

Topic: Five Senses

Taste Testing Without Smell

<http://www.sciencekids.co.nz/experiments/smelltaste.html>

We all know that some foods taste better than others but what gives us the ability to experience all these unique flavours? This simple experiment shows that there's a lot more to taste than you might have first thought.

What you'll need:

- A small piece of peeled potato
- A small piece of peeled apple (same shape as the potato so you can't tell the difference)

Another option:

- Fruit juice of two different flavours

Instructions:

1. Blindfold someone and ask them to taste the apple and then potato, while holding their nose. OR, do the same with the two flavours of fruit juice
2. Ask the person if they can tell the difference between the two.

What's happening?

Holding your nose while tasting the potato and apple makes it hard to tell the difference between the two. Your nose and mouth are connected through the same airway which means that you taste and smell foods at the same time. Your sense of taste can recognize salty, sweet, bitter and sour but when you combine this with your sense of smell you can recognize many other individual 'tastes'. Take away your smell (and sight) and you limit your brains ability to tell the difference between certain foods.

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Expose Your Nose

<https://faculty.washington.edu/chudler/chsmell.html>

We can recognize a wide variety of smells. Some smells can stir up memories. To demonstrate the sense of smell (olfaction), collect several items that have distinctive smells such as:

lemon
orange peel
banana
coffee
dirt
garlic
onion
flowers
ginger
pencil shavings
potato chips
shampoo

Keep the items separated and enclosed in plastic containers so that the odors do not mix. Put a blindfold on a student and ask them to:

- Identify the item by smell.
- Rate the odor (strong, pleasant, neutral, [bad or good for young kids])
- Tell about any memories associated with the smells.

Equipment and materials:

- Items with smells: lemon, orange peel, banana, etc.
- Containers to hold the smelly items
- Blindfold

Caution: Use only small amounts of each item and do not expose the students to smells that are potentially toxic, e.g. strong perfumes or cleaning products