

38 - Smell

What is smell? Why do you need it? And how does it affect the food you eat? You might be surprised to learn smell is the most primitive of your five senses... In fact, it's the very FIRST SENSE you use after you're born -- and 1 out of every 50 genes in your body is dedicated to it! Whoa!

Also, we're very excited to announce a partnership that will benefit YOU, with our friends at the very popular site and podcast network [Quick And Dirty Tips](#). Besides being a treasure trove of useful tips and information, they produce [awesome popular podcasts](#) like [Everyday Einstein](#), [Grammar Girl](#), and [Mighty Mommy](#) - so you can see why we're excited to work with them! You'll see that some of our newsletters will feature great additional resources from them, and we encourage you to check out their site and podcasts!

Ever notice how just mentioning certain foods - like fresh baked bread - can practically make you smell it?

So, how does hearing about a food make you SMELL it? It's because your sense of SMELL is so powerful. In fact, it's the only sense connected directly to your brain!

To find out how smell works, let's meet the organ responsible for it all...YOUR NOSE! Smell and memory go hand in hand. Or should we say, nose in brain? That direct connection to your brain is why smells can make you feel happy, scared, disgusted, or excited.

Of course, not all smells are pleasant. And there's a good reason for that. Bad smells are signals to your brain that something is wrong and should be avoided - (like rotten food).

Also, everyone's sense of smell is a little bit different. That's why you can't smell yourself - but you can smell other people.

Questions We Answer on Today's episode:

1. What is Smell? How does it work?
2. Why do we connect smells to memories?
3. Why is it you don't smell yourself - but can smell other people?
4. How are smell and taste connected?
5. Which animal has the best sense of smell?

Whenever you smell something, your BRAIN and your NOSE work together to make sense of hundreds of tiny invisible particles floating in the air known as molecules or chemicals.

These molecules travel into your nose and to the base of your nostrils — and that's where the magic happens. Inside your nostrils, tiny neurons “talk” to each other using electrical messages. And these neurons are always fresh and ready to work! In fact, they're the only neurons in your body that get replaced regularly — every month or two.

Each smelling neuron, or “olfactory” neuron, connects with a different neuron in the olfactory *bulb* at the top of your nasal cavity -- which sits right under your brain. This information is sent to different areas all around your brain including areas that also store memories and provoke emotions.

Activities

1. **Taste Test** – Grab some foods with similar textures but different flavors like banana yogurt and strawberry yogurt, or different colored jelly beans. Get someone to help you and be the judge. Close your eyes and hold your nose closed while you taste the items... Can you tell the difference between the purple jelly beans and the green ones? Can you tell one yogurt from another? Probably not! That's because smell is a huge part of what we call "taste".
2. **Senses Experiment** - Have a grown-up poke small holes in 4 or 5 containers with lids. Put one "smelly" object in each container (lemons, bananas, orange peel, pine needles, a cotton ball soaked in perfume, chocolate, coffee, dirt, vanilla, garlic, onion, mint, vinegar, rose petals, pencil shavings, or whatever you come up with). Write a number on the side of each container. Tape a label to the bottom of each container to say what's inside. Blindfold a friend or sibling and have him or her smell each container. Write down the number of the container, what's inside and whether they thought it smelled 'Gross' or 'Good'. Are the answers what you would say too? Which are good smells? Which are gross?

Additional Resources

1. Does the smell of salty beach air or freshly baked chocolate chip cookies bring you back to a specific memory? As we explain in the episode, our sense of smell is associated with our emotions, and could be a better memory trigger than our sense of sight. [This quick listen and read](#) at Everyday Einstein explains even more about the fascinating way smell impacts our memory.
2. Six Smelly (and Really Fun!) Activities for Kids: Teach your children about the wonders of their sense of smell with these scent-acular ideas!... [Fun Activities](#)

3. Video – Five Senses: The Sense of Smell | Educational Videos for Kids -Get to know a very Nosey scent...the scent of smell. Enjoy the video here [Happy Learning](#)

Kid News

Meet Marvels New Superheroes...Nurses! Over the years, Marvel has fascinated fans with heart-stopping tales of superheroes saving the world from devastation. However, the graphic novel unveiled on December 3, 2020, is the most exciting one yet. Entitled, *The Vitals: True Nurse Stories*, it shows factual accounts from the world's real-life superheroes — nurses who risk their lives daily to save strangers from the COVID-19 pandemic.

The brilliant idea of creating a comic book to honor the brave and selfless hospital workers was first suggested at an Allegheny Health Network (AHN) and Highmark Health (HH) marketing meeting a few months ago. Read more about the three series comic book...[Here](#)¹

¹ This activity guide is for the Who Smarted? podcast www.WhoSmarted.com