

Introduction

An Epidemic

I've been practising as a dermatologist for 20 years. I'm also on the faculty of the University of Toronto's Department of Medicine. My academic interest is contact dermatitis, or reactions to the things that come into *contact* with the skin. And during my decades in practice I've seen an alarming increase in the number of patients walking into my examining room with a certain kind of skin problem.

The least serious cases complain about sensitive skin. These patients are hyper-aware of whatever's touching them; in fact, they're hyper-aware of their skin. Moving up the scale of severity, there are patients who complain of burning and stinging anytime they put skin products onto themselves, whether the product is moisturizer, soap, sunscreen or something else. Others experience flare-ups due to the friction from their clothing, the wind or sun exposure. We're talking eruptions that range from mild redness to burning or stinging of the face. It might be persistently dry and cracked hands. Or the sensation that the skin or scalp is covered with insects.

Some cases are so severe that patients can't work or sleep because of the constant itch. The reactions affect people's self-esteem and hamper their ability to function. Some feel so ashamed of their rashes that they don't want to go outside. The problems can make many people's lives a living hell.

The type of skin problem I'm talking about, in all its forms, is caused by beauty products. And it's becoming an epidemic. The number of patients I see to treat these reactions has spiked in recent years. I believe my practice is representative of those in developed countries; dermatologists all over the world are noticing increasing numbers.

In 2016, the U.S. Food and Drug Administration made public, for the first time, the database of adverse events related to cosmetic and beauty products. The trend was alarming in the extreme. For such products as moisturizers, shampoos and conditioners, shaving creams, cleansers, baby products and makeup—the whole of the skincare and beauty product universe, in other words—the FDA registered 291 adverse events in 2013, 436 in 2014, 706 in 2015 and a remarkable 1591 in 2016. Those represent percentage

increases of 50 percent, 62 percent and 125 percent in the last three years. You might think these numbers are small relative to population size, but bear in mind, these are events that are *reported* to the FDA. A team from Northwestern University medical school analyzed the data for a study in a major medical journal (*JAMA Internal Medicine*). The study authors noted that the FDA's database "reflects only a small proportion of all events." That is, the actual number of reactions to cosmetic and beauty products is certain to be far higher. Health Canada tracks its own reports on human health and safety concerns related to various types of consumer products—and cosmetics consistently places among the top five reported sectors.

Or consider what's been happening in the last half-century or so with a condition known as eczema—inflamed, scaly, itchy skin. It affects more young people than old. In the 1940s, eczema was relatively rare, affecting just 5 percent of children and comparatively unknown in adults. Today, localities exist where 25 percent of young people suffer from the condition. Adult eczema now affects about 10 percent of adults in the U.S. One interesting thing about eczema is that people with it become more likely to experience other problems, such as asthma and hay fever. A survey that focused on an individual city—Aberdeen, Scotland—found that rates of eczema had increased by three times between 1964 and 1999, while rates of hay fever and asthma had increased by four and five times, respectively. As John McFadden, a dermatologist at London's St. Thomas' Hospital, wrote in the *British Journal of Dermatology*, the skyrocketing eczema rates reflect "a general trend in industrialized countries," and that "during the last decade this increased prevalence has persisted."

The *really* dramatic increase over time has happened with another condition, known as sensitive skin, which is pretty much what it sounds like—skin that is ultra-reactive, intolerant, possibly itchy or otherwise painful, and sometimes, but not always, accompanied by some kind of a rash. The condition is the biggest trend in my practice as well as many others throughout the developed world.

This epidemic troubles some of the world's most respected dermatologists. "The reported prevalence of self-perceived skin sensitivity have increased steadily over time,"

notes a 2013 article co-authored by the American dermatological legend Howard Maibach. “Knowledgeable, experienced observers agree that the subject is not trivial, causes a great deal of distress, and is more than a cosmetic nuisance or a mere matter of vanity,” comments a 2006 article lead-authored by Albert Kligman, the co-inventor of Retin-A.

Reports suggest that 40 percent of people worldwide consider themselves to have sensitive skin. That’s a *remarkable* amount. And the research shows that the prevalence can be even higher in individual countries. One survey revealed that approximately 69 percent of American women self-identified as having sensitive skin. Nearly 85 percent of women in France claimed to be plagued by it. And a whopping 91 percent of Italians told researchers that they suffered from the condition.

Adverse events from beauty products. Skyrocketing rates of eczema. Huge numbers of people reporting that they have sensitive skin.

What on earth is going on?

This is the 21st century! We have instantaneous access to nearly any TV show or movie ever filmed. Driverless taxis are an actual thing! In so many ways, it seems, we’re living in the future—so why does it seem as if we’re having more skin problems than ever? Shouldn’t the modern lifestyle have solved this problem by now?

But here’s the thing: *What if that modern lifestyle is part of the problem?*

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Evolution invented skin millions of years ago—and until relatively recently, we’ve left it to its own devices. Even our great-grandparents started their lives at a time when most people considered a weekly bath to be the height of cleanliness.

But then, in the last 70 or so years, we decided that this wonderful invention *wasn’t good enough*. We decided it needed help. So began the practice of daily showering. The use of soap several times a day to cleanse the skin. The more-than-daily application of moisturizers and makeup.

These customs are *incredibly* recent in historical terms.

The bathing and grooming customs of developed societies are a major contributor to the recent epidemic of skin problems. We think we’re taking care of ourselves by bathing at

least every day, cleansing our faces and bodies multiple times a day, shampooing several times a week. Not to mention all the other things we do to our skin. But the irony is, many of the things we're doing to *take care* of our skin actually end up *harming* it.

You read that right: The way we're taking care of our skin today is *the wrong approach*.

Whether it's the women in lab coats at the cosmetics counter or the glammed-up influencers on YouTube and Instagram, the conventional wisdom is cleanse, cleanse again, exfoliate, moisturize, protect. *Spend* more money, *buy* more products, *take* more time. No, these things aren't necessary! In fact, most of that advice actually contradicts the academic literature!

What's responsible for the increase in skin problems I described earlier? The modern beauty habits—including our overall obsession with grooming—that are supposed to be taking care of the skin in the first place!

This book isn't just another beauty or how-to guide. It's a diagnosis grounded in the latest science that suggests the way we've been taking care of our skin is wrong. As a practising dermatologist, every day I encounter people with major skin reactions. They tend to be astonished when they discover that they may be causing the issue themselves—with a skincare product or the way they wash and take care of their skin.

This book amounts to an objective examination of current beauty and skincare practices, by a medical doctor who's been on the front lines of the battle for skin health for 20 years. The volume you hold in your hands details the latest dermatological science, cutting-edge microbiology and my insider's perspective on the beauty industry to argue that, rather than putting the skin into a cycle of damage and repair—*damaging* with soap, cleansers and treatments, *repairing* with creams and balms—maybe it's better just to sidestep that cycle. To *minimize* such interventions and experience a return to skin health.

The approaches described in this book can help with the following conditions:

- Atopic eczema
- Dandruff
- Dermatitis
- Dry hands