

In nature, leaves and other plant materials fall to the ground and eventually **decompose** with the help of microorganisms, worms, insects, and fungi, which break them down into nutrients. These nutrients keep the soils healthy and feed new plants. We can replicate these processes at home by making **compost** from our yard waste and kitchen scraps in a homemade compost bin. In a few weeks, you'll have microbe-rich soil to add to your garden or use to sprout seeds!

## What is healthy compost made of?

A well-balanced compost mixture is made from **brown** and **green** wastes.



Brown waste is made of dead leaves and pine needles that have turned brown and dried out. These materials are high in carbon.



**Green waste** comes from fresh materials like kitchen scraps (like eggshells and commonly unused parts of fruits and veggies), grass clippings, and weeds, which are high in **nitrogen**.

Meat and dairy products are **not** commonly composted. They are decomposed by different types of microorganisms than the ones that break down plants, and this process can be slow, smelly, and attract pests.

To build a kitchen compost bin, you will need: a clean, clear container with lid, knife or hole punch (if your container is plastic), dirt from outside, shredded newspaper, brown waste, green waste, spray bottle with water

**Step 1:** With an adult's help, use the knife or hole punch to add a few air and drainage holes to the bottom and sides of the container. This will be your compost bin, and the holes will allow fresh air in and extra moisture out. If your container is not plastic, don't seal the lid completely.

Tip: this activity is a great way to repurpose an empty 2-liter bottle. Cut the top section off to add materials, and replace it – upside down and cap off – to close.

**Step 2:** Add a layer of soil from outside, shredded newspaper, and brown waste (dried leaves) to your compost bin, and spray the mixture with some water. The microbes that will break down your compost come from the soil you introduce to your mix.

**Step 3:** As you produce food waste in your kitchen (fruit and vegetable scraps, eggshells, coffee grounds...but no meat or dairy products), add it to your compost bin.

**Step 4:** Store your compost bin somewhere where sunlight can reach it, and spray the mixture with a little water each day. Every few days, stir the contents. Molds and fungi are signs of thriving microbes that help break down your food scraps into nutrients!

## More ideas:

- If you have outdoor space, you can build a more <u>complex compost bin</u> for your household and experiment with different composting techniques.
- You can use some types of fruit and vegetable scraps to start your own kitchen scrap garden!
- Check your area for community composting sites! You can drop off your green waste at our very own Chico State Compost Garden anytime.

