

Overview and Objective

Foods are fortified with iron because it's considered an essential ingredient of our daily diet. Iron must be present for the body to function properly and our bodies can't produce it. Approximately 60-70% of the human body's iron is found in hemoglobin, a protein in the blood that transports oxygen. Iron is also present in muscle tissue and some enzymes.

For this experiment, we're going to test to see if we can find the iron in cereal, using a MAGNET!

Process:

1. Fill your bottle 1/3 full with water.
2. Add cereal.
3. Shake it up and let it dissolve and soften. (We tried after an hour, and found we needed to give it more time. We waited 4 hours and tried again for our results.)
4. Place your magnet against the bottle to attract the iron. Rotate the bottle a little to allow more cereal (and iron!) to come in contact with the bottle.
5. Slowly lift the magnet above the water line.
6. Look very closely! You see there are tiny bits of iron moving with the magnet.



WHAT YOU WILL NEED:



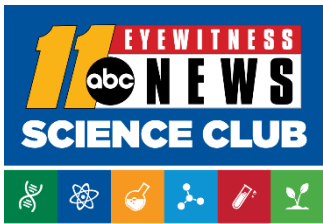
- **Iron fortified cereal (we used Honey Nut Cheerios)**
- **A clear plastic bottle**
- **Water**
- **Safety goggles and gloves**
- **A *neodymium or rare earth magnet**

*Be careful with multiple neodymium magnets! Their pull is strong on one another. You can pinch your fingers - we did!

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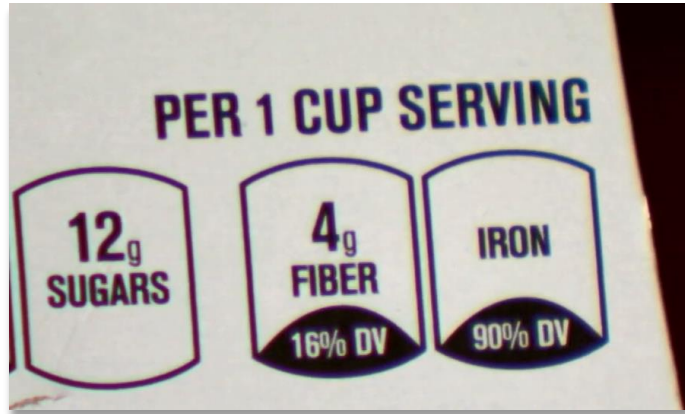


FORTIFIED WITH IRON

Take it further!

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Try this experiment using cereals with a variety of iron content as a percentage of your daily diet. Does it impact the amount of iron you find?

Share your results! www.Facebook.com/abc11scienceclub

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