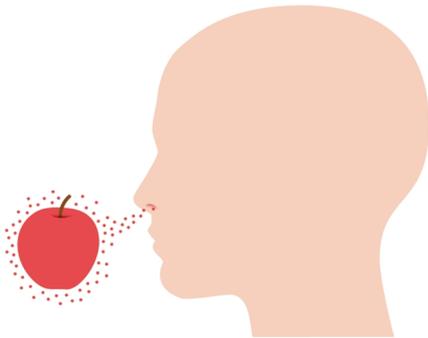


## Odours and aromas – What's the difference?

### CHEMICAL STIMULI

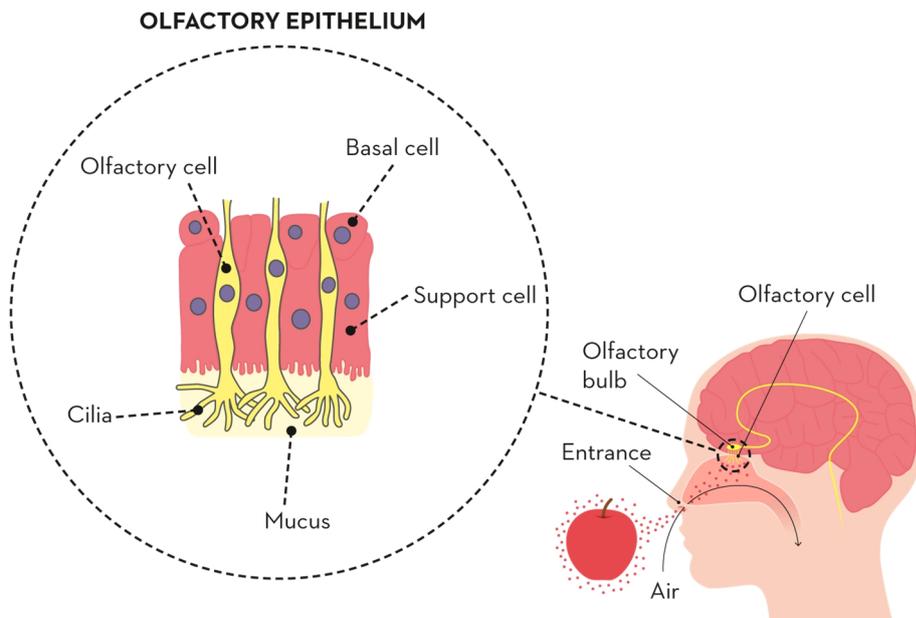
In everyday life, sight and hearing are more important than smell. For example, your sense of sight lets you know when to stop at a red light and your sense of hearing tells you to pay attention if you hear a car horn. These two senses allow us to avoid danger. But smell has a much deeper impact in life than we realise, especially when it comes to food.



The nose reacts to chemical stimuli, so how does that work in practice? First of all, odorous substances release volatile molecules into the air. These molecules are so small that your eyes cannot see them, but your nose is able to smell them.

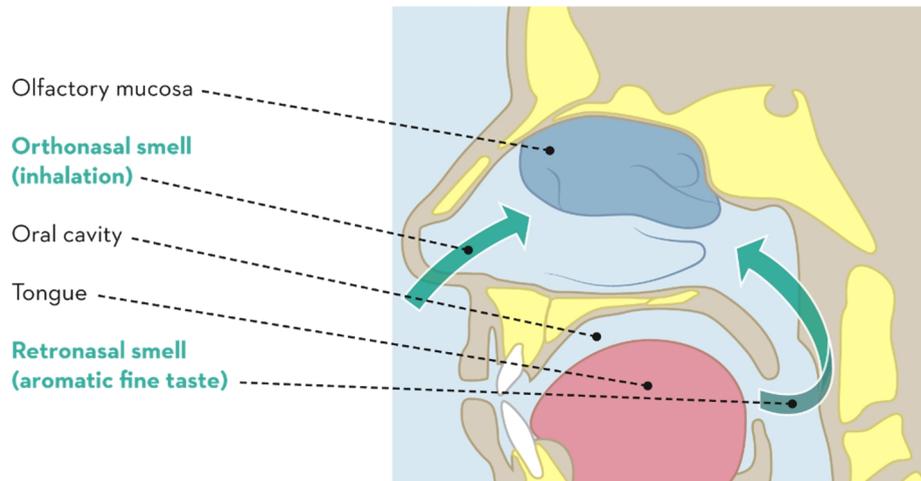
### ORTHONASAL OLFACTION

When odour molecules reach the nose through the air we breathe, we talk about 'orthonasal' olfaction. Nasal mucus comprises olfactory cells which end in fine sensory filaments. We call these filaments the **olfactory cilia**.



These brush-like cilia contain olfactory receptors which fix the inhaled molecules. These molecules convey stimuli to the brain via the olfactory nerve, which is how we perceive different odours.

## RETRONASAL OLFACTION



In addition to this 'orthonasal' olfaction, we perceive olfactory molecules retronasally, i.e. via the mouth. As we chew food and warm it up in our mouths, it releases odorous molecules. These molecules go up to the olfactory receptors via the pharynx.

### ODOUR AND AROMA

You sometimes hear about the 'smell' or 'odour' of food and sometimes you hear people talk about its 'aroma'. What's the difference? It is very simple, when odour molecules come from the air you breathe, we talk about 'odour'. When they come from your mouth, we talk about the 'aroma' of food.

Keywords > Through the nose: smell

Keywords > Through the mouth: aroma

We can therefore conclude that we perceive odour molecules from food twice – once, directly, through the nose and a second time, indirectly, via the mouth.