

Pre-Show Activity: Getting the Starch Out of Your Food

Starch is a natural form of sugar. Chemical reactions that take place in the body turn it into glucose, which provides your body with energy.

Activity Objective: Students will scientifically discover the glucose that's within their foods.

This activity can be done individually or in pairs.

CAUTION: This experiment involves iodine, which could cause sickness if swallowed. Instruct students not to drink the iodine or eat apples with iodine on it.

Materials per group

- Different kinds of fresh apples.
- Other food samples such as potatoes.
- Paintbrush
- Iodine
- Knife

Teacher Preparation

Students will need to be able to see the inside of the apples so teachers should cut the apples in half beforehand. Each student receives half an apple.

To Try with Students

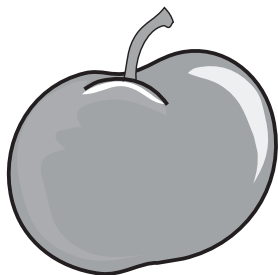
- Discuss with your student what they think their body does with energy. The answers could be limitless.
- Ask the students if they know where they get their energy from. When they say food, discuss about how starch comes from food and how starch is changed into glucose (which is usable by the body as energy) through the body's chemical reactions.
- Discuss what foods they think has the most amount of starch. Since starch is made up of sugar, the food should be sweet.

Check it out online:

<http://californiasciencecenter.org/FunLab/DoltYourself/Nutrition/Starch/Starch.php>

Includes a stopwatch!

Activity 3: Getting the Starch Out of Your Food



CAUTION: This experiment involves iodine, which could cause sickness if swallowed. Do not drink the iodine or eat apples with iodine on it.

What to Do:

1. Describe and draw the characteristics of an apple in the box below:

2. Use a paintbrush to brush the iodine on the apple below:

3. Iodine has a chemical reaction with starch. What reaction do you see when you brush the iodine on the apple? Describe and draw your findings in the box:

4. What are your predictions on the amounts of starch other apples and foods have compared to this apple? How can you test your predictions?

5. Describe and draw your findings for the foods that you are able to test:

6. In Conclusion...

Check it out online:

<http://californiasciencecenter.org/FunLab/DoItYourself/Nutrition/Starch/Starch.php>

Includes an animated demonstration!