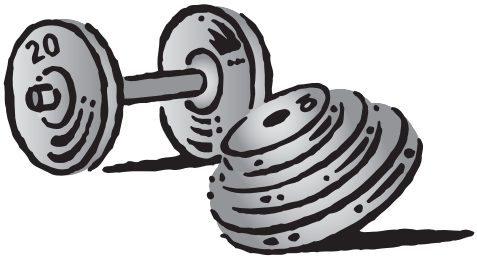
Pumping Iron:

How to Raise Your Hematocrit Level



Heme Iron Sources	mg
Chicken Liver *(3 oz.)*	7.0
Oysters *(6)*	4.5
Beef *(3 oz.)*	1.7-3.2
Clams *(3/4 cup)*	3.0
Turkey *(3 oz.)*	1.2-2.0
Fresh Tuna *(3 oz.)*	1.1
Chicken *(3 oz.)*	1.0-1.1
Blue Crab *(1 cup)*	0.8-1.1
Halibut *(3 oz.)*	0.9
Pork Loin *(3 oz.)*	0.8
Shrimp *(4 large)*	0.7

Nonheme Iron Sources	mg
100% Fortified Cereal *(3/4 cup)*	18.0
Soybeans *(1 cup)*	8.0
Lentils *(1 cup)*	6.0
Instant Grits *(1 packet)*	5.4
Kidney Beans *(1 cup)*	5.2
Pinto Beans *(1 cup)*	4.6
Lima Beans *(1 cup)*	4.2
Instant Oatmeal *(1/2 cup)*	4.1
Navy Beans *(1 cup)*	3.8
Black Beans *(1 cup)*	3.6
Fresh Spinach *(1/2 cup)*	3.2
Firm Tofu *(1/2 cup)*	1.8
Black-eyed Peas *(1 cup)*	1.8
Whole Wheat Bread *(1 slice)*	0.9
Enriched White Bread *(1 slice)*	0.8
Raisins *(50)*	0.5

One of the most common reasons for not being able to give blood is having a low hematocrit, the percentage of red blood cells in whole blood. Fortunately, this is not reason for permanent deferral and ensuring your hematocrit is higher for your next donation may be simpler than you think.

Why Does Iron Matter?

A very important component in red blood cells is iron. Iron enables the production of hemoglobin, a protein in red blood cells responsible for carrying oxygen to every cell in the body. Because giving blood temporarily reduces your supply of red blood cells, donors need to have sufficient red blood cells remaining after donation to meet the body's needs without interruption. Without a sufficient supply of iron, your body is unable to make red blood cells and, therefore, hemoglobin. The result is a hematocrit that is too low to safely allow you to donate blood. Increasing your iron intake, especially the week before donation, can bring your hematocrit back up to safe donation levels.

How Much?

For pre-menopausal, non-pregnant, non-breast feeding women over 18, the Recommended Dietary Allowance (RDA) of iron is 18 milligrams. The RDA for men over 18 and post-menopausal women is eight milligrams.

But, I Feel Fine!

A hematocrit that is too low for safe blood donation may still be within the "normal range" for general health. The safe blood donation standard is established by the Food and Drug Administration and takes into consideration the anticipated change in red blood cell volume after donation. However, if you are deferred from donating because of a low hematocrit and you have attempted to meet the RDA for iron, you may want to consult your physician. Although symptoms of decreased iron stores may include general fatigue, shortness of breath, headache, irritability and lethargy, many people experience no symptoms.

What Are Some Good Sources of Iron?

There are two forms of dietary iron: heme and nonheme. Heme iron is absorbed very efficiently by your body and can be found in meat, poultry, fish and seafood. Nonheme iron is not absorbed as well, however, vitamin C and meat proteins consumed at the same time as nonheme iron sources have been found to improve iron absorption. Beans, along with flours, cereals and grain products enriched or fortified with iron are good sources of nonheme iron. Items to avoid when eating iron rich foods include calcium, coffee, tea, egg yolks, fiber, rice, grains and soy protein as they can block nonheme iron absorption. Multivitamins containing iron may also be helpful and are safe for most healthy adults. Due to the risk of iron overload, however, iron supplements should only be taken when prescribed by a medical professional.

Naval Medical Center, San Diego Blood Donor Center
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ASBP
Armed Services Blood Program