



## **Don't Sweat It**

By John Mamana, M.D.

Hot sticky summer days can encourage busy executives to slow down and enjoy friends and family, yet sultry heat also leads to sweat.

Perspiration, or sweating, is a release of salty liquid from the body's sweat glands. Microscopic glands in the deep layer of skin produce perspiration by filtering fluid and salts out of the blood and secreting this fluid through small tubes in the skin known as sweat ducts. These ducts normally empty out into small pores at the top layer of the skin. As a critical bodily function, sweat helps your body stay cool and regulates temperature. Perspiration also helps cool and lubricate the skin, especially where skin rubs together such as under arms and breasts and between your legs. How much you sweat depends on how many sweat glands you have. A person is born with about two to four million sweat glands. While women have more sweat glands than men, men's glands are more active. Some areas have many sweat glands while other areas have far less. For the most part, the highest concentrations of sweat glands are found in the palms of your hands and soles of your feet.

In addition to sweat glands, skin also has sebaceous oil glands that surround almost every hair root. There is also the apocrine gland which secretes a very thick type of sweat that has a large amount of fatty chemicals. These glands are found in areas such as the underarm and the groin, and because these chemicals can be broken down by bacteria found on your skin's surface, it can create the malodorous chemicals we associate with body odor.

There is a common sweating disorder many people suffer from - miliaria rubra- a sweat retention syndrome which is also known as prickly heat. Sweat glands may plug up at several different depths, producing several types of skin rashes.

Two of the types are miliaria crystallina, which is when small blisters of sweat cannot escape to the surface of your skin and form blisters that look like a severe sunburn. Deeper plugging of the glands causes miliaria rubra, which is when sweat seeps into the living layers of skin causing itching and irritation.



Besides itching, when sweat can't cool the body by evaporating on the skin's surface, the body can become quickly overheated. Known as heat stroke, people experience heat exhaustion symptoms including dizziness, thirst, and weakness. As the body's temperature rises, often quite fast, death can occur unless the body is quickly cooled.

Heavy sweating can be a warning sign of medical issues including thyroid problems, diabetes or infection. Excessive sweating is also more common in people who are overweight or out of shape, and is often a symptom of menopause.

The good news is that most cases of excessive sweating are harmless. If you are worried about how much you sweat, call your doctor at Executive MD for a checkup.

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