



Activity- taste vs. flavour

What you'll need:

- a jelly bean, mint or any sweet.
- A drink or any item of food can work just as well.

What to do:

Practice holding your nose so that when you say the word 'yummy' it sounds more like 'jummy'. Remember to breathe through your mouth! • Now, with your nose firmly held and breathing through your mouth, place the sweet on your tongue • What can you detect? • Now let go of your nose – what can you detect now?

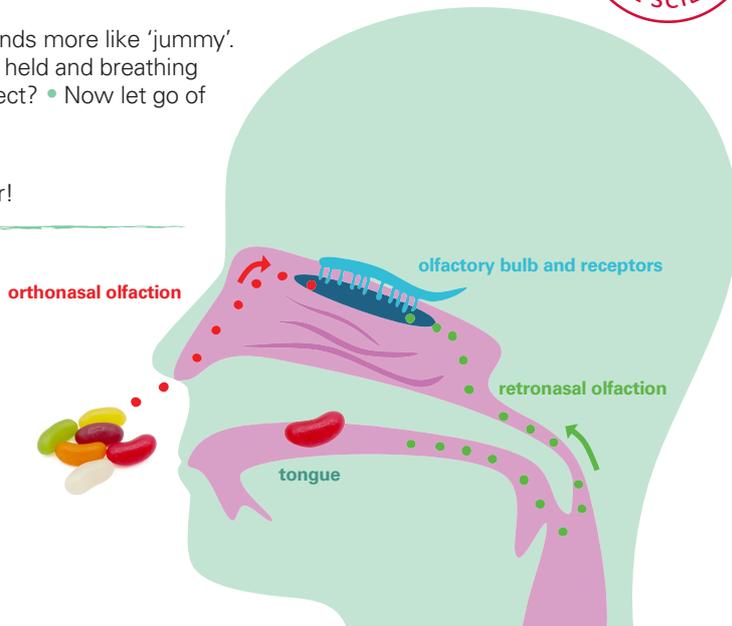
What you may notice:

As you release your nose, you will instantly notice a much stronger flavour!

The science behind it all:

Taste occurs when molecules from food interact with specialised receptor cells in the taste buds which detect the five currently recognised* basic tastes: sweet (e.g. glucose), sour (e.g. citric acid), salty (e.g. sodium chloride), bitter (e.g. caffeine), and umami (e.g. glutamate/MSG). We can only detect these five basic tastes – in other words we cannot taste all the elements associated with

chocolate, cheese and chips, like cocoa, dairy and potato. And it's not just words beginning with the letters 'ch' – all we can taste is sweet, sour, salty, bitter and umami. The rest of the work is being done by your nose. That's why, when your nose is blocked, you mostly detect the sweetness of a jelly bean or mint sweet, but not the fruity or minty notes, which are detected retronasally.



Beyond the science:

The tongue contains the taste buds, which are the sensory organs for taste, while the nose is the sensory organ for aroma. There is no single sense organ

for flavour because it is created by combining multiple senses: mainly taste and aroma. Your nose detects many different volatile molecules (gases that

travel through the air) both orthonasally (through sniffing) and retronasally (when volatiles travel from the mouth to the nasal cavity via the back of the

throat while chewing and swallowing). Your brain then integrates these signals, which makes the aromas seem like they come from your mouth!

*Scientists are investigating other tastes such as fatty, metallic and calcium.