000. This is mainly because this process requires anesthesia and a good deal of aftercare.

**At-Home Chemical Peels**

The success of these in-office procedures has led to the availability of some lighter chemical peel options for home use. These are usually AHA, BHA, or TCA peels at the lower end of the concentration range. They also use added skin conditioners to help improve the aesthetics of the actual experience.

I'd classify these as the right choices for the curious-minded among you. If you want to know what a chemical peel can do, but aren't ready to commit to the real deal, pick up an at-home version. The results won't be as good, but you should be able to get a taste of what's out there if you should later choose to go all the way.

**Dermabrasion and Microdermabrasion**

**Dermabrasion**

Dermabrasion is a surgical procedure performed by a highly trained doctor wherein the epidermis and the top layer of the dermis are planed off using a mechanical device. The procedure is extremely aggressive and painful, and it leaves the patient bloody and raw for a good period of time afterward.

The primary goal of dermabrasion is to remove spots, scars, lines and other perceived imperfections of the skin. By removing the outer layers and allowing the skin to heal under a doctor's supervision, the skin regenerates, revealing a new, more perfect complexion.

Dermabrasion has largely been replaced by less painful and messy laser procedures and is not used much anymore. It's kinder gentler cousin, microdermabrasion, however, lives on.
Microdermabrasion

Microdermabrasion works on the same principle of manual exfoliation, but it uses a more gentle scrubbing mechanism and adds suction to the process to suck away the dead skin as it is sloughed off. The procedure is generally done at a spa or salon. The technician uses a tool that sprays tiny crystals the surface of your skin. These crystals exfoliate that top layer of epidermis, then the tool’s vacuum element sucks away the crystals and the dead skin.

The removal of the outer layer signals to the body that a wound has occurred and it needs to start healing. This is when the skin begins to generate new cells - cells that lack the sun, age, and environmental damage of the old cells.

Removing the outer layers also clears the way for moisturizers and any medicinal lotions, creams, or serums you may be using. The rough, dead cells that were previously blocking access to the deeper layers of skin are no longer in the way. So topical treatments will be more effective.

The Cost of Microdermabrasion

In a spa setting, a microdermabrasion treatment will cost between $100 and $200. To maintain the healthy even tones and smoothed line and wrinkle effect of the procedure, it's recommended that you repeat the treatment several times throughout the year. Many spas offer packages that help you save on the per treatment cost. But if you're planning to use this procedure, you'll probably want to count on spending $500 to $700 a year.

At-Home Microdermabrasion

As is the case with most spa treatments, skincare companies have come up with at-home microdermabrasion products and kits. Some are simply cleansing creams with tiny exfoliating beads added while some are entire kits that include creams and exfoliating brushes.

I'd say the same thing about these at-home versions of microdermabrasion treatments as I would about the at-home chemical peels. If you're interested in the process, but not convinced that you should run out and spend hundreds of dollars on a treatment or two, try an at-home version. It's genius really. If you like the results you get at home and think you'd love them if only they were on a bigger scale, then the spa treatment becomes something you should think
Laser Skin Resurfacing Treatments

Laser treatments are the latest entry into the field of in-office procedures to improve the tone and texture of skin while removing fine lines and imperfections. For the most part, it covers the same ground as chemical peels and microdermabrasion, but its methodology is more technologically advanced.

There are several skin conditions that laser resurfacing can address. In addition to wrinkles, there's:

- Mild to moderate acne scars
- Birthmarks
- Skin discolorations from sun damage or aging
- Unwanted hair
- Tattoos

What Laser Resurfacing Does

In the most basic terms, laser resurfacing shoots a laser beam down to the dermis of the skin, destroying collagen. Once that collagen is destroyed, the body goes into healing mode, creating new, better collagen that improves skin's tone and texture.

Now there are basic types of lasers used, ablative and non-ablative.

