

Microbe Magic Experiments

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Inside your gut - How your nose affects the taste of your food!

Your nose is very important in helping you to taste your food properly. Try the experiment below to see if you can see the difference it makes! Remember, this won't work so well if you have a cold!

What you will need

- An apple
- A potato
- A knife (*remember to get adult supervision when you are using a sharp knife*)
- A blindfold (this can be a scarf or even a tea towel!)
- An adult assistant
- Your nose!

What to do:

- Peel the apple (or ask an adult) and cut a thick slice.
- Peel the potato (or ask an adult) and cut a slice the same size as the apple.
- Take a bite of the apple slice and notice the taste.
- Take a bite of the potato slice and notice the taste (it isn't as nice as the apple I'll bet!)
- Now, put on the blindfold and ask your adult assistant to mix up the slices.
- Hold your nose and take a bite from one of the slices (remember, no peeking to see which one it is!).
- Can you tell the taste of an apple from an orange without using your nose?

What's happening?

Your nose plays a most important part in your ability to taste food effectively. The taste buds on your tongue detect sweet, salty, sour and bitter but without the involvement of olfactory (smell) receptors in your nose, you cannot detect the *flavour* of what you are eating! When you bring food to your mouth, the aroma travels into your nasal cavities and stimulates the olfactory receptors. These send signals to your brain which happens so quickly, you taste the flavour of the food as you eat it.

Flavour, coupled with the information from your taste buds gives you the overall picture!