

Introduction to sense: Taste

In both humans and animals, one of the functions of the **tongue** is to **taste food**.

There are **taste receptor cells** located on the tongue, grouped in small clumps called **taste buds**. These special cells help us to taste food by **telling the brain** if foods are sweet, sour, bitter, salty, savoury or a combination of these.

If you look in a mirror and stick out your tongue, you will be able to see small bumps - these are your **taste buds**.



A human can have up to **10,000 taste buds!**



Did you know...

In order to taste something, you need your **nose** too! Your nose detects the smells that are released when you eat and together with your tongue, **signals** are **sent** to your **brain** to tell you about what you are eating.

Classifying animals according to the food they eat

We sometimes classify animals based on the **type of food** they eat. This helps us to feed our pets and other animals the right food they need to stay **healthy**.

Humans and animals eat lots of different foods but we generally split them into **3 different groups**, depending on the **type of foods** they eat:

1. Carnivores, like cats, can only eat meat.



2. Herbivores, like cows and sheep, can only eat plants.



3. Omnivores, like pigs, can eat both meat and plants.





Cows are **herbivores** and have around 25,000 taste buds.

They have so many taste buds because they need to know which plants are **safe for them to eat**. Their taste buds help them to do this.

Omnivores, like **pigs**, have **fewer** taste buds (15,000), while **carnivores**, like **cats**, have **even fewer** taste buds (just 480).

What have you learnt so far?

How do we use our **tongues** to **taste**? What **other sense** do we need in order to taste?

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What do the **taste buds** on your tongue look like? Use a mirror to help you!



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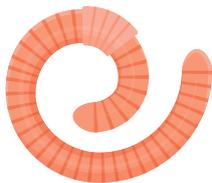
Which **group** do **humans** belong in? Are we carnivores, herbivores or omnivores?

Carnivores

Herbivores

Omnivores

Did you know?



Earthworms have taste receptors all over their bodies so they can taste **through their skin!**

Giraffes have very **long and sensitive tongues** so they can reach into prickly bushes to collect food. Their tongues are also **black** to help them **avoid sunburn** while feeding in hot sunshine.



Try it at home - Taste Treat!

This activity is for children ages 3-11. Young children will need help preparing the materials in the activity whilst older children can create them with very little support or even independently.

You will need: 5 containers and 5 different types of food. Choose foods from each of the 5 types of taste: sweet (sugary), sour (lemons, unsweetened yogurt), salty (pretzels, potato chips), bitter (olives, greens), and savoury (cheese, meat, mushrooms). Be careful in your choices if there are food allergies or sensitivities in your family.

1. Have a look in your kitchen and choose some food from each of the categories (maybe get a grown-up to help you!).
2. Place each piece of food in a separate container.
3. Find a family member (or someone else who can taste with you) and take turns to eat a piece of food from a container.
4. Do you notice the taste on a different part of your tongue? Can you name the type of taste for each food?

Montessori is a hands-on learning approach that supports children's creativity, curiosity, problem solving and independence. The Montessori Group is pleased to Partner with Humanimal Trust to bring you interactive learning activities found in Montessori schools worldwide.



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Optional activity:
Keep a food diary!



Questions to think about

Our **teeth** help us to **chew food** so we can taste it, can you find out about **different animals teeth**? Do they **differ** between carnivores, herbivores and omnivores?

What **kind of teeth** do **humans** have?

If we need our nose to taste, **what happens** if we **cannot smell**?

Try eating something and holding your nose, does it **taste different** to how it does normally?

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