

Xperiments with **Magnets**

#7 IRON IN YOUR FOOD

SEE THE METAL YOU EAT EACH DAY!

NEEDED:

- a strong magnet such as a Neodymium magnet
*If you want to purchase this magnet from Dowling, try our item # 715.
- breakfast cereal well fortified with iron such as "Raisin Bran" or "Bran Flakes"
- milk or water
- clear glass bowl for cereal, clear glass mixing bowl, or tall clear water glass

You can do this with a bowl that isn't see-through but see-through is more fun.

EXPLANATION:

Most foods contain the mineral iron in them. Iron is a natural part of many foods. But iron is also added as a supplement to many foods including cereal, pasta, bread and many others because we need iron in our diets. As the cereal slowly dissolved into the milk, small particles of iron were released. A strong magnet can pull the iron particles through the milk and cereal over to the side of the bowl.

INVESTIGATION:

Pour a clear glass bowl or glass nearly full of cereal. Add milk or water; milk is better because you can see the results in greater contrast. Rub the magnet in slow circles all over the outside of the bowl for a couple of minutes. Place the magnet at the bottom outside of the bowl or glass and pull it slowly up the side until the magnet is just above the level of the cereal and milk. You should notice small black particles inside the bowl that follow the magnet's movements.