Ablative Laser Resurfacing

The term ablative refers to the fact that the top layers of skin are removed during the procedure. So in addition to the laser beam reaching deep down to destroy collagen in the deeper layers, the top layers are removed. This method is the more effective of the two for removing wrinkles, but it requires significant downtime for the healing process.
Non-Ablative Laser Resurfacing

In this type of procedure, the top layers of skin remain intact. The benefit comes solely from the stimulation of collagen production at the deeper layers of skin. This type of treatment is more suited for younger, less damaged skin. There’s little to no downtime required for recovery, and the benefits appear more gradually over time as more collagen is produced. Usually, several courses of non-ablative treatment are indicated, and the results are far less dramatic.

The most commonly used type of laser for addressing wrinkles and aging is the CO2 ablative laser. It uses the powerful infrared CO2 type laser to both remove that outer layer and stimulate the collagen production below. But while the results are great, the pain and healing time are far from convenient or desirable.

That's where fractional lasers come in.

Fractional Laser Skin Resurfacing

This newer type of laser attempts to improve the healing and downtime situation while still maintaining the superior results of the ablative laser. Traditional ablative lasers remove the top layers of skin in their entirety. Imagine using a knife to peel the skin off an apple. The entire skin comes off together (or more likely in several pieces but you get the idea).

What the newer fractional technologies do is break up the laser into several tiny separated "microbeams" that each destroy the small section of outer skin they reach. Each tiny beam also shoots down to the lower layers to destroy collagen. This leaves tiny sections of the outer layers of skin untouched and unharmed, while still resurfacing and regenerating collagen growth.

What happens is that this accomplishes the task of removing much of the outer layers of skin, but because it is effectively so much less wounding, it takes less time to recover. This Fractional CO2 Laser technology is fast becoming the go to procedure for people who want the latest and greatest in anti-wrinkle non-surgical procedures.

How Laser Resurfacing is Done

The procedure is by no mean pain-free. Before you head to the doctor's office, you'll be
instructed to apply some numbing cream, usually lidocaine, to your face. You may also take a sedative or receive a local anesthetic to lessen the pain and discomfort.

The laser will pass over the skin sending out pulses as it does. Depending on the thickness of the skin being treated, there might be several passes of the laser. Most patients will find that the procedure goes more quickly than they expected.

When it's done, your face will feel hot and tight, like you have a mild to moderate sunburn.

Over the next few days, your skin will start to peel and get crusty. In about a week to ten days, the peeling will be over and you'll have a face full of bright red new skin. Over the next number of weeks, the redness will subside little by little, revealing your new complexion.

**The Cost of Laser Resurfacing**

The gold standard fractional CO2 laser treatment will cost in the neighborhood of $3,000 to $5000. Other treatments may go for less, but some of them need to be redone several times for the best results, and none of them is cheap.

**Thermage**

The last non-surgical treatment I'll give mention to is Thermage. This is a treatment that emits radio frequency energy down into the deeper layers of skin. It damages the collagen it finds. This results in two things, one immediate and one long term.

1. First, the damaged collagen is shortened, which causes an immediate tightening of the skin. This effect is temporary because eventually that damaged collagen will die off completely.
2. Second, the damaged collagen signals the body that it needs to create new, remodeled collagen. This new collagen is in better shape than the old collagen, so your skin looks younger, firmer, less sagging, and more evenly toned. This effect can last for years.

**The Thermage Process**

A Thermage treatment is performed by a doctor in an office setting. There are several advantages of choosing Thermage:
• A single treatment is all you need.
• It's completely non-invasive.
• It requires next to no downtime.
• It can be used for sagging skin on the face or body.

Unfortunately, there are some real downsides as well. Thermage is expensive and painful. And worse yet, for lots and lots of people who've used it, it doesn't work.

The Cost of Thermage

What you pay for a treatment depends a lot on the area of the country you live in and the area of your body you're treating. You should expect to pay in the neighborhood of $2,500.

