



[Taste & Smell: Crash Course A&P #16 - YouTube](#)



[Understanding Smell and How It Affects You - Whole Home Scenting](#)

How Does Smell Work

Our nose is part of a system called the olfactory system. This system plays an important role in your body and allows you to experience not only smells but also flavors. Before exploring the olfactory system and how it works, here are the two basic ways that we detect odors.



How do we smell? - Rose Eveleth

2 basic ways that we detect odors

1) air passes through the front of your nose as you breathe. This type of smelling is called **orthonasal olfaction**, which essentially means smelling through your nose. Molecules pass through your nose, dissolve and are translated into a distinct smell.

2) We experience odors indirectly through our mouths. As you chew food, a process called **retronasal olfaction** causes molecules to enter the back of your nose through your mouth. This creates a strong link between the flavor and the smell of food. If you have an issue with your olfactory system, it can seriously affect your ability to taste unique flavors. Researchers say that up to 80% of your sense of taste comes from your olfactory system.

Your sense of smell actually grows stronger when you're hungry. You also typically have a stronger sense of smell in the morning compared to the evening. Other interesting factors can affect how you smell, like your genes, skin type, diet, and even the weather

Just listen to the next few slides

Your entire olfactory system is connected to your brain in unique ways, making it a more powerful and memorable sense in some interesting ways. First, here is a guide to the major parts of your olfactory system.



A Journey in Your Nose to See How Smell Works

When you breathe in through your nose, odor molecules are drawn into your nose and past the top of your nose, called the olfactory cleft. Bony cushions in your nose, called turbinates, help bring in air and odor molecules. Turbinates also direct, filter, humidify and warm-up air as it enters your nose. Once in your nose, molecules dissolve on the olfactory epithelium, which is a layer of mucus in your nose. There are millions of sensory neurons in this thin strip of tissue, and they assist in translating odor molecules into distinct smells.