

The Skin

Do you know which is your body's largest organ? It weighs 8 to 10 pounds? If laid out flat, it would cover an area of about 22 square feet? It covers your entire body.

In case you don't know, it's your skin. A piece of skin the size of a quarter contains one yard of blood vessels; four yards of nerves; 25 nerve cells; 100 sweat glands; and more than 3,000,000 cells.

Your skin is constantly sloughing off dead cells and replacing with new. Here's an easy test to prove it. Take a piece of clear tape and stick it on the back of your hand for a few seconds then remove it. What do you see? Probably lots of little specks. Those are dead cells.

The pores of our skin require four essential things to live and function properly:

>**Oxygen:** cells die within 3 minutes without oxygen

>**Water:** cells die in a few days

>**Nutrition:** cells die in a few weeks

>**Cleansing:** cells begin to die in a matter of minutes (or at the most, a matter of hours) if cell wastes are not removed promptly.

The Spirit of Prophecy calls our pores "**...the little mouths through which the body breathes...**" (2T 524), and gives counsel to the importance of bathing and cleanliness.

"The skin needs to be carefully and thoroughly cleansed, that the pores may do their work in freeing the body from impurities;..." HL227

"Upon rising in the morning, most persons would be benefited by taking a sponge bath, or, if more agreeable, a hand bath, with merely a wash-bowl of water; this will remove impurities from the skin." HL 192

"Bathing frees the skin from accumulation of impurities which are constantly collecting..." HR June 1, 1872

Like a marvelous machine, all of the body systems must work together. When they do not function properly, putrefaction is the result. Whenever wastes do not pass from the system within 24 hours, the blood then absorbs this pollutant. The liver, lungs, kidneys and skin must try to eliminate this waste.

"Scrupulous cleanliness is essential to both physical and mental health. Impurities are constantly thrown off from the body through the skin. Its millions of pores are quickly clogged unless kept clean by frequently bathing, and the impurities which should pass off through the skin become an additional burden to the other eliminating organs." MH 276

We're still receiving requests for a tract we published several years ago entitled "**Beauty's Only Skin Deep.**" It contained several interesting sections:

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- **Cosmetic Safety:** excerpts from Congressman Ron Wyden's appeal for accountability: "no statutory requirements that cosmetic ingredients be tested for safety before they are used"
- **"Natural" ingredients:** there are no legal guidelines or boundaries. "Natural" can mean anything. For example, decomposed bird droppings are "natural" and have been used as a "natural" source of certain ingredients in cosmetics.
- **Products & by-products:** animal, vegetable or human! Human placenta can be found in products found even in health food stores!
- **Beauty, Pride & Pig Grease:** how rendering plants process dead carcasses, and where those by-products end up!
- **Mineral oil:** petroleum-based ingredients block pores; the skin can't breathe, and toxins get trapped inside.

Petroleum Products

Many folks do not realize the detrimental effect that the use of petroleum products (Vaseline, etc.) and mineral oil has on their skin.

Here's another test: the next time your hands feel dry and you're about to apply hand lotion, instead put some Vaseline, mineral oil or baby oil, etc., in the palm of your hand, then spread it all over your hands as you would hand lotion. Next, pour water over your hands and see what happens. It runs right off. Oil and water do not mix. The water cannot penetrate the barrier. Oxygen cannot get in, and toxins can't get out. The same thing happens to a degree each time you use products which contain petroleum products.

Mineral oil comes from crude oil (petroleum) used in industry as metal cutting fluid. It may suffocate the skin by forming an oil film. Healthy skin needs oxygen, and to release carbon dioxide and toxins, it should not be inhibited. Holding to large amounts of moisture in the skin can "flood" the biology and may result in immature unhealthy, sensitive skin that dries out easily.

Antiperspirants & Deodorants

Psalms 139 says we are fearfully and wonderfully made. If our bodies were not designed exactly the way they are, we could overheat or explode within the normal course of our day. But God created each one of us to deal with adverse conditions in very unique ways. When we get hot, certain parts of our body produces sweat to throw off wastes and help cool us down.

Think about this for a moment:

Q: What is a de - odor - ant?