At-Home Thermage Treatments

Of course, there are at-home versions of radio frequency skin treatments designed to damage old collagen so it can be replaced with new collagen. These devices use a different type of radio frequency.

Thermage uses monopolar radio frequency which helps it travel deeper into the layers of skin in search of a grounding electrode. The at-home versions use tripolar radio frequency, which is a combination of monopolar, which goes deep into the skin and bipolar which works more closely to the surface.

The tripolar technology gets away with using lower levels of energy (heat) so it is not painful like the Thermage method can be. On the other hand, using these devices, you'd have to give yourself several treatments, unlike Thermage, where you only need one.

The devices we've seen sell for about $400 to $500.

Up until now, we've covered the broad strokes of both extremes: the natural and organic way to stave off wrinkles and the highly technical procedures. Next we'll settle into the middle ground with the most common and enduring method that today's women use to mitigate the less desirable effects of aging - wrinkle creams.
Chapter 7: Wrinkle Creams

The title of this chapter is a little bit deceptive. Most of what we'll cover here is about the components of wrinkle creams - the ingredients you should be looking for and the ones you should avoid. And while there is perhaps some disagreement among experts about the order of importance, in most cases, the benefits and drawbacks of each component are pretty clear.

Do Wrinkle Creams Even Work?

Well this is the age old question, isn't it? And the answer can best be articulated as a solid "sort of." Expecting miracles will probably just leave you disappointed. If after years of sun-worshiping, you're faced with a leathery, wrinkled mess looking back at you in the bathroom mirror, no wrinkle cream is going to make you look like a 20 year old co-ed.

But if that 20 year old co-ed maintains a daily regimen that includes the right ingredients for her skin type (and she avoids the sun and makes healthy lifestyle choices), she won't turn into that leathery wrinkled mess when she's 45.

Sounds a little unfair, I know. But that doesn't mean creams, lotions, and serums will have no effect on the wrinkles, lines, and other signs of aging you're already showing. They will. It just means that maintaining reasonable expectations for the effects they can have is an important part of finding success.

But it's hard to maintain reasonable expectations when you're bombarded with product marketing that promises a new you in less the week if you would only buy this product. You've seen the ads. The beautiful actress is right there on the television screen telling you the only reason she's beautiful is that she uses XYZ Product. She wouldn't be where she is today without it. How can you be expected to resist such a powerful argument?

I have the answer. Are you ready? It's a simple 3-step process, and here it is:

1. Learn about ingredients.
2. Know which ones work for your issues and your skin type.
3. Use products that have the ones you know you need.

In order to best understand what is needed to combat wrinkles, let's first briefly review what
wrinkles are, and why and how they happen.

**Where do Wrinkles Come From?**

Very briefly this time, as skin ages, several things happen:

- It produces less oil to keep it hydrated.
- It, little by little, loses its ability to produce collagen and elastin.
- It becomes thinner and more fragile.
- It lives through years of environmental exposure, particularly to the sun.

Each of these things contributes to the formation of lines and wrinkles over time, and we all face them differently due to our unique genetics and experiences. As we look at what is necessary to fight wrinkles, we need to keep each of these factors in mind.

**Anti-Wrinkle Ingredients**

Here's where we get to the nitty gritty. It may be an impossible pipe dream to think you'll find a wrinkle cream with all of these components, but if you make an attempt to get a wide range of them into your routine, you'll be doing pretty well.

**Hydroxy Acids**

Hydroxy acids exfoliate your skin. By sloughing off the outer layer of dead skin cells, they serve a few important purposes.

1. Firstly, they reveal the brighter, fresher, newer skin beneath the dull dead outer layer.
2. Secondly, they clear the way for other necessary skincare components, be they prescription treatments or over-the-counter wrinkle products, to be better absorbed into the deeper layers of skin.
3. Thirdly, they encourage regeneration of new skin cells, collagen, and elastin.

There are two basic types of hydroxy acids.
1. **Alpha Hydroxy Acids** (AHAs) are derived from plant sugars or milk. They work by breaking down the glue that holds dead skin cells together. AHAs are best for dry to normal skin because they work mainly on the surface to remove the dry rough outermost layer.

The most common AHAs are Glycolic Acid and Lactic Acid, and you'll want to look for a concentration of 4% or more.

2. **Beta Hydroxy Acids** (BHAs) are more often recommended for normal to oily and acne prone skin. They act as an exfoliant, just like AHAs, but they are able to penetrate more deeply into the pores. This makes them more effective for oily skin because clogged pores is a common problem for this type of skin.

There is really only one BHA commonly used in skincare products - Salicylic Acid. But it serves multiple purposes. In addition to exfoliation, it is also an anti-irritant, anti-inflammatory, and anti-microbial.

If you find yourself in the unfortunate position of having to fight against wrinkles and acne at the same time, Salycilic Acid will be one of your most powerful weapons.

Regardless of which type of hydroxy acid you choose, an important factor to take into consideration is pH. These acids can only provide exfoliation if they are kept at the proper pH level. In the case of both kinds, that means its pH needs to be between 3 and 4.

There is actually a third kind of hydroxy acid that you might benefit from, though it is found in far fewer products than the other two. It's called polyhydroxy acid and it is very similar to AHA except that it is made of larger molecules. What this means is less penetration, which means slightly less effectiveness, but also less potential for irritation. So skin that's sensitive to AHAs may find Polyhydroxy Acids like Lactobionic and Gluconolactone helpful.

All hydroxy acids make skin especially sensitive to UV rays, making daily sunscreen a required companion.

**Retinol**

Retinol is the name given to the whole Vitamin A molecule. It comes in several different forms, but for our purposes, we'll treat it as one entire ingredient category. The form used by the skin cells is called Retinoic Acid, and that is what retinol breaks down into when it penetrates the skin.
Retinol is what is called a cell-communicating ingredient. What that means is that retinol (in the form of retinoic acid) has the ability to instruct cells how to behave. And what retinoic acid tells skin cells is that they need to behave like normal, healthy, undamaged cells. This means regeneration of new cells as well as collagen and elastin to build skin's structural support system.

It was first touted as a prescription treatment for acne, but it wasn't long before its cell regenerating abilities turned to anti-aging applications. This makes sense because in the cases of both acne and wrinkles, the goal achieved by retinol - healthy skin cells with better structural support - is beneficial.

While retinol is highly regarded for the improvements it can make to skin, it does come with some potentially troublesome side effects. Some people experience redness, itchiness, and flaking when using products containing retinol. While it is possible to view this as a sign that it's working, most see it as just a nuisance. Most over-the-counter retinol products include one or more soothing agents to counteract the problem.

Something else to note about retinol is that it, like hydroxy acids, increases skin's photosensitivity. This makes daily use of sunscreen an absolute must.

Retinol can be pretty unstable, so it has some very specific packaging needs. Any product containing retinol needs to come in packaging that prevents exposure to light and air. An opaque tube or pump dispenser is best. A clear jar is worst.

Antioxidants

These little powerhouses are extremely important for healthy skin. Research continues to bear this out, and there doesn't seem to be any counter-evidence even being presented.

What antioxidants do is combat the damage done to skin by the sun, the environment, and by simple aging. They provide a protective force against the free radicals that result from each of those assaults.

Free radicals are formed as by-products when chemical reactions occur. They become incomplete chemical particles looking to become whole, and they are frantically scurrying around in your body trying to find a way to accomplish their goal. So they steal an electron from an otherwise healthy cell, effectively turning that cell into a brand new
free radical that then goes in search of a replacement for its missing electron.

