## Beauty is only skin deep?

The topic this week tries to give some appreciation for something you probably don't think about too often: your skin. The average square inch of skin holds 650 sweat glands, 20 blood vessels and more than a thousand nerve endings.

Skin is classified as an organ, and if looking at the different organs in the body, it is by far the largest. Each of us carries around from 10 to 40 pounds of skin.

Even though we slough off the outer layer of the skin about once each month, we don't really change looks. Even your fingerprints, that are made of skin, will stay the same for your entire life. The skin sloughs off and grows back in just the same way for all of the days of your life.

The main job of the skin is to protect the body. While we live in a dry world, the inside of the body is about three-quarters water. In order to keep from drying out, the skin does a great job of balancing the amount of liquid that is lost. Sweat is let out to cool the body down, but the majority of the moisture is kept where it belongs.

The skin also helps to regulate your body temperature in other ways. When the body is hot, the skin has an increased blood flow, allowing more heat from the body to escape to the outside. When the temperature of the body is cold, the blood flow is directed away from the skin and stays deeper in the body, allowing the heat to be kept within. This may make your hands and feet feel cold, but the body is doing what is can to keep the heat within.

The skin is also the most important part of your immune defense. Your body is covered with bacteria at all times, some estimate that the average square inch of skin has about 50 million little organisms living on it. We live in a world that is chalk full of bacteria, fungus and viruses that would just love the opportunity to get to the good stuff that resides within your body. Thanks to the skin, these would-be infections cannot get past that tough outer layer and your insides remain germ free.

This is not even to mention the sensation that your skin provides. Heat, cold, touch, vibration, pain and all of our interactions with the world are directed by what the skin relays to the brain.

While protecting the body from drying out, the skin absorbs the light from the sun. Sure, you may be thinking, but tell me something I don't already know about my skin. Well, did you know that your skin is responsible for providing vitamin D to your body? This vitamin D is necessary for the body to be able to absorb and use calcium – so in some ways the skin is helping to feed those healthy bones that are found beneath it.

Special cells within the skin can react to the amount of sunlight that the body is exposed to. This allows you to get a tan—increased tone of skin color allows more sun to be tolerated without getting a sunburn.

Hair originates in the skin from a follicle—a group of cells that grow the hair. Around these hair follicles are glands called sebaceous glands. These glands make oils that protect and waterproof the hair and skin, they are essentially the natural lotion for the skin. These glands are found all over the body, accept the lips, palms of the hands and the soles of the feet.

Even more interesting is what skin can tell about a person. Lies, flirting and embarrassment are immediately known when a person blushes. Skin also allows a book to be read by its cover, as it can reveal hints about someone's age, heritage, job and health.

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*This column is about health related issues with a focus on a rural community. The purpose of this column is to be informative and to comment on interesting medical and health related topics. Any questions or concerns that may arise regarding topics covered by this article should be addressed to your primary care doctor.*

*Justin can be reached by email at Justin.Tyler.Newman@gmail.com with comments or ideas for topics that you may desire to be addressed in this column. The goal of this column is that*

*you find it not only entertaining and informative but also that it creates a desire to take a life-long interest your health and body.*