A: Something we use to take away or cover odor.

Q: What is an anti - perspir - ant?

A: Something we put under our arms to keep us from perspiring.

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Antiperspirants actually block the pores so the sweat can't get out. What happens? It gets recycled. Once again, the Spirit of Prophecy tells us the toxins get reabsorbed into the system and it throws the burden on the other organs to rid the body of them.

"Impurities are constantly and imperceptibly passing from the body through the pores, and if the skin is not kept in a healthy condition, the system is burdened with impure matter... The impurities of the body, if not allowed to escape, are taken back into the blood, and forced upon the internal organs. Nature, to relieve herself of poisonous impurities, makes an effort to free the system, which effort produces fevers and what is termed disease." HL 206

Every day, millions of people raise their arms and apply deodorants and antiperspirants. I think about all those folks who go to health clubs to work out. It's not "cool" to sweat or stink -- so they dam up the body's natural course by using deodorants and antiperspirants! All those toxins are reabsorbed by the body.

If deodorants and antiperspirants were something as pure and simple as a flower petal or a feather, it wouldn't be so bad. Unfortunately, deodorants and antiperspirants contain combinations of strong chemicals. These chemicals are absorbed through your skin, remember ***"the little mouths through which body breathes..."*** (2T 524). Here are just three of the chemicals.

- ***Calcium Hypochlorite***: an algicide and bactericide for swimming pools; a deodorant, water purifier, fungicide and bleaching agent. Can cause severe irritation of nose, throat and skin. A human mutagen. Dangerous fire risk.
- ***Formaldehyde***: a confirmed carcinogen and human mutagen. Poisonous if swallowed. Effects on the body are watering eyes, changes in the ability to smell, aggression, and lung damage. A skin and eye irritant. (By the way, if you check the label and don't find the word ***formaldehyde*** there are 26 other names manufacturers can use to disguise it.)
- ***Lineleytrimethylammonium bromide***: used in germicides, deodorants, algicides and slime control products. A severe skin and eye irritant. Highly toxic by swallowing.

These chemicals, and many others, help prevent sweating, and sweating is one of the ways the body cleanses itself of toxic substances. Every time you apply an antiperspirant, it's like damming up a river. Sweat backs up in and around your armpit. The result? The toxins in your sweat become trapped there. And worst of all, fatty breast tissue is especially efficient at storing these poisons. If you want to be at your healthiest, you need to sweat more, not less! Exercise, which promotes sweating, has been proven to lower breast-cancer risk.

An important part of our health message is the use of water, especially the use of hot and cold water treatments and sweat baths specifically to promote sweating to help rid the body of toxins. What are we doing obstructing the very process designed to help us maintain health?

A report in a women's health newsletter made this alarming statement: "You are eight times more likely to develop breast cancer next to where you apply your deodorant. Did you realize that, if you do develop breast cancer, there's a 50% chance the tumor will appear in the area closest to your underarm?" There was displayed this disturbing breast cancer map.

Breast Cancer Risks

The 1994 statistics according to the National Cancer Institute show:

Up to age. . . Your odds are

25 1 in 19,608

30 1 in 2,525

35 1 in 622

40 1 in 217

45 1 in 93

50 1 in 50

55 1 in 33

60 1 in 24

65 1 in 17

70 1 in 14

75 1 in 11

80 1 in 10

85 1 in 9

95 1 in 8

Is it a wonder that numbers of breast cancer continues to increase among both men and women!? The latest figures indicate that 1 out of every 2 men, and 1 out of every 3 women, will develop breast cancer during their lifetime.

Aluminum

There has been much debate about the presence of aluminum in antiperspirants, deodorants and other items many of us use on a daily basis.

Aluminum is a metal, the third most common element in the environment and a toxin in the body. You'll find it in processed foods, antiperspirants, antacids, cosmetics, paper products, beverage cans, foil and cookware.

