

Iron Levels and Blood

During the 2008 blood drives, about a third of the folks couldn't donate 'cause they had "low iron". The question is How can we drop those numbers by increasing the "iron levels"?

If iron levels are "down," *it could mean* that there is not enough iron in the food we eat. At times, our bodies do not absorb iron very well. A blood test is the best way to confirm the presence of iron deficiency anemia.

The below will discuss what foods we can eat to help raise iron levels, plus some other things.

According to the University of Illinois at Urbana-Champaign (gotta like any school named for a type o'booze) and some dietitian from France [never did get his/her name], the following information may be of some use.

Iron intervenes in the constitution of the hemoglobin and myoglobin. These two compounds are involved in the cellular activity.

The hemoglobin, via blood vessels, shuttles oxygen from the lungs to every organ. There it exchanges the oxygen with carbon dioxide and then takes back this carbon dioxide to the lungs to eliminate it.

The myoglobin is in muscles. It grabs the oxygen brought by the hemoglobin and delivers it to the muscular cells. Iron is also part of numerous enzymes, is indispensable to our immune system and plays an important role in the learning process.

There are two different types of iron ... heme and non-heme.

The heme iron is present in the hemoglobin and myoglobin that is in blood. That is why heme iron is found in red meat where it represents approximately 40% of total iron. The non-heme iron is in every other food ... vegetables, eggs, dairy products.

A classical omnivore (eats everything) diet provides approximately 15% of heme iron while a vegetarian diet is 100% non-heme. NOTE: The iron found in the vegetable world is not as well absorbed as heme iron.

There are some things we can do to increase the iron absorption from non-heme foods. They are:

- a good source of vitamin C (ascorbic acid) ... oranges, grapefruit, tomatoes, broccoli
- heme and non-heme foods eaten together
- non-heme foods cooked in an iron pot or cast iron skillet

The following factors might decrease non-heme iron absorption. They are:

- large amounts of tea or coffee (the polyphenols bind the iron)
- excess consumption of high fiber foods or bran (the phytates may inhibit absorption)
- high intake of calcium

The recommended dietary allowance (RDA) for iron for non-vegetarian pre-menopausal women is 18 mg/day. The RDA for non-vegetarian men and post-menopausal women is 8 mg/day. Because of iron absorption issues in a healthful, high-fiber vegetarian diet, the RDAs for vegetarians are higher ... 14 mg/day for vegetarian men and 33 mg/day for vegetarian women. The upper level of intake should not exceed 45 mg/day.

Heme iron sources

Food Source	Serving Size (oz.)	Iron (mg)
Beef liver	3.0	7.5
Corned beef	3.0	2.5
Lean ground beef (10% fat)	3.0	3.9
Beef round	3.0	4.6
Beef chuck	3.0	3.2
Beef flank	3.0	4.3
Chicken breast without bone	3.0	0.9
Chicken leg with bone	2.0	0.7
Chicken liver	3.0	7.3
Chicken thigh with bone	2.3	1.2
Cod, broiled	3.0	0.8
Flounder, baked	3.0	1.2
Pork (lean ham)	3.0	1.9
Pork (loin) chop	3.0	3.5
Salmon (pink) canned	3.0	0.7
Shrimp (10 2 ½ inch)	1.1	0.5
Tuna canned (in water)	3.5	1.0
Turkey (dark meat)	3.0	2.0
Turkey (white meat)	3.0	1.2

Non-heme food sources

Food Source	Serving Size	Iron (mg)
Almonds (raw)	10-12	0.7
Apricots (dried) medium size	10	1.7
Bagel	1	1.5
Baked beans (canned)	½ cup	2.0
Bread (white)	2 slices	1.4
Bread (whole wheat)	2 slices	1.7
Broccoli (cooked)	½ cup	0.6

Broccoli (raw)	1 stalk	1.1
Dates	10	1.6
Kidney beans	½ cup	1.6
Lima beans	½ cup	1.8
Macaroni (enriched, cooked)	1 cup	1.9
Molasses (blackstrap)	1 tablespoon	2.3
Peas (frozen, cooked)	½ cup	1.3
Prune juice	½ cup	1.5
Raisins	¼ cup	1.0
Rice (brown, cooked)	1 cup	1.0
Rice (white enriched, cooked)	1 cup	1.8
Spaghetti (enriched, cooked)	1 cup	1.6
Spinach (cooked)	½ cup	2.0
Vitamin supplements	Varies	varies

In addition, some breakfast cereals are iron-fortified.

Bottom line ... eat good, live long and prosper, and remember, you are what you eat.

All the above technical stuff was stolen from various web sites and probably is correct ... at least it may have been correct when it was written. If anyone wants to really check their "iron levels" please contact your medical professional.

See ya at the next blood drive.

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