

SKIN FOUNDATION

About Skin-Our Largest Organ



About skin: Your body's largest organ

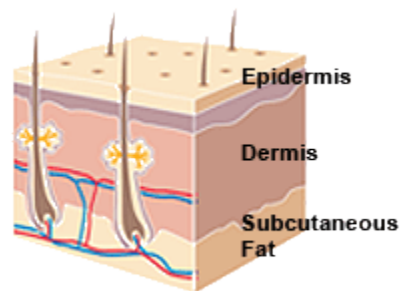
Is your epidermis showing? Don't worry, it should be. Your epidermis is the top part of your skin, and your skin is your body's largest and fastest-growing organ. Skin is your body's coat. It protects you. It helps you stay warm when it's cold, and cool when it's hot. Your skin keeps all your insides in, from your heart and lungs to your blood and muscles. And unless it's cut or damaged, it keeps stuff out, including germs and water. You also feel things through the nerves in your skin.

Doctors who are experts in caring for skin are called dermatologists. Derma is the Greek word for skin. Dermatologists treat just about everything that can happen to skin, including rashes, dry skin, acne, and skin cancer.

The layers of your skin

Your skin has a big job to do protecting your body, so it's made to be tough and stretchy. There is a lot more to this job than it might seem. There are three main layers of the skin.

- Epidermis is the top layer of the skin, the part of the skin you see.
- Dermis is the second layer of skin. It's much thicker and does a lot for your body.
- Subcutaneous fat is the bottom layer.



Layers of skin.

Epidermis

Your skin's top layer, the epidermis, is super thin on some parts of your body (your eyelids) and thicker on others (the bottoms of your feet). The epidermis is the layer of skin in charge of:

- **Making new skin cells:** This happens at the bottom of the epidermis. The skin cells travel up to the top layer and flake off, about a month after they form.
- **Giving skin its colour:** The epidermis makes melanin, which is what gives your skin its colour.
- **Protecting your body:** The epidermis has special cells that are part of your immune system and help you stay healthy.

Dermis

A lot happens in the next layer, the dermis. The jobs of the dermis include:

- **Making sweat:** There are little pockets called sweat glands in the dermis. They make sweat, which goes through little tubes and comes out of holes called pores. Sweating keeps you cool and helps you get rid of bad stuff your body doesn't need.
- **Helping you feel things:** Nerve endings in the dermis help you feel things. They send signals to your brain, so you know how something feels if it hurts (meaning you should stop touching it), is itchy or feels nice when you touch it.
- **Growing hair:** The dermis is where you'll find the root of each tiny little hair on your skin. Each root attaches to a tiny little muscle that tightens and gives you goose bumps when you are cold or are scared.
- **Making oil:** Another type of little pocket, or gland, in your skin makes oil. The oil keeps your skin soft, smooth and waterproof. Sometimes the glands make too much oil and give you pimples. (See Acne: Pimples and Zits.
- **Bringing blood to your skin:** Blood feeds your skin and takes away bad stuff through little tubes called blood vessels.

Subcutaneous fat

The bottom layer of skin is the subcutaneous fat layer. This layer plays an important role in your body by:

- **Attaching the dermis to your muscles and bones:** This layer has a special connecting tissue that attaches the dermis to your muscles and bones.
- **Helping the blood vessels and nerve cells:** Blood vessels and nerve cells that start in the dermis get bigger and go to the rest of your body from here.
- **Controlling your body temperature:** The subcutaneous fat is the layer that helps keep your body from getting too warm or too cold.
- **Storing your fat:** This fat pads your muscles and bones and protects them from bumps and falls.

What gives skin its colour?

Skin colour can be everything from very pale to very dark, and many shades in between. That's because of something called melanin, which is made in the epidermis. Some people call it pigment.

Here are some facts about melanin:

- Some people make more melanin than others. Everyone has about the same number of cells that make melanin, but not everybody makes the same amount of melanin.
- The more melanin your skin makes, the darker your skin. How much melanin your body makes depends on your genes, which you get from your parents.
- Melanin is why you get a tan or burn. When you go out in the sun, your body makes more melanin. That's because it's trying to protect you from the sun's damaging rays by deflecting or absorbing them. But melanin isn't strong enough to completely protect you, especially if you have pale skin. By the time you see your skin turn darker or get burned, it's already damaged, so trying to get a tan is a bad idea. You should always protect your skin from the sun by covering up and using sunscreen.

Because people with darker skin have more melanin, they usually don't get as wrinkly when they get older. They're also less likely to get skin cancer. But even dark-skinned people can get wrinkles and skin cancer, so everyone needs to protect their skin when they go outside.

Let's learn more: