

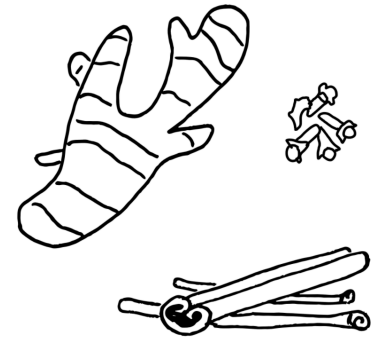
Let's Spice Things Up + Guacamole Recipe**What's this lesson all about?**

Stick out your tongue and look in the mirror. See all those bumps? They help your brain tell you food is delicious. But taste buds aren't the only parts of your body that tell you what's yummy. In this lesson, you'll explore flavors using your senses with new foods and spices to make tasty guacamole.

LEARN ABOUT IT

What are taste buds?

- We taste things with our tongues.
- Our tongues have tiny sensory organs on them called taste buds which allow us to taste different flavors.
- There are between 3,000 and 10,000 taste buds on your tongue.
- Taste receptors cannot actually taste food until saliva has moistened them. For example, we usually taste salty things first because salt dissolves quickly in our saliva.



Our taste buds are capable of detecting **FIVE** types of flavor:

- Sweet
- Salty
- Bitter
- Sour
- Savory (also known as Umami)

Our noses help us taste, too!

- Receptors inside the uppermost part of the nose contain special cells that help you smell. They send messages to the brain.
- When you chew food, the food releases chemicals that immediately travel up into your nose. These chemicals trigger the receptors inside your nose.
- The receptors then work together with your taste buds to create the true flavor of whatever you are eating by telling your brain all about it!
- When you have a cold or allergies, and your nose is stuffy, you may notice that your food doesn't seem to have much flavor. That's because the upper part of your nose isn't clear to receive the chemicals that trigger the flavor receptors.

FOOD FOUNDATION STANDARDS: Food is Fun

This lesson meets the following Indiana State Academic Standards: 4.RV.1, 5.RV.1, 6.RV.1, 4.SL.1, 5.SL.1, 6.SL.1, 4.SL.2.1, 5.SL.2.1, 6.SL.2.1, 4.SL.2.3, 5.SL.2.3, 6.SL.2.3, 4.SL.2.4, 5.SL.2.4, 6.SL.2.4, 4.SL.2.5, 5.SL.2.5, 6.SL.2.1, SEPS.1, SEPS.2, SEPS. 8, 4.PS.3, 5.PS.1, 5.4.2, 5.4.3, 5.4.6, 5.7.1, 5.7.2, 8.4.1, 8.4.2, 8.4.3, 8.4.4

FOOD IS FUN! FOOD IS FUEL. FOOD IS FROM THE EARTH. FOOD IS FOR SHARING!

Let's Spice Things Up + Guacamole Recipe**What can we use to flavor food?**

Spices, herbs, and seasonings are what cooks use to add flavor to food.



- **Spices** can be made from a seed, fruit, root, or bark of a plant (basically, anything but the leaves). Common spices include: salt, black pepper, cinnamon, cumin, cayenne pepper, garlic, and mustard.
- **Herbs** come from the leaves of plants and can be used fresh or dried in almost any dish. Common herbs include: basil, thyme, oregano, parsley, sage, chives, oregano, dill, and mint.
- **Seasonings** are a mixture of several flavoring components such as sugars, salts, and spices.

What about salt?

Salt is a natural mineral. Salt is one of the basic building blocks of life. We need it like we need water to live. Salt is present, to some degree, in everything we eat.

Getting the right balance of salt into cooked food is what makes the food tasty, which is what seasoning is all about. The purpose of adding salt isn't to make food taste salty, but to enhance the flavors of other ingredients.

When a recipe says "salt to taste" that means you should add a little bit at a time and taste your food to see if you like it. Over time, you'll be able to guess how much salt you prefer to add to your recipes.

How much salt is too much?

A healthy amount of salt helps your body to regulate, or control, the right amount of water and fluids you need and helps your heart, muscles, and nerves function properly. Too much salt in the body causes your heart and blood to pump harder and faster, making your blood pressure too high over time, which can make you unhealthy.



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BE A FOOD EXPLORER

WATCH: Did you know avocados grow high up in trees just like apples? Watch this video to see how farmers get them down- it's pretty cool.

Click this link: <https://www.youtube.com/watch?v=whNYlkV-TMU>

WONDER: Did you know different parts of your tongue can taste different flavors? You can map out these flavors on your own tongue. Make your own tongue map at home:

Click this link: <https://www.scholastic.com/parents/kids-activities-and-printables/activities-for-kids/math-and-science-ideas/home-science-experiments-tongue-map.html>

LISTEN: Flavor is influenced by all the senses. How food looks, smells, and feels can make a difference. In this episode from brains on!, they visit a taste bud beauty salon, talk with a chef researcher, and do some experiments. Click this link: <https://www.brainson.org/shows/2019/11/26/flavor-facts-why-food-is-so-delicious>

LEARN: Did you know salt can be pink, red, or black? Find out more about all the different types of salt you can cook with. Click this link: <https://www.foodrepublic.com/2018/07/30/a-handy-guide-to-the-many-different-types-of-salt/>

MAKE:**Guacamole**

This recipe makes 5-6 servings. You may cut the recipe to reduce number of servings. (For example, to cut the recipe in half, divide the quantity for each ingredient by 2). Make sure you have a grown-up to help you while cutting. See end of recipe for how to store leftover guacamole.

Ingredients

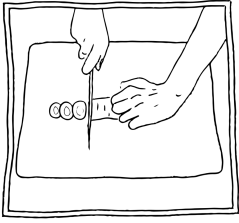
- 4 avocados - peeled, pitted, and mashed
- 1 lime, juiced
- 1 teaspoon salt
- 1/2 cup diced red onion
- 3 tablespoons chopped fresh cilantro
- 3 tomatoes, diced
- 1 teaspoon minced garlic
- 1 pinch ground cayenne pepper (optional)

Materials

- Paper towels
- Knives
- Mixing bowls
- Measuring cups
- Measuring spoons
- Dish towels/wash cloths
- Spoons or spatulas for stirring
- Forks/ large spoons for mashing
- Plates for serving
- Cups for spices

Directions on next page

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Let's Spice Things Up + Guacamole Recipe**Directions**

1. Cut avocados into chunks*

* Watch this video first on how to safely pit and cut an avocado:

<https://www.youtube.com/watch?v=texyKNGt4iU>

2. Finely dice (cut into small squares) onion and tomatoes.

3. Peel off the papery wrapping to expose your garlic cloves. (Sometimes smashing it with your hand first helps with this.) You can dice your garlic or crush it with a garlic press.

4. Cut lime in half and squeeze out juice. You can use your hand to catch the seeds while letting the juice run through your fingers.

5. Pick leaves off of cilantro. You can use them in your guacamole whole, or chop them.

6. In a medium bowl, mash together avocados, lime juice, and salt.

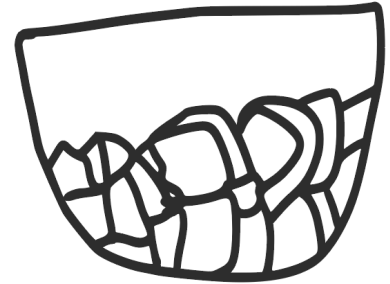
7. Mix in onion, cilantro leaves, tomatoes, and garlic.

8. Stir in cayenne pepper. A little goes a long way!

9. Enjoy your guacamole with tortilla chips.

How to store guacamole

- Guacamole can oxidize (turn brown) quickly.
- The acid in the lime or lemon juice called for in most guacamole recipes helps delay oxidation, but not enough so that you can make the guacamole ahead of time without it forming an icky-looking brown top layer.
- The fool-proof method to keep guacamole green, even when it's made well in advance, is to simply cover it with plastic wrap *directly and completely* against the surface of the guacamole.



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