The World Health Organization conducted studies on chemical pollution and the elderly. "There is a suspected link between Alzheimer's disease and the toxicity of aluminum...autopsies have found high concentrations of the metal in the brain of people who had suffered from the disease." (**Public Health Reports**, Nov-Dec 1993)

"Studies linking aluminum to Alzheimer's disease... 'The evidence is strong enough that the prudent person will eliminate all food and cosmetic sources of aluminum and will use aluminum

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cooking utensils only if they are coated,' suggests Gary Price Todd, M.D., author of *Nutrition, Health and Disease*." (*Natural Health*, May-June 1993)

Dr. Daniel Perl, Director of Neuropathology at Mount Sinai Medical Center in New York, suggests, "...avoid aerosol antiperspirants. Aluminum in aerosol form may be more readily absorbed into the brain through nasal passages." (*The University of California, Berkeley Wellness Letter*, April 1993)

"Aluminum-containing antiperspirants are designed to be absorbed, and studies show that regular use of these products can raise the risk of Alzheimer's by as much as three-fold. [Also in] municipal water supplies treated with alum (aluminum sulfate)... at least 7 studies show that people drinking water high in alum are more likely to develop Alzheimer's." (*Natural Health*, May-June 1993)

Literally thousands of chemical compounds are formulated into the personal care products and processed foods we use and consume daily. What do they do? What happens inside our bodies when these chemicals build up over decades of use? What happens when they interact with one another?

Aluminum is a great example of this question. To reach the brain, aluminum must pass the blood-brain barrier, an elaborate structure that filters the blood. Elemental aluminum doesn't easily pass this barrier, but aluminum compounds found in many consumable products do. Aspirin is commonly buffered with aluminum hydroxide or glycinate. If you drink some orange juice, the citric acid transforms these compounds into aluminum citrate -- 5 times better able to find its way to the brain. If the aluminum in food combines with maltose, a sugar-like additive used in many baked goods, its capacity to pass the blood-brain barrier increases by as much as 90 times!" (from *Natural Health*, May-June 1993)

Buyer Beware!

Many products on the grocer's shelves contain ingredients which do not promote health. I believe it is time we take an active role as our own personal health care provider -- it might be the best insurance you could ever buy.

Many of the products we wash our hair with, brush our teeth with, and put on our skin, may contain harmful chemicals. For label-readers, here are some other ingredients to watch out for:

Propylene Glycol

Called a humectant in cosmetics it is actually "industrial antifreeze" and the major ingredient in brake and hydraulic fluid. Tests show it can be a strong skin irritant. Material Safety Data Sheets (MSDS) warn users to avoid skin contact as it is systemic and can cause liver abnormalities and kidney disease.

Propylene Glycol: the primary ingredient in industrial antifreeze, brake fluid, varnishes and resins; a strong irritant. Product content can be 10% or 20% or more! Causes liver and kidney damage.

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Propylene glycol is used to keep products from freezing, and also as an emulsifier and thickening agent. It can be found in floor wax, pet food, laundry detergents, and processed foods such as baked goods, beet sugar, beer, cheese, citrus fruit (raw fruit to keep from freezing), packaged coconut, condiments, confections, dairy desserts (frozen), fats, flavorings, frostings, gelatins, gravies, jams, jellies, margarine, oil, puddings, relishes, salad dressings, sweet sauces, seasonings, syrups, soaps and perfumes.

Check the label next time you reach for the Cool Whip or packaged coconut. I was especially disgusted to see it listed as the first or second ingredient in the butter and coconut flavorings I had for cooking.

Mothers, next time you change your baby's diaper and reach for the baby wipes, check the label -- most contain propylene glycol. Your baby's bottom was made to function with water not antifreeze!

SLS & SLES

Potentially, SLS is perhaps the most harmful ingredient in personal-care products. SLS is used in testing labs as the standard ingredient to irritate skin. Industrial uses of SLS include garage floor cleaners, engine degreasers, and car wash soaps just to name a few. Studies show its danger potential to be great when used in personal-care products. A study from the Medical College of Georgia indicates that SLS is systemic, can penetrate and be retained in the eye, brain, heart, liver, etc., with potentially harmful long-term effects. It could retard healing, cause cataracts in adults, and can keep children's eyes from developing properly. (Summary report to **Research to Prevent Blindness, Inc.** Conference.)

Other research has shown that SLS and SLES may cause potentially carcinogenic nitrates and dioxins to form in shampoos and cleansers by reacting with commonly used ingredients found in many products. Large amounts of nitrates may enter the blood system from just one shampooing. SLES is the alcohol form (etho-xylated) of SLS. It is slightly less irritating but may cause more drying. Both SLS and SLES can enter the blood stream. They are used in personal-care products because they are cheap. A small amount generates a large amount of foam, and when salt is added it thickens to give the illusion of being thick and concentrated.

Sodium lauryl sulfate (SLS) and **Sodium laureth sulfate (SLES)**: a detergent and foam-building agent. A human mutagen and potential carcinogen. Can cause hair loss and eye, skin and scalp irritation.

SLS can be found in beverages, eggs, fruit juice drinks, marsh-mallows, vegetable oils, detergents, shampoos, toothpastes, hand lotions, bubble baths, and shaving cream. (There are 29 other names by which SLS can be disguised by manufacturers.)

If someone chooses to use products containing these ingredients, it may be wise to clean up as if they were adding antifreeze to their car or using an industrial strength detergent, because that's exactly what these chemicals are!

Something to Think About

- **Glycerine** (and some alcohols): a humectant, draws moisture out of skin leaving it dry on the inside but gives a moist feeling on the outside.
- **Collagen** or **Elastin**: derived from animal skins and ground up chicken feet. Used to moisturize; clogs pores, suffocates skin with too large of molecules (it's like trying to play golf with a bowling ball).
- **Talc**: chemically similar to asbestos, is a known cancer causing substance. Used in baby powder, it clogs the pores, and is a skin irritant. Linked to ovarian cancer. As early as the 1930's, talc has been linked to post-operative granulomatous peritonitis and fibrous adhesions. Doctors no longer use it as a glove donning powder (because of its dry lubricating properties) for surgical gloves.
- **Bar Soaps**: made from animal fat and lye allows bacteria to feed and grow in it. May corrode the skin and dry it out.
- **Kaolin** or **bentonite**: a fine, natural clay that dehydrates and suffocates the skin. Used to put out forest fires by cutting off oxygen.

How Much is Too Much?

While GRAS "generally regarded as safe" by the FDA if used "within limits," many of these chemicals are in many of the everyday items people use and eat. A little bit here and there soon adds up.

In 1938, the FDA grand-fathered the use of several of these ingredients as safe for personal care items, within limitations. Since that time there has been no testing for long range side effects from the constant use of these specific products. It has been proven that these can be absorbed into the blood stream. And technically, by using these chemicals in their products, manufacturers are not doing anything "illegal" according to government standards.

Potentially, the public is as much at risk naively using these chemicals as we were 40 or 50 years ago with cigarette smoking. Today, tobacco companies are required to have warning labels on their products. Unfortunately, manufacturers who use chemicals that have been proven to cause cancer, mutations in humans, and other debilitating health problems and diseases, are not required to carry similar warnings.

Surprisingly, on the side label of a popular child's bubblebath, beneath the directions and list of ingredients (which included SLS and SLES), appeared this warning:

"Caution: Use as directed. Excessive or prolonged exposure may cause irritation to skin and urinary tract. Discontinue use if rash, redness, or itching occurs. Consult physician if irritation persists. Avoid eye contact: if contact occurs, rinse with water. Keep out of reach of children"

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Now What?

For us to be able to make good decisions and discern right from wrong, our bodies must be able to produce good blood. We need to know what goes into our bodies. We need to ensure that our skin can breathe and eliminate toxins.

There are a few companies offering personal care items such as cleansers, shampoos, conditioners, deodorants, cosmetics, toothpastes, mouthwashes, etc., which are made with safer ingredients. Also, there are books available which offer recipes for making your own hair and skin care products.

Pure Castile or coconut soap is readily available and can be used for bathing and shampoo.

Fine powdered charcoal mixed with a drop of clove oil (beware as clove oil can be potent!) or myrrh and enough toothpaste to bring to the right consistency, make a healthful alternative to commercial toothpastes. It promotes healing in cases of gum problems, reduces plaque and brightens teeth.

"Disease never comes without a cause. The way is prepared, and disease invited, by disregard of the laws of health." MH 234