



The average daily requirement for iron in pregnancy is 30 to 48 mg, due primarily to its poor absorption rate (about 10%). For a pregnant woman to meet the iron requirements of pregnancy, she must choose her foods wisely and/or take supplemental iron. Iron is generally found in red meats (especially organ meats), whole grains, beans, dark green leafy vegetables, nuts and seeds, dark molasses, seaweed, nutritional yeast, and dried fruit.

DIFFERENT FORMS OF IRON → 'HEME' and 'NON-HEME' IRON

Although iron is found in a variety of different foods and supplements, its availability to the body varies significantly. In general, iron is not easily absorbed by the body. Availability and absorption is partially determined by whether the iron is found in the form of HEME or NON-HEME iron. HEME iron is found only in meat, fish and poultry and is absorbed much more easily than NON-HEME iron, which is found primarily in fruits, vegetables, dried beans, nuts and grain products.

HOW TO INCREASE THE ABSORPTION OF IRON IN YOUR DIET

- Add a source of Vitamin C (orange, tomato, broccoli, cantaloupe, kiwi, mango, kale, etc) to your iron-rich meals. If you are unable to add a dietary source of Vitamin C to your meal, take a Vitamin C supplement. Taking 200-400mg Vitamin C will almost double your iron absorption from NON-HEME iron rich foods.
- Try to eat a HEME food and a NON-HEME food together to increase iron absorption.
- Cook NON-HEME foods in a cast iron pot or skillet to add iron to your food. This is especially true for acidic foods, such as tomatoes, when cooked in cast iron cookware.
- When possible, use leavened whole grains; yeast in the fermentation process makes iron available.
- Iron supplements are best taken with food. This slows movement through the digestive tract and increases the amount of time for absorption. It also allows absorption from the iron supplement to benefit from the stimulation of acidic digestive enzymes. Pregnant women find iron supplements more tolerable if taken with the evening meal, when the blood sugar is less likely to be low, so they are less likely to be nauseated.
- Exercise regularly. Regular exercise improves iron absorption because of the body's increased need for oxygen-carrying capacity.

THE FOLLOWING FACTORS WILL DECREASE YOUR IRON ABSORPTION

- Do not consume large amounts of tea, coffee or caffeinated cola with your iron-rich meal or snack (the polyphenols, tannic acid and caffeine bind to the iron and reduce availability for absorption). Try to wait at least one hour after your iron-rich meal before consuming these beverages.
- Do not eat iron-rich meals or snacks with dairy products. Calcium, which neutralizes stomach acidity, will decrease iron absorption because iron is best absorbed in a more acidic environment. Try to take your Calcium supplement or antacid before bed, not at the same time as your iron-rich meal or snack.
- Try to avoid excess consumption of high fiber foods or bran supplements (the phytates in such foods inhibit iron absorption).

This document was compiled for general use with information excerpted from the following sources:

"Dietary Sources of Iron," McKinley Health Centre, University of Illinois, December 2006.

"Iron and You," Nutrition Series, BC HealthFile #68c, March 2006.

"Iron in Pregnancy: Nutrition for Two," Althea Seaver, nutritionist; *Midwifery Today*, Issue 16; 1990.

"Iron Content of Common Foods," Nutrition Series, BC HealthFile #68d, October 2005.

FOODS CONTAINING HEME IRON

Food Source	Amount	Iron (mg)
Clams	3oz	25.0
*Liver, lamb	3.5oz	17.9
*Liver, pork	3oz	16.0
Oysters, simmered	3.5oz	13.4
Kidneys, braised	3.5oz	13.1
*Liver, Chicken	3oz	7.5
Mussels – steamed	3oz	5.7
*Liver, Beef	3oz	5.5
Liverwurst	3.5oz	5.0
Corned beef	3.5oz	4.4

Food Source	Amount	Iron (mg)
Beef, lean ground	3oz	3.9
Turkey	3.5oz	3.8
Veal	3.5oz	3.5
Leg of Lamb - broiled	3.5oz	3.5
Shrimp	3oz	2.8
Sardines	3oz	2.4
Lamb – simmered	3oz	2.0
Chicken – thigh w/bone	2.3oz	1.2
Fish	3oz	1.0

**Pregnant women should not eat liver more than once per week because of its high Vitamin A content. Whenever possible, try to eat organic liver to reduce exposure to harmful toxins. Also, liver is high in cholesterol, thus people with high blood cholesterol levels should not eat it often.*

FOODS CONTAINING NON-HEME IRON

Food Source	Amount	Iron (mg)
Dulse seaweed, dried	1oz	42.8
Pumpkin seeds, dried	1cup	33.9
Kelp seaweed, dