



# Magnetic Food

**Abstract:** Learn about iron and how to remove it from cereal!

**Grade Level:** 1-8

**Time Needed:** 30 minutes

## Materials:

- Small Ziplock bags
- Iron fortified cereal (such as Wheaties or Total)
- Magnets

## Preparations before program:

## Procedure:

1. Talk to students about what is in our food. Why do our bodies need food? What types of vitamins and minerals are found in food that our bodies use?
2. Discuss what iron is and why it is important to our bodies. (See background info)
3. Iron is found in many foods naturally, but it can also be added (fortified) into other food such as cereal. We will now do an experiment to see if we can pull out iron from fortified cereal.
4. Fill zip lock bags with dry cereal.
5. Pass out one bag to each child.
6. Tell the children to crush the cereal in the bag.
7. Run a magnet along the bag near the cereal. Watch as iron filings attach to the magnet.

## Terminology and Definitions:

Fortified cereal: Cereal that has added vitamins and nutrients.

**References:** <http://www.scientificamerican.com/article/get-the-iron-out-of-your-breakfast-cereal-bring-science-home/>

## Additional Information:

How to extend: You can try different brands of cereal with different iron serving amounts (check food label). Do you see more iron filings in cereals with more iron?

## Additional/Background information:

Iron is found in our blood, specifically in hemoglobin of red blood cells. Hemoglobin helps transfer oxygen around our body.

Our body doesn't make iron; it must get it from outside sources. Some examples of food with iron include dark green vegetables (like spinach), meats (especially red meat), and fortified cereals.

Iron is also one of the three magnetic metals (other two being nickel and cobalt). That means it is attracted to a magnet.