
IRON DEFICIENCY ANEMIA

Iron is an essential part of the hemoglobin in red blood cells. Hemoglobin functions to carry oxygen to the tissues of the body. If, over time, your body's stores of iron become depleted, you cannot maintain a normal amount of hemoglobin in your blood. The end result is iron deficiency anemia.

Iron deficiency anemia most often results from a combination of blood loss and an inadequate dietary intake of iron. In young women, the most common source of blood loss is menstruation. Iron deficiency may also develop with blood loss from other sites, especially the gastrointestinal tract.

The Symptoms

Anemia may cause no symptoms, especially if the onset is gradual and the anemia mild to moderate in severity. Some individuals experience fatigue, decreased exercise tolerance, or irritability. With more severe anemia, palpitations and shortness of breath can occur.

Treatment

Treatment of iron deficiency anemia involves:

- Correcting any treatable form of blood loss
- Replenishing the body's depleted supply of iron

Your clinician will recommend that you take an oral supplement for up to 3-6 months. Such a prolonged course of therapy is important in re-establishing the body's tissue stores of iron as well as resolving the anemia. Oral iron can cause some gastrointestinal irritation, which is usually lessened by taking it with or after a meal. Side effects are often dose related; it is important to work with your clinician to find a dose that is effective and well tolerated. You will have blood tests to monitor your response to treatment.

Iron in the Diet

Attention to iron in the diet can help prevent recurrence of iron deficiency anemia. There are two forms of dietary iron, heme and non-heme. Heme iron is found in meat, fish and poultry. It is absorbed better than non-heme iron. Non-heme iron is found mostly in fruits, vegetables, grains and eggs. Since only 5-10% of the iron you consume is absorbed, you need to eat substantially more iron than your body needs, ie you need to eat about 18 milligrams per day, the Recommended Daily Allowance (RDA).

Various dietary factors increase or decrease the absorption of non-heme iron. Not only is meat a source of easily-absorbed heme iron, it contains factors that increase the absorption of non-heme iron. Vitamin C also increases non-heme iron absorption. To benefit from the enhancing effect of meat or vitamin C, you must eat them at the same time as non-heme iron-rich foods.

Continued Over

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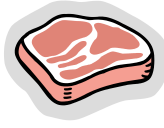

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IRON DEFICIENCY ANEMIA Continued

To Get The Most From Your Diet

- Include four servings of iron-fortified breads and cereals daily.
 - *Check labels for breakfast cereals fortified with 45-100% of the RDA for iron.*
- Include a vitamin C source with meals. *Vitamin C can triple the iron absorbed from other foods.*
 - *Good sources of vitamin C = citrus fruits and juices, kiwi fruit, strawberries, cantaloupe, broccoli, tomatoes, peppers, chilies, potatoes, cabbage*
- Include meat, fish or poultry at least 2-3 times per week. Select lean meats, skin poultry and trim fat to keep fat and cholesterol intake low.
 - *If you are vegetarian, include iron-rich foods such as dried beans, peas, dark leafy vegetables, raisins. Use vitamin C sources to enhance absorption. Discuss with your clinician the possibility of staying on an iron supplement.*
- Egg yolk, coffee (regular & decaffeinated), tea and bran found in high fiber foods, consumed in large quantities can interfere with iron absorption. *Vitamin C helps to counteract the inhibitory effect.*
- Other factors, such as reduced stomach acid secretion and chronic antacid use, can also interfere with iron absorption.
- Cooking in cast iron pans adds iron to food.
 - *Eggs scrambled in an iron skillet or spaghetti sauce simmered in an iron pot can double or triple the iron content of a meal.*

Dietary Sources of Iron

	Milligrams iron / serving		Milligrams iron / serving	
Breads and Cereals (enriched) 	Kellogs Bran Flakes	18.0 / 2/3 cup	wheat germ	2.6 / 1/4 cup
	Kellogs Product 19	18.0 / cup	white rice, cooked	1.8 / cup
	Kellogs Raisin Bran	18.0 / 3/4 cup	spaghetti, cooked	1.4 / cup
	General Mills Kix	8.1 / 1 1/2 cups	brown rice, cooked	1.0 / cup
	Malt-O-Meal, cooked	8.1 / 3/4 cup	wheat or white bread	0.7 / slice
	Cream of Wheat, cooked	8.1 / 3/4 cup		
Meat and Beans 	clams, raw	3.0 / 3 ounces	pork, cooked	1.5 / 3 ounces
	shrimp	2.6 / 3 ounces	tuna, canned	1.0 / 2 ounces
	hamburger, cooked	2.6 / 3 ounces	chicken, breast cooked	1.0 / breast
	beef, lean, cooked	2.5 / 3 ounces	peanut butter	0.6 / 2 Tbsp
	dried beans, cooked	2.0 / 1/2 cup	hot dog	0.6 / hot dog
	turkey, cooked dark meat	1.9 / 3 ounces		
Fruits and Vegetables 	figs	2.4 / 4 large	prunes	1.3 / 5 prunes
	watermelon	2.1 / 4x8 wedge	potato, baked	1.1 / 1 medium
	spinach, cooked	2.0 / 1/2 cup	Brussels sprouts, cooked	1.0 / 1/2 cup
	dried apricots	1.4 / 8 halves	banana	0.8 / 1 medium
	raisins	1.4 / 1/4 cup	broccoli, cooked	0.6 / 1/2 cup
	peas, cooked	1.4 / 1/2 cup		

Milk and milk products do not provide a significant amount of iron.

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