

# Changes in Taste and Smell after COVID-19

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Our senses of taste and smell give us great pleasure. Taste helps us enjoy food and beverages. Smell lets us enjoy the scents and fragrances like roses or coffee. Taste and smell also protect us, letting us know when food has gone bad or when there is a gas leak. They make us want to eat, ensuring we get the nutrition we need. Anosmia is when a person has a decreased sense of smell. They may not be able to smell something easily or at all. Smells also influence how things taste, so when a person has anosmia, they may notice that their taste has also been changed. People may taste things that aren't there, may not be able to tell the difference in tastes, or can't taste at all.

## **What causes anosmia?**

Many illnesses and injuries can cause taste and smell disorders, including colds and head injuries. Some medicines can also affect taste and smell. Most people lose some ability to taste and smell as they get older.

About 4-5 out of 10 people (44%) with COVID-19 have reported a decrease in taste or smell. In most cases, this started suddenly, lasted a short time and the affected person quickly returned to their previous state. One study suggests that most people find significant improvement in taste or smell within 7-10 days, but for others, it can last weeks or months. Research about the causes of anosmia after a COVID-19 infection is still ongoing but possible causes include:

- Congestion.
- Damage to the olfactory nerve that conveys sensory information related to smell to the brain.
- Inflammation in cells within the lining of the nasal cavity (the space inside the nose).
- Other changes affecting nerves within the brain.

If you have not noticed the return of your taste or smell within 6 months of your COVID-19 infection, we recommend that you speak to your doctor to look for other potential causes for your anosmia.

### **What is the treatment for loss of smell?**

If your decrease in smell or taste lasts more than 2 weeks, smell training may be helpful. Smell training is a way of stimulating the olfactory nerve that helps you to smell. It involves repeated sniffing of specific scents for 20 seconds twice daily for 4-6 months. Smell training kits typically include essential oils with lemon, rose, clove, and eucalyptus scents. While these are the standard scents included in smell training kits, you can also choose your own oils based on your personal preference. You might find it helpful to have a couple of kits around the house where you will see them and remember to use them.

#### **Directions for Smell Training:**

1. Open the jar or bottle and hold it close to your nose
2. Take some gentle sniffs for 20 seconds
3. During this time, concentrate on what you are doing. Keep your mind on lemon for instance, or one of the other smell training smells. Try to block out any intrusive thoughts. Be as attentive as you can and try to recall what your experience of lemon was.
4. Close the bottle after 20 seconds and take a few breaths.
5. Take a break for a few minutes and repeat the process with the same scent several times before moving on to the next.
6. Do this twice daily for 4-6 months

#### **Tips for Smell Training:**

- Be patient. Even if you can't smell anything today, start training and give it a shot. A damaged olfactory nerve has a good chance to repair itself, and smell training is the way you can help that happen faster.

- Don't be discouraged if you can't smell anything at first.
- Keep your smell training kit in a convenient place where you can remember to use them twice per day. Good places may include your bedside table, your desk, or in the car.

### **What precautions do I need to take for my safety?**

- Be sure that your home has numerous smoke and natural gas/propane detectors.

### **What can I do to improve the taste of food?**

- Choose foods that appeal to you to ensure you eat well, but continue to retry foods as your taste preferences may change.
- Keep your mouth clean and healthy by brushing your teeth morning and evening and rinsing your mouth with water if it feels dry or uncomfortable. Avoid alcohol-based mouthwashes.
- If you find cooking smells are affecting your appetite, microwave ready meals or eat cold food as a short-term alternative.
- Unless you have been given specific recommendations from a Speech and Language Therapist (SLT) regarding your swallowing, try experimenting with different flavors, textures, and temperatures of food to see which you find more edible. You may find bland flavors such as plain chicken, fish, tofu, and rice may be easier to eat especially if you are still feeling nauseated or have an unsettled stomach. Cold or room temperature foods may also be more acceptable.
- A good protein intake is important for your recovery, but high protein foods can take on a bitter or metallic taste. Try marinating meats with sweet or sour marinades to change the flavor and try a variety of protein sources to see which ones are the most enjoyable for you. Protein sources include red meat, poultry, fish, egg, cheese, vegetarian meat alternatives, and legumes.

- If foods have a metallic taste, try plastic cutlery instead of metal and use glass cookware.
- Try adding flavor with herbs and sauces and spices.
- Balance very sweet tastes with sharp or tart flavored foods and drinks such as orange, lemon, lime flavors.
- Suck sweets and mints to help refresh your mouth before and after eating.
- Improve salty or bitter taste by choosing low salt varieties and adding sweet flavors to food or drink, such as sweetener, honey, or sugar.

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Adapted from:

- National Institute on Deafness and Other Communication Disorders. <https://www.nidcd.nih.gov/>
- NHS. Your COVID Recovery. <https://www.yourcovidrecovery.nhs.uk/>

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