And so it goes... on and on, over and over. Over time, depending on which cells they target, these free radicals can cause a lot of damage. Take collagen for example. When free radicals chip away at healthy collagen, making it damaged collagen, eventually the collagen is no longer able to perform its function, and skin starts to sag.

Here's where antioxidants come in. They stop the chain of destruction by neutralizing the free radicals. They do this in one of two ways.

1. They provide the missing electron to the free radical, making it stable so it no longer needs to find an electron to pair up with.
2. They break down and destroy the free radical.

There are lots and lots of antioxidant sources. They come mainly from vitamins and plant sources. All sorts of fruit and herbal extracts like berries, green apple, and grape seeds are antioxidants, as well as green tea, white tea, olive oil, vitamin c, vitamin e, and selenium. The list goes on and on.

Just like Retinol, antioxidants are very unstable and need to be kept safe from light and air exposure in order to remain effective. The same types of packaging required for retinol applies to antioxidants as well.

Several skincare product ingredients are antioxidants in addition to serving other important functions. When that's the case, I've listed them separately so as to highlight all its functions.

**Ubiquinone**

You may know this one better by its other name - Coenzyme Q10. It qualifies as one of those ingredients that can count antioxidant protection as one of its relevant purposes. This is a substance found naturally in all human cells. It produces cellular energy and protects the cell from harm.

Research has shown that topical application of Ubiquinone also provides an anti-inflammatory effect which is more important to anti-aging efforts that most people know. Inflammation is akin to irritation, and irritation destroys cells. Anything that destroys
cells is going to cause aging.

In sum, ubiquinone protects cells from damage caused by oxidation and UV rays, while it stimulates collagen production and helps fight inflammation.

**Niacinamide**

Niacinamide goes by a couple of other names as well. It may be called Vitamin B3 or Nicotonic Acid as well as the more common Niacinamide. This one has been getting more attention than ever lately, and that's probably a good thing.

Niacinamide is great at bolstering the skin's moisture barrier. It increases the concentration of fatty acid and ceramides in skin, which prevents water loss. It's got another exciting function as well. It stimulates circulation in the dermis which allows for the more efficient delivery of nutrients.

Recent research has found even more benefits coming from niacinamide use. Apparently it also blocks melanin production, making it a useful ingredient in skin lightening and brightening products.

**DMAE**

Technically known as dimethylaminoethanal, DMAE is an important ingredient for firming and tightening the skin. It works because it's a precursor to acetylcholine which is a neurotransmitter that tells the muscles under the skin to contract. This will help support facial muscle tone which can help prevent sagging skin.

DMAE also works as an anti-inflammatory and it communicates to cells that they need to strengthen their outer membrane for protection.

One of the great things about DMAE is that the effects are both immediate and cumulative, so you get the dual benefits of instant gratification and of knowing that you're improving your skin in the long term.

**Hyaluronic Acid**
Hyaluronic acid is a must in your anti-wrinkle products. It's what's known as a skin-
identical ingredient because it is found naturally in skin, mainly in the dermis. You might
recall we discussed hyaluronic acid back in the section on wrinkle-filling injectables.

What it does is attract water molecules and bind to them, sometimes as much as a
thousand times its own weight. So skin remains well hydrated without the need for
greasy, oily ingredients.

Also, because it attracts all those water molecules, it plumps up and fills out wrinkles
and crevices. All of this makes your skin look dewy and hydrated, but not greasy and
weighted down.

**Vitamin C**

Researchers keep finding more and more reasons why we should be using vitamin C on
our skin. First of all, it is a great antioxidant, and we've just gone over why we need
those. But there are so many other benefits.

For one thing, vitamin C increases collagen production. It's needed for the chemical
interaction that amino acids undergo when synthesizing collagen. So the more vitamin C
you provide to your skin, the more efficiently it produces collagen.

Vitamin C also can help lighten and brighten skin. Research has shown that it inhibits
the production of melanin which is the dark pigment in skin that causes spots, blotches,
marks, and other discolorations.

