



*General Mills Consumer Services*

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P.O. Box 1113, Minneapolis, MN 55440

November 23, 1992

David Katz  
1700 Spring Garden St.  
Dept. of Chem./Comm. College Phil.  
Philadelphia, PA 19130

Dear Mr. Katz:

Thank you for contacting us concerning the iron we add to our cereal.

The type of iron added to our cereals is elemental iron which is made by a process called hydrogen reduction. The particle size can vary, but generally the smaller the particle size, the greater the absorption by the body. The most important advantage of elemental iron over iron salts for cereal fortification is its stability after adding it to a food. This helps prevent off-flavors, odors, discoloration and rancidity from developing in the cereal.

Iron metabolism in humans is quite complex and tightly controlled. Men must replace about 1 milligram (mg) per day while women must replace about 1.5 mg per day. The Recommended Dietary Allowance (RDA) for iron is 10 mg and 18 mg per day for men and women, respectively. These allowances take into account the proportion of dietary iron that the body absorbs and the iron replacement needs of the individual. The U.S. Recommended "Daily" Allowance (U.S. RDA) used for nutrition labeling is based on 18 mg per day.

The experiment you conducted is an interesting physical chemistry experiment. In fact, when we make our cereals, precautions must be taken because the presence of magnets or magnetized metal can be detrimental to the process.

Thank you again for your thoughtful questions about the iron in General Mills' cereals.

Sincerely,

*Jan Ecklund*

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