The Skin on Your Body
by Jack Griffin

Open and close your hand as fast as you can. Bend your legs. Blink five times. Lift your arms. All these actions show how flexible your skin really is.

If you spend a few minutes thinking about your skin, you will be amazed. Besides being flexible, skin is durable. What other material can you think of that can be washed and dried so easily, or be broken and bruised and then mend itself? What other material is so sensitive to heat and cold? What other material lasts as long? You may have answered one of those questions with something better than skin, but there’s nothing quite like skin to answer them all. For nothing is quite as varied in its functions—or quite as versatile—as human skin.

Although you might never have considered skin as an organ of your body, it is one because of the many jobs it performs. The skin is actually the largest organ of the body, weighing about six pounds. If it were laid out in one flat piece, it would cover an area of 18 square feet! One piece of human skin about the size of a quarter contains all sorts of blood vessels, nerves, nerve endings . . . plus over 100 sweat glands and three million cells!

The skin has two main layers: the outer layer or epidermis, and the inner layer, or dermis. The outer layer, which you can see and feel, protects the body and helps control body temperature. Interestingly, your skin has different thicknesses on different parts of your body. Care to guess where it’s thinnest and thickest? . . . Your eyelids have the thinnest skin, with some light passing through them when they are closed. The skin on your back is the thickest, although the skin on your feet and hands may be the toughest.

What you have in the epidermis is a waterproof and disease-proof covering over your entire body. A very thin film of oil is spread over the surface of this layer, keeping your skin lubricated and also catching dirt and dust from the air. But all this washes off when you shower or bathe. Since the surface layer of skin just below this film of oil is the driest of the 12 to 15 thin rows of cells that make up the epidermis, this layer flakes off when you dry yourself after washing.

Another important function of the epidermis is its sensitivity to touch. You may have reached for something in a dark room and been able to tell immediately if it was a rough bathroom towel or a smooth cotton handkerchief. This sensitivity to touch is greater in some areas of your body than in others. Your hands, for example, are very sensitive because they contain a greater concentration of nerve endings.

The tiny ridges you see on your fingers are a sign that nerve endings here are closer to the surface than at any other place.

The lower layers of the epidermis also contain pigment, a coloring substance, called melanin. Melanin not only determines your skin color, but freckles as well. Freckles are caused by an uneven release of melanin in different parts of your body.

The dermis, or inner layer, is about twice as thick (1/16” to 1/8”) as the epidermis, and plays an important role in making the epidermis function. Oil glands in the dermis are one example, for they provide the oils the epidermis needs to keep its surface moist. Sweat glands are another example. Beginning in the tissue beneath the dermis
are many sweat glands, each with a channel through the dermis to the surface of the epidermis. Waste products from the kidneys are released to the outside in the form of sweat. This is how the epidermis controls your body temperature, by controlling the amount of sweat your body releases. When you are cold, you sweat very little; when you are hot, you sweat frequently. Your body produces between two and six pints of sweat every day. You wouldn't want all that sweat to pour out all at once, would you?

Body liquids (sweat and oils) come out through pores, or tiny openings, in the skin. When pores become clogged with these liquids, a hard waxy plug forms at the opening. Regular washing helps prevent this clogging.

Because the skin is flexible, it sometimes develops wrinkles. What causes them? Fat cells just beneath your skin usually keep the skin smooth and rounded. But a sudden loss of weight or the gradual aging of the body causes many of these fat cells to be absorbed into the body to be used as energy. Sometimes, the skin does not shrink quickly enough to keep its smoothness, and it folds and wrinkles. But your skin does do an amazing job of protecting your body during your entire life!