http://greenlivingideas.com/2008/02/26/natural-deodorants-and-antiperspirants/

Whether we like it or not, it is part of our culture: we are perceived in part by how we smell. Since the body's natural process of cooling itself involves sweating, perspiration is an essential part of its natural functioning.

Thus, most of us use deodorants, which neutralize the smell of perspiration, or antiperspirants, which minimize body odor by blocking sweat from escaping through underarm pores onto the surface of the skin.

Most conventional deodorants and antiperspirants contain several ingredients linked to serious health effects, from Alzheimer's disease to virulent cancers. Since deodorants and antiperspirants are designed to stay on our bodies for hours, this allows the potential for more harmful chemicals to be absorbed through the skin.

While natural options are available, many people have lodged complaints about the inadequacy of natural deodorants to adequately mask body odor. There is now an abundance of alternative options—many improved upon since their initial introduction several years ago—that may inspire you to think again about incorporating natural deodorants into your body care regime. Many of these new natural body products can protect you from exposure to unnecessary, harmful ingredients and still leave you smelling fresh and feeling confident.

The Physiology of Perspiration

The apocrine glands are the reason that underarm perspiration smells stronger than the sweat secreted by the rest of the body. The two types of sweat glands that cover the human skin are:

•apocrine, or scent, glands located only in the armpit, ear, navel, nipple, and genital regions

•eccrine glands do the work of regulating the body's temperature by secreting a watery sweat over the skin. This sweat quickly evaporates and keeps the body cool.

In hot weather or under stress or hard exercise, excessive perspiration exceeds the rate of evaporation. Sweat produced by the eccrine glands does not contribute to body odor because eccrine sweat contains no substances that are attractive to bacteria. Apocrine sweat, on the other hand, contains organic compounds that are quickly populated by bacteria on the surface of the skin. This bacterial activity is what produces underarm odor.

What is the Difference Between Antiperspirants and Deodorants?

Antiperspirants work by clogging, closing, or blocking the pores with aluminum ions so they cannot release perspiration. Aluminum is a hazardous material that the FDA allows to be added to body care products in regulated amounts. There is no proof that these "regulated amounts" of what is essentially poisonous to the human body are actually safe. Arguments against the use of aluminum emphasize the fact that aluminum accumulates in the brain over time and may contribute to Alzheimer's disease and breast cancers.

Recent studies on the effects of aluminum and the dangers of antiperspirant usage suggest that it travels more easily into the lymphatic system when underarms are shaved. Your antiperspirant label may list aluminum as:

•aluminum chlorohydrate

•ammonium aluminum sulfate

•potassium aluminum sulfate

•aluminum zirconium tetrachlorohydrex gly

Aside from aluminum, most antiperspirants also contain parabens, antimicrobial agents derived from toluene—a toxic petrochemical derivative. Some evidence suggests that repeated exposure to toluene may contribute to hormone disruption.

Thirteen research studies performed since 2000 have shown that various types of parabens act like estrogen in living tissue. Estrogen is known to drive the growth of cancerous cells.

Some people with sensitive skin have an allergic reaction to parabens, which results in a skin condition known as contact dermatitis.

Antiperspirants also have harsh astringent salts containing metals that can cause granulomas (small, itchy bumps) on underarm skin.

Deodorants work by:

•neutralizing the smell of the perspiration mixed with bacteria

•antiseptic action against that bacteria

Deodorants are more healthy than antispirants because they don't interfere with perspiration, but many conventional brands contain harsh, potentially toxic ingredients that should be avoided. Deodorant ingredients to avoid include parabens, all forms of aluminum, and the following substances:

•Propylene glycol: a penetration enhancer that absorbs quickly through the skin and which has not been fully investigated for carcinogenic potential.

•Talc: classified as a carcinogen by the International Agency for Research on Cancer if it contains asbestiform fibers, which are unregulated in cosmetic grade talc.

•Steareth-n: ('n' may be any number, say 100), may be vegetable derived but is processed with ethylene oxide (ethoxylated), a known human carcinogen.

•Triclosan: an antibacterial found in deodorants and soaps. It has an astounding ability to create resistant bacteria.

Ammonium alum is a prevalent natural compound that cannot be absorbed into the skin and doesn't clog pores the way aluminum chloride does. While it doesn't kill the bacteria or stop perspiration, ammonium alum inhibits bacterial growth that causes odor. It is the primary ingredient in deodorant crystals, a safe and effective alternative to antiperspirant and commercial deodorants.

Environmental Impact of Conventional Deodorants

Showering washes our deodorants and antiperspirants down the drain, introducing known or suspected toxins into our nation's waterways. Octoxynol compounds, otherwise known as alkylphenol ethoxylates (APEs), are found in deodorants, antiperspirants, and bodies of water. These chemicals are slow to break down and have been shown to disrupt the endocrine systems of fish, birds, and mammals.

The process of mining aluminum used in antiperspirants destroys the landscape, pollutes water, and consumes vast amounts of electricity.

According to Lester Brown's Eco-Economy: Building an Economy for the Earth (Norton,2000), each year the aluminum industry consumes as much electricity as the entire continent of Africa.

Alternative Options

It's up to you, conscious consumer, to choose the best and safest product for your body. Before you buy any deodorant or product that goes on your skin, always read the ingredients. Eschew conventional antiperspirants altogether and opt instead for hypoallergenic, paraben-free, and aluminum-free deodorant. Choose deodorants with ingredients like:

•Vegetable glycerin

•Charcoal

•Vinegar

•Baking soda

•Algae extracts

•Green tea

•Aloe vera gel

•Natural preservatives like bioflavanoids and lichen

•Essential oils

Many of these new natural body products can protect you from exposure to unnecessary, harmful ingredients and still leave you smelling fresh and feeling confident.

Some manufacturers of natural deodorants are:

Aubrey Organics Crystal Body Jasön * Pure and Natural Weleda

Avalon Natural Products Dessert Essence Kiss My Face Terra Naturals

Burt's Bees Earth Essentials Miessence Tom's of Maine*

* Some products may contain proplyene glycol.

Always read ingredient labels, even of purportedly natural brands. Also remember that everyone's body chemistry is different. What worked for your friend may not work so well for you and you may have to try a few before you find the right one.

Some people find that crystal rocks and tea tree oil-based deodorants are too harsh and cause irritation, while others say some natural deodorants give off unpleasant odors that are worse than the body odor itself. You may want to experiment with your own products by looking for recipes online and:

•making homemade deodorant with baking soda and essential oils

•trying an apple cider vinegar or witch hazel extract-based spray

A very healthy diet rich in unprocessed vegetables and grains and low in meat-based products, alcohol, and caffeine is shown to help reduce body odors. Regular showering and wearing fabrics that breathe can also do wonders for a sweeter smelling you without compromising the health of your body.

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