The Differences between Deodorants and Antiperspirants

This is a huge product category in the global personal care market that is expanding rapidly. But what is the real difference between an antiperspirant and a deodorant? Deodorants are the main product category while antiperspirants are a subcategory in the deodorant market. Deodorants are products that are applied to the body, usually the underarm area to reduce body odor. This odor is usually caused by bacteria during the breakdown of perspiration. They can come in many forms such as sticks, creams, gels, roll-ons or sprays. They can be applied to different parts of the body, usually the underarms to reduce odors, but can also be used in other areas that may exhibit odor problems, such as the feet.

Antiperspirants are a subcategory of deodorants. Antiperspirants are products that are designed to reduce sweating and therefore reduce the amount of odor that may be produced by sweat. Human sweat is for the most part odorless. However, this sweat develops foul odors when it is attacked by bacteria that thrive in warm humid environments such as the underarms. Since the underarm area is usually the warmest, most humid area of the body, odors in this area are quite common and regular and need to be controlled. The use of antiperspirants and deodorants are used for this purpose. The resulting body odor is thus controlled by reducing moisture, killing off bacteria, and masking the odors with fragrances or perfumes.
**Deodorants** are classified as OTC products by the United States Food and Drug Administration. Usually their main ingredient is alcohol that works to reduce bacteria that cause odors. Alcohol is an excellent antimicrobial agent. Another common ingredient used to fight off bacteria is Triclosan. Killing bacteria is the key functional aspect of deodorants. The first commercial deodorant product put on the market was MUM that was released around 1888 in Philadelphia, PA. Below is an early advertisement for this groundbreaking product.

Antiperspirant activity is a little more complicated. These products are also OTC drugs according to the FDA and are designed to reduce or stop the production of moisture in which bacteria can thrive. Most antiperspirant technology is based on various Aluminum salts such as Aluminum Chloride, Aluminum Chlorhydrate, and Aluminum-Zirconium compounds. These are the most common active ingredients used. The mechanism by which these salts work is that they react with electrolytes in sweat to form a gel plug in the sweat gland ducts. While these plugs are only temporary, they prevent the sweat glands from releasing moisture. But the effectiveness of antiperspirants can vary from person to person.
While Aluminum and Aluminum compounds have been found to be potential neurotoxins, these materials are still widely used in these products. It does open the door to new types of products especially in the natural product area. Many natural ingredients are effective in killing bacteria and fighting off odors. Some natural ingredients that have been used in antiperspirant and deodorant products are Hops (Tom's of Maine) and Sodium Bicarbonate (Arm and Hammer). These natural ingredients have been shown to be effective in these types of products. Other notable deodorants and antiperspirants containing a variety of natural and organic ingredients are TerraNaturals, Aubrey Organics, Jason Natural Products, Kiss My Face and Crystal Body. The most common active ingredients you will find will be functional extracts and essential oils.