

FOOD SCIENCE

Food is a perfect teaching tool when it comes to kids. By exploring how ingredients become food, we can not only examine the minute components of what we put in our bodies, but also appreciate all the work that it takes to get it from farm to table.



WHAT'S IN YOUR FOOD? TEST FOR VITAMIN C Question for kids: Can you tell if your food

has vitamin C?

Learn about the components of your favorite everyday foods by testing them with this simple scientific experiment. One simple test is for the <u>presence of vitamin C</u>, which helps our bodies grow skin and tissue, heal wounds, and maintain healthy bones and teeth.

MATERIALS FOR THIS ACTIVITY:

- Test Tubes, small 13 x 100 mm
- Indophenol, Dichloro, 0.5 g
- Pipet, disposable, 1 ml, 10/pk
- Bottle, 250 ml (8 oz), natural HDPE plastic
- Safety Goggles, splash, child size
- Safety Gloves, size 6 6.5 child
- Lab Apron No 3, plastic, 2 mil





FOLLOW THIS EASY, STEP-BY-STEP ACTIVITY

In this activity, kids will create testing solutions, follow detailed instructions to obtain results, record what they see, and make determinations for how much vitamin C is in their favorite food and drink.

- Determine which food(s) you want to test for vitamin C. If you pick a solid food, it will need to be ground up and mixed with water to make a solution that can be transported with a pipet. A simple pick for this experiment are various fruit juices.
- Make indophenol solution by combining less than 1/8 teaspoon of indophenol with 1 cup of water. Use the bottle to mix and store the solution.
- 3 Put 15 drops of indophenol solution in a test tube for each food item you want to test.
- Add one of the foods you chose to the indophenol solution drop by drop with the pipet. Be careful not to mix different solutions! Use a different pipet for each one. Record how many drops it takes to turn the blue indophenol colorless.

BUY EVERYTHING YOU NEED FOR THIS ACTIVITY IN ONE PLACE

See all of these products and more on one handy shopping page.



Test Tubes, Small <u>13x100mm</u> Perform multiple tests



Indophenol, Dichloro, 0.5g Key to this activity





Pipet, Disposable,
1 ml, 10/pkChemistry of Food
Experiment KitFor exact measurementExplore chemistry and nutrition
See all related products

A FEW TIPS TO HELP YOU OUT

- Safety equipment is needed around chemicals.
- Chemicals need to be separated from food items. When experimenting, put all food items away and clean the area well. Also clean thoroughly after the experiment is complete.
- The test tubes can be held upright in a glass, if needed.
- Indophenol is an indicator that turns colorless in the presence of vitamin C. The fewer drops of juice or food solution you need for the color to change, the higher the vitamin C content.

GO BEYOND THE ACTIVITY!

- Hypothesis which tested food will have more vitamin C and then experiment to see if you are right.
- Test to see if the preservation process (canning, drying, or freezing) effects the amount of vitamin C.
- Learn about other food tests. You can test food for sugar, starch, or fats!

NEED HELP WITH THIS ACTIVITY?

Call 1-800-860-6272 or email service@homesciencetools.com.