

The
DR. SKIN
SHOW



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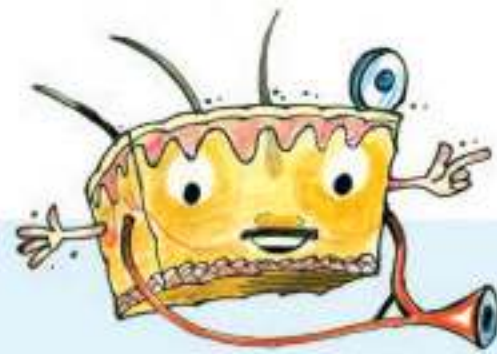
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Inside Out

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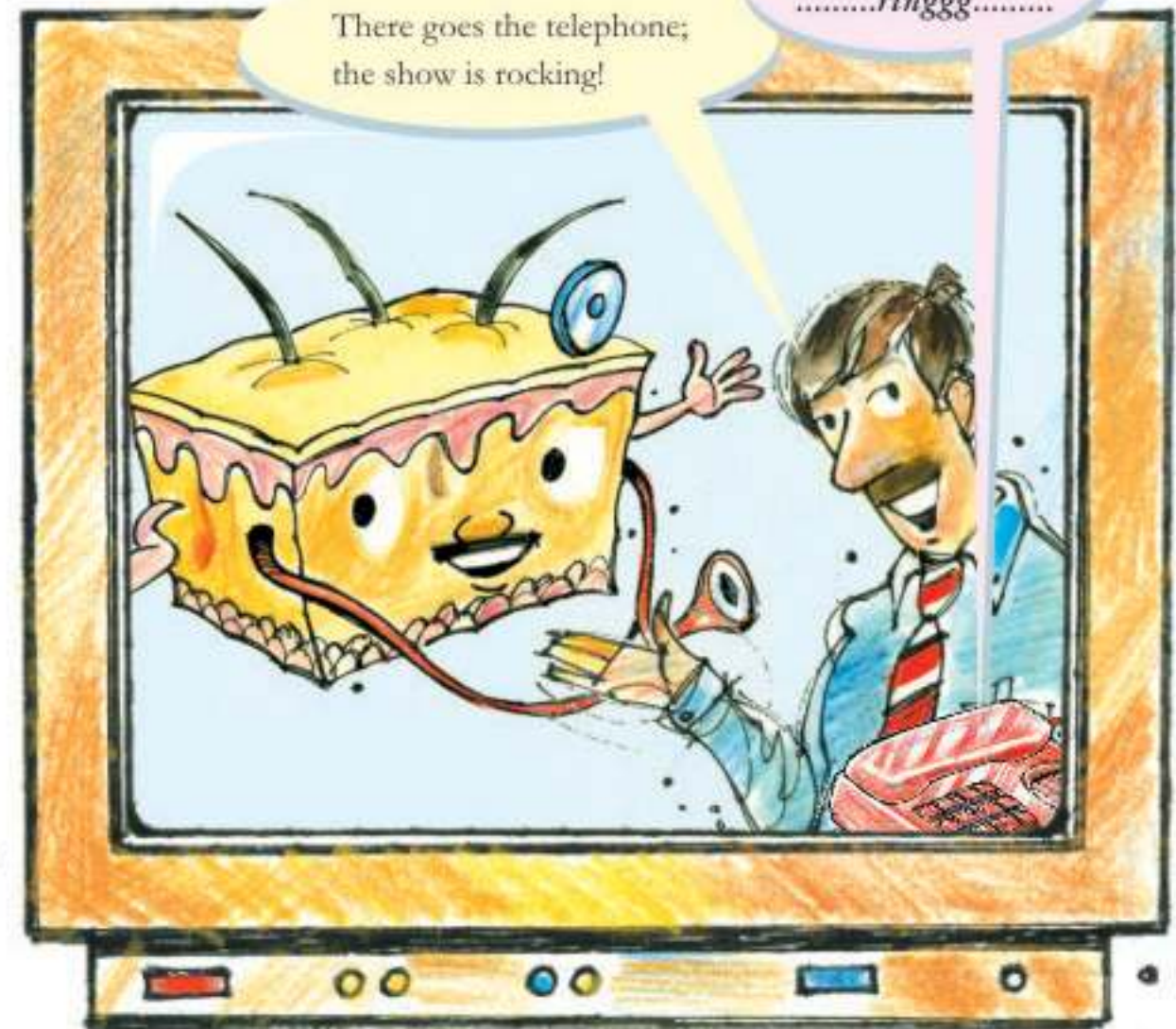
Welcome dear viewers to this episode of our popular TV show, Inside Out!

Tonight, our special guest on the show is none other than the renowned Dr. Skin, whose area of specialisation is...you guessed right, SKIN! Dr. Skin has a very interesting job.

He keeps what's inside in and what's outside out. I'm sure you have loads of questions for our amazing guest tonight. So pick up your telephones and call into the show, live, right now.

*Ringgg.....
.....ringgg.....*

There goes the telephone;
the show is rocking!





Dr. Skin, how much skin do I have on my body?



So! You want to know how much of 'me' covers your body. On an average, any adult human being has about 2 square metres of protective skin. At places I am as thin as 1 mm and in other places I can be as thick as 5 mm.

That's why, while spilled hot tea does not hurt the soles of your feet (where I am thick), sipping hot tea can burn your lips.

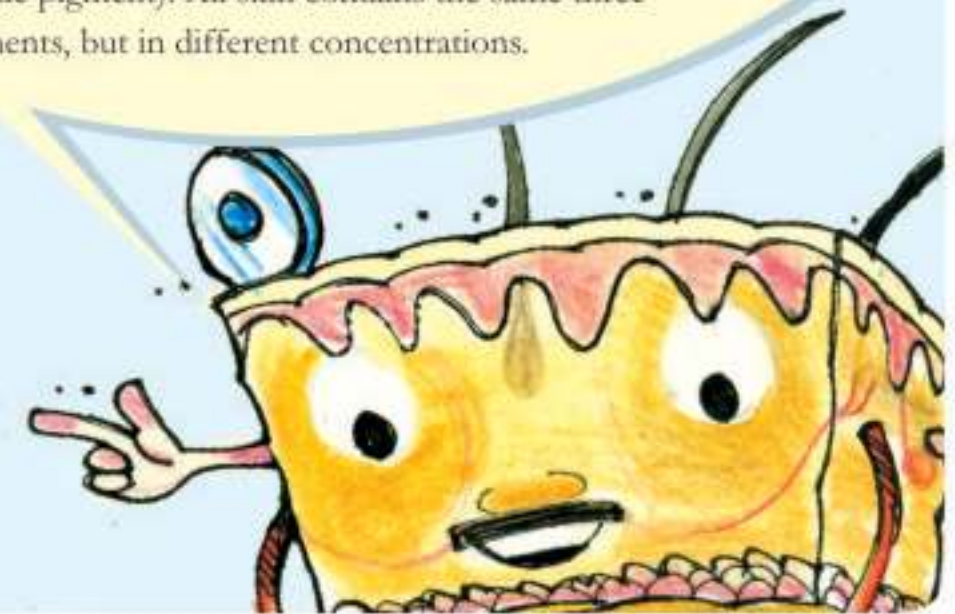


Dr. Skin, when I play a lot, why does my face become red? One more question on colour - why do people have different colours of skin?



Well tomato face, that's got to do with a trick I use to cool your body. I allow warm blood to rush into me and throw away heat to the outside. As the blood flows to my surface, you get all red-faced.

But the colour of skin is not caused by blood vessels. I am coloured by three pigments: haemoglobin (red), carotene (yellow-orange), and melanin (brown - the suntan and freckle pigment). All skin contains the same three pigments, but in different concentrations.



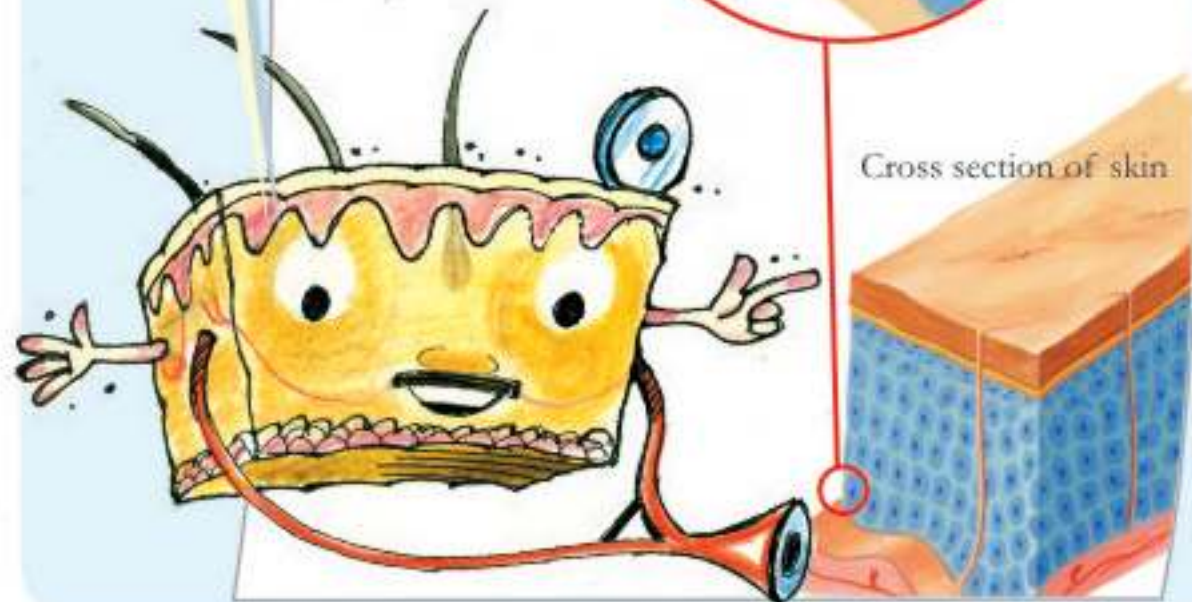
Melanin gives me my primary colour and provides protection from the damaging effects of sunlight. When I am exposed to the sun, I produce a lot of melanin to protect myself from the harmful rays. It is this melanin that makes me darker and people say that I have tanned.

Epidermal cell

Melanocyte

Melanin granules

Cross section of skin



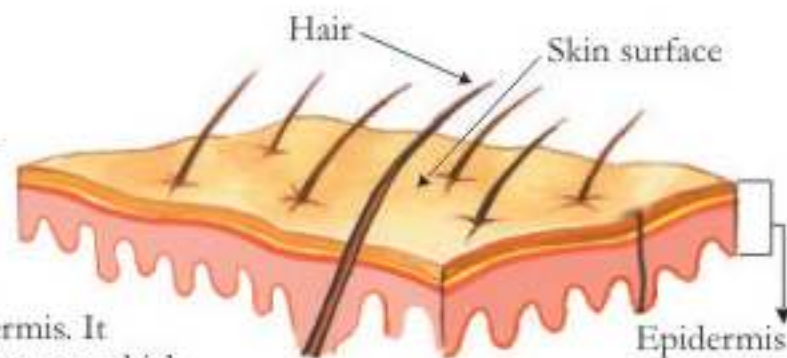
BREAK TIME!

What's that?

EPIDERMIS

Skin is made up of two layers. What you can see on the outside, the outer layer, is called epidermis. It is as thick as the paper on which you normally write.

The epidermis is made up of millions of very small parts called cells.



Why do we sweat Dr. Skin?

Now that's a short question to which I need to give you a fairly long answer. Sweating is related to one of my critical responsibilities - keeping your body temperature at around 37.2° C (98.4° F). Let me tell you how I do this. I do this with the help of pores and in a way very similar to the opening and closing of windows to regulate temperature in a room.

In hot weather or when you are playing games, I need to reduce your body temperature. So I open up the pores and allow sweat to ooze out of them.