Vitamin C serums are becoming very popular lately because they can be very useful in
making skin look and act younger.

One drawback of vitamin C as a skincare ingredient is that it can be very unstable.
Packaging is very important to making the effectiveness of the products last. Any
product with vitamin C as a prominent ingredient should come in an opaque tube or
pump dispenser.

**Vitamin E**
You'll most commonly see Vitamin E on skincare product labels as Tocopherol. This is another one of those ingredients that doubles as an antioxidant and something else. (I told you there were a bunch of these.) As one of the oldest and most well-researched antioxidants, vitamin E provides real protection against free radical damage, especially that which is caused by UV rays.

It also bolsters the skin's moisture barrier to help protect against a loss of hydration.

Another great benefit you'll get from vitamin E is added protection from your sunscreen. Now this doesn't mean it can replace your sunscreen. What vitamin E does is increase the efficiency and availability of the ingredients in sunscreen products. It's also great for soothing your skin if you do get a sunburn.

**Glycerin**

As a natural humectant, glycerin attracts water to the outer layers of skin to keep it well hydrated, looking smooth and soft. What's good about the choice to use glycerin is that it is found naturally in skin, which makes it a skin-identical ingredient. This means that it is very well tolerated by just about everyone.

Glycerin is also cell communicating in that it tells cells to mature at a steady rate. This helps normalize skin and keep cells intact throughout their lifespan.

**Peptides**

Peptides are tiny little protein fragments made up of amino acid chains. They belong to the cell communicating category of ingredients because they tell cells how to behave. There are all different kinds of peptides that serve a huge variety of different functions.

Traditionally, for skincare purposes, peptides communicate to the cell that more collagen is needed. And as they are amino acids themselves, they can help in the synthesis as well.
There are also peptides (Like Hexapeptide-3 aka Argiline) that communicate to the facial muscles to relax, aiming to achieve a Botox-like effect.

**Ceramides**

Ceramides are naturally found in skin. They are skin lipids that are crucial to skin's support structure at the surface, where the protective moisture barrier lives. Age and environment cause the breakdown of natural ceramides, which is why it's helpful to use a wrinkle cream that replaces that which has been lost.

This way, moisture stays in and environmental attackers are kept at bay.

**Resveratrol**

Resveratrol has become almost a household word ever since the news came out that drinking a glass of red wine a day will make you live and stay young longer. Resveratrol is an antioxidant found in the skin of grapes, and it's been touted for a while now as the "fountain of youth." But it had only been tested when taken orally, not topically.

More recently, it has been tested for topical use. Subjects were found to be protected against the damages of UV radiation. It's also been found to decrease acne outbreaks.

Whether or not Resveratrol would qualify as "the fountain of youth", it definitely provides significant antioxidant protection for your skin, particular against the damaging effects of the sun.

**Linoleic Acid**

Linoleic Acid is another one of those multi-purpose ingredients. It's an unsaturated fatty acid that is usually used as an emollient and thickener. But as an Omega 6 fatty acid, it also has antioxidant and anti-inflammatory properties.

On top of that, recent research has shown linoleic acid to be able to fortify the skin's moisture barrier and cell membranes to protect against moisture loss and boost the immune system.
Green Tea

Or white tea or black tea for that matter. Tea, whether used internally or topically, is a very strong antioxidant, and is being studied all the time to determine if there are any other anti-aging benefits.

Tea's additional benefits include its anti-inflammatory properties, which are very important for cell health. Inflammation damages cells. Anything that prevents inflammation can be considered anti-aging.

Tea also contains EGCGs, which have been shown to prevent the breakdown of collagen as well as reduce the damage that UV rays do to skin.

Whether you choose a wrinkle cream that uses tea or you drink a cup nightly, green tea, white tea, or black tea can all be a key part of your anti-aging plan.

Soy Extract

Soy offers antioxidant benefits in addition to stimulating collagen synthesis. More recent studies have also shown soy to have a positive effect on hyaluronic acid production in skin.

The key component involved is called genistein, and it's a soy isoflavone. The genistein in soy is also believed to reduce redness and even out skin tones. This is because it prevents melanin from adhering to skin cells.

And soy doesn't stop there. On top of all that, soy also lessens the thinning of the skin so often associated with menopause. This is because soy is a phytoestrogen, so it works as a very mild estrogen replacement compound.

Clearly, this is just a partial list. There are thousands of different ingredients in thousands of different skincare products to choose from. These are just some of the ones that come most highly recommended by experts and skincare enthusiasts alike. And just because they're on this
Another thing to consider about skincare ingredients is that not everything works for everyone, and some may cause irritation to your particular skin. But if you use this list as a guide, you'll have all the bases covered.
Chapter 8: A Couple Great Products

A list of quality ingredients to look for is one thing. But I also think it may be helpful to point out a couple wrinkle creams that actually use many of these ingredients. There are hundreds upon hundreds. I know there are those among us who'll enjoy scouring the malls, beauty supply stores, and internet, trying sample after sample and product after product until one day (maybe when they're 85) they'll find just the right one. But for the rest...

LifeCell

This has been one of my favorites for a while now, and when you get a look at the ingredients, I think you'll understand why. It's got several of the most highly recommended ingredients from our list, including:

- Hyaluronic Acid
- DMAE
- Retinol
- Ubiquinone
- Vitamin C
- Acetyl Hexapeptide (the one that relaxes your muscles for a Botox-like effect)

So LifeCell's got you covered in terms of oil-free hydration, skin cell rejuvenation, moisture barrier protection, antioxidant protection, collagen production, skin firming agents, and even a smoothing out of expression lines.

Lifecell also has this really cool feature where it reflects light away from the shadows caused by your wrinkles. When you put it on, it has the immediate effect of camouflaging any fine lines you may have.

I use it all over my face and neck, even around my eyes and on my lips, and I've seen a real improvement in my skin texture and tone. It even lightened up the really stubborn dark patches I have around my jawline.

Click Here To Read My Official Review of Lifecell Anti Aging
Kollagen Intensiv

Kollagen Intensiv is a great product too, but different in that its focus is mainly on collagen renewal and production. This is important because our skin has less and less collagen naturally as we age. Since collagen is the stuff that makes your skin strong, firm, and plump, we need to find a way to replace it.

Many of the primary ingredients in Kollagen Intensiv are taken right from our list.

- Syn-Coll (a very particular peptide engineered specifically and shown to stimulate the production of collagen in skin).
- Glycerin
- Vitamin E
- Green Tea
- Retinol
- Cucumber Extract (an antioxidant)
- Shea Butter (not on our list but a good emollient nevertheless)

I like the way Kollagen Intensiv goes onto my skin. It's light and moisturizes well without feeling greasy. I find it gives me that filled in, plumped out look right away, but the real benefits of the increase in collagen come later, like 3 months later. But you should stick it out, because if you do, I know you'll be happy you did.

Click Here To Read My Official Review of Kollagen Intensiv
Chapter 9: Preventing Wrinkles in the Future

The older you get, the more you want to do something to improve the look of the skin you have now. Whether it be through invasive, expensive surgical procedures, painful and pricey spa procedures, or that miracle cream you've pinned your hopes and 40 bucks on, you're going to see if it can make you look better now.

But there's another part to this. Whether you're 25 or 75, you probably don't want any more wrinkles popping up on the scene. Well, sorry to break it to you, but you can't stop time. You can however, take some preventative measures in the hopes of buying yourself a little more time with smoother skin.

If you had to choose only one preventative measure to stave off wrinkles and all the other nasty signs of aging skin, the choice should be easy.

**Sun Protection**

It really can't be stressed enough. It's like climate change. Don't kid yourself, the science is in, and it's definitive. The sun is the number one cause of prematurely aging skin. So short of getting in touch with your inner vampire and only coming out between sunset and sunrise, you're going to have to figure out how to protect yourself.

- Wear sunscreen. Use at least an SPF 15 every single day. If you're planning to be out for long periods of time, up it to SPF 30 or even better, SPF 50.
- Plan outings when the sun's rays aren't at their most damaging. Avoid prolonged periods of exposure between the peak hours of 10am and 3pm.
- Wear protective clothing. This is especially important during the peak hours when the sun is highest in the sky. Wear a hat, use an umbrella. Do what you must. Your skin will thank you.

While sun protection really is the most important, it's certainly not the only thing you can do to prevent future wrinkles.

**Drink Water**

Keeping well hydrated is important both internally and externally. And while dryness
doesn't cause wrinkles, it makes it more likely that those cute little crinkles you get when you laugh will become permanent fixtures on your face. Getting enough water will also help keep at bay the toxins that want to destroy your skin cells.

**Get Your Eyes Checked**

As often as not, those vertical "frown" lines that appear between your eyes can be caused by squinting. If you're squinting to compensate for not being able to see very well, glasses could prevent those lines from settling in for the long haul.

**Eat Your Vitamins**

Make sure you're eating plenty of fruits and vegetables in their whole forms as much as possible so you can get the full effect of the antioxidants they provide. Making sure you're getting enough of these cell protecting powerhouses will fight off both aging and disease. Supplement with some soy and green tea and you should get plenty.

**Sleep on Your Back**

Smushing your face against the pillow all night may be fine when you're 12, but at 45, your lack of collagen and elastin makes it harder for your poor skin to bounce back form its contortions.

**Exercise**

Healthier bodies have healthier skin. A good workout also relieves stress. Consider adding a strength training component if you don't already have one. It'll improve muscle tone which helps hold back the sagging.

Yoga is a good wrinkle prevention choice too. It delivers an oxygen boost to your skin, giving it a nice glow (temporarily at least).

**Quit Your Bad Habits**
Smoking is the obvious one. Cigarette smoke is full of toxins that damage collagen and blood vessels in the skin. Not to mention the squint lines and those deep creases you get around your mouth from years of sucking on those cigarettes.

Excessive alcohol should be avoided too. It's dehydrating, and dehydration is no good for your skin.

Find the Right Wrinkle Creams and Use Them

They may not be miracle workers, but they will help give your skin the tools it needs to fight the signs of time. The biggies are antioxidants, retinol, vitamin C and hydroxy acids.

Sleep

When you're getting enough sleep, your body makes Human Growth Hormone (HGH) which is vital for all kinds of new cell generation in your skin and body. When you're not getting enough sleep, your body makes cortisol instead, a skin cell killing hormone.

There's another reason to get enough sleep, and that's what's known as the "domino effect." If you don't get enough sleep, you wake up late and tired, you eat a PopTart for breakfast, you forget to put on your sunscreen, you fall asleep on the train with your head smushed into your hand, you skip lunch to make up for being late, you drink 7 Diet Cokes, you get home and eat french fries and fruit snacks for dinner, and you fall asleep with your makeup on, face firmly planted in the couch cushion.

Now that I think about it, maybe getting enough sleep should be right up there with sun protection.

Be Happy

There has actually been a study showing that twins in healthy, positive relationships have fewer wrinkles on their faces than their divorced siblings. It's awfully specific and a little presumptuous to assume that divorced people aren't happy. But from what I've heard, going the the process of divorce is pretty miserable.

Anyway, the point is a good one. Happy people, wrinkles or not, look better than

Most everybody wants to look younger. But is it really about how we look, or is it about how looking younger makes us somehow feel younger, and how feeling younger makes us feel more vital and alive? We all have our reasons for the choices we make and the priorities we set. If looking younger makes you feel better, then I hope you've found some helpful guidance in these pages.