



## Craft Activity: Applesauce Oobleck

By Sticky Fingers Cooking®

**Prep Time** 5 / **Cook Time** / **Serves** -

### Fun-Da-Mentals Kitchen Skills

**measure:** to calculate the specific amount of an ingredient required using a measuring tool (like measuring cups or spoons).

**mix:** to thoroughly combine two or more ingredients until uniform in texture.

**adjust:** to change seasonings or consistency to one's taste or to alter portion sizes.

**experiment:** to try out new ideas, recipes, ingredients, or combinations of ingredients when cooking; to perform scientific tests in a laboratory or in the field to discover or verify something.

### Equipment

- Large mixing bowl
- Spoon for mixing

### Ingredients

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- 2 C cornstarch
- 1 C applesauce
- water, as needed
- ground cinnamon or pumpkin spice, optional

### Food Allergen Substitutions

Craft Activity: Applesauce Oobleck

# Instructions

## Craft Activity: Applesauce Oobleck

### measure + mix

Measure and add **2 cups of cornstarch** to the mixing bowl. Next, add **1 cup of applesauce** and get ready to mix! This can be messy, and your hands might be easier to use than a spoon. Then, add **water**, a little bit at a time, as needed. If you want a pie aroma, add a **few sprinkles of cinnamon or pumpkin spice!**

### adjust

If you added too much cornstarch, add a little more water. We suggest making small changes, a bit at a time—a little can go a long way once you start incorporating water into the mixture. Your oobleck shouldn't be soupy and runny or too stiff and dry. Can you pick up oobleck clumps in your hand, but then it oozes into the bowl? Then you have successfully made oobleck!

### experiment

Test your oobleck: Apply pressure to the mixture. A quick tap on the surface will make it feel hard, like a solid, because it forces the cornstarch particles together. Next, dip your hand slowly into the mix, and see what happens—your fingers slide in as easily as through water. Moving slowly gives the cornstarch particles time to move out of the way.

### science time

Check out The Science of Oobleck below to learn about the science behind it.

## Featured Ingredient: Cornstarch!

Hi! I'm Cornstarch!

"You can probably guess by my name that I'm made from corn! I've got other names, too, including Cornflour and Maize Starch (you can also spell my name Corn Starch). I'm used to thicken foods, like sauces and soups. I'm also used in glues and as an anti-sticking agent. That confuses me, but I like that I have so many purposes!"

Cornstarch comes from the endosperm or tissue, making up the bulk of the corn kernel. In commercial processing, after soaking, the germ is separated from the endosperm and they are ground individually. A centrifuge separates the starch from the liquid (corn steep liquor), germ, fiber, and gluten. It is then dried. The residual matter is processed for animal feed and corn oil. Additional modifications to the cornstarch may be necessary, depending on its use.

Cornstarch started as a laundry starch in the 1800s to stiffen shirt collars and other clothing, like the Paisley shawls made in Paisley, Scotland. In 1854, John Polson of Brown & Polson, the Scottish company

that made the laundry starch for the shawls, patented a production method to enable its use in food. They called their product "Patented Corn Flour." They became the largest producers of cornstarch in the United Kingdom.

In the culinary world, cornstarch is used as a thickening agent. Add cornstarch to water to thicken gravies, sauces, and soups, usually at a 1:2 ratio (e.g., 1 tablespoon cornstarch to 2 tablespoons water). Cornstarch results in a clearer thickening slurry than flour. After pouring it into a gravy or sauce, applying heat to the mixture causes it to thicken. However, boiling it for too long will cause the sauce to thin again.

Cornstarch is also added to powdered sugar as an anti-caking agent (to prevent lumps). Adding a thin outer layer of cornstarch to chicken nuggets allows more oil to be absorbed, creating a crisper nugget. Non-food uses for cornstarch include baby powder, anti-sticking agent on latex medical items, like medical gloves, and adhesive in creating paste paper designs.

You can make cornstarch at home. Start by cleaning and soaking corn for 30 to 48 hours in room-temperature water to soften the kernels and begin to separate the starch. Drain and rinse the corn, then blend it in a high-powered blender with a little water to release more starch. Pour the resulting slurry into a container through a cheesecloth or fine mesh strainer. Liquid will pass through with the starch. Let it sit for a few hours, and the starch will settle at the bottom of the container. Pour off the liquid, leaving the starch at the bottom. Spread the wet starch in a thin layer on a parchment paper-lined baking sheet and let it dry out. This may take several hours or days, depending on air circulation and moisture. Breaking up clumps and laying the baking sheet by a sunny window may speed up the drying. Once thoroughly dried, use a blender or food processor to remove clumps and produce a fine powder. Store in an airtight container for up to six months.