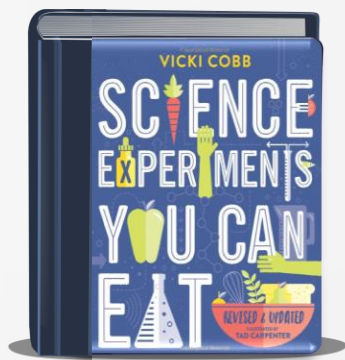


Tasty Science

Chemistry in the Kitchen

Can you think of ways the food you eat involves science?



- Farmers use science to figure out the best way to grow their crops.
- Food manufacturers use science to figure out the best way to preserve and store food.
- Cooks use science to figure out how to make the best tasting meal.

Did that last one surprise you?

There is actually a lot of science involved in cooking. Starting with the order you chose to mix the ingredients, all the way to the temperature you cook or chill your food, every recipe is the result of many cooking experiments. Use the activities in *Science Experiments You Can Eat* to explore the chemistry in your kitchen and come up with new and tasty discoveries.



IDEA! Get a small notebook to write down your observations. Leave some room on the side for questions or ideas that pop into your head while you are working.



IDEA! Explore the details of cooking chemistry with cookbooks like [The Food Lab](#) and [On Food and Cooking](#).

Exploring Taste and Smell

You may think that the job of figuring out how things taste is the responsibility of your taste buds alone. It is true that your tongue has over 10,000 taste buds to help you figure out if you like what you're eating or drinking, but did you know that your sense of smell is also important?

It's true!

Of your five senses – taste, smell, touch, hearing, sight – only taste and smell involve sending your brain chemical information. These two senses – taste and smell – working together is called *chemosensation*, or chemical sensing system. When you chew your food, you push air through your nose and nasal passages without realizing it. This means that you smell the food or drink as you are it, which results in an even stronger flavor.



IDEA! Try tasting a different foods with your nose unplugged and the plugged. Can you taste a difference?