

The Sense of Touch

A more general special sense is that of touch, which you can feel all over the body on the skin. Your skin, which is also called **integument** or **epithelium**, is considered the largest organ of the body, making up about 7% of your body weight. That means that a 200-pound adult has about 3,000 square inches of skin, which weighs about 14 pounds.

Touch stimuli is picked up by **cutaneous sensory receptors** in the skin. These little nerve endings pick up stimuli from the outside world, such as heat, cold, pressure and pain.

There are many kinds of receptors. **Meissner's corpuscles** are egg-shaped receptors found just below the top layer of the skin in the epidermis. They pick up light touch. These receptors help us identify objects by touch. Close your eyes and have someone place an object in your hand, feel it with your fingers until you know what it is. This is the Meissner's corpuscles at work.

Deep in the skin, in the dermis, **Pacinian corpuscles** feel deep pressure, like a painful squeeze.

Free nerve endings sit just below the top layer of the skin in the epidermis. They pick up heat, cold or pain. The receptors that pick up heat and cold are called **thermoreceptors**. The receptors that pick up pain are called **nociceptors**.

