Taste - Why does chocolate taste sweet and lemons taste sour?

Fact

- When you put chocolate or lemons in your mouth you bite them and mix them with saliva. The juicy mush touches our tongue and different parts detect and tell us about the different tastes.
- The back of your tongue tastes bitter things, the sides taste sour things, the tip of your tongue tastes sweet and salty things.
- Your tongue does this taste computing because it is covered with small hollows called taste buds. Inside the hollows are taste cells with tiny hairs that detect the taste of the food from the chemicals released as you eat it.
- The taste cells send a message along the nerves in your tongue to your brain and your brain deciphers the messages into categories.

Do you know

- When you were a baby you had a lot of taste buds on your tongue, the roof of your mouth and on the sides of your mouth.
- As you grow older taste buds begin to disappear, so you are able to eat things that you thought were too strong when you were younger.
- Your tongue also has touch sense that can detect hot and cold things.
- And senses to detect spicy, peppery tastes.
- Your tongue is a great big muscle that you use to pronounce words and make food balls.

Experiments you can do

The Taste Test
What you need:
- Foods from all the categories: salty, sweet, bitter, sour, peppery, hot and cold.
- Water to rinse your mouth between tastes
What you do:
- Try the different foods one by one, rinsing your mouth out with water between each taste to clear your taste buds.
- Which part of your tongue detects the different tastes? Draw a map of your results.
- Try it again blindfolded. Then again holding your nose. Does either of these things make a difference? Can you explain your results?
- Do a taste test with a piece of apple and a piece of onion while blindfolded and holding your nose. Can you taste the difference?

Other Investigations

Think about the foods that you eat now. Are there any foods that you didn't like a few years ago? Try some of those foods now and see if your “taste buds have changed”

Can you curl your tongue inwards from the sides? Try it – either you can or you can't. We inherit this ability and can't train our tongues to do it.

Jokes

What sugar sings? Icing sugar. (I sing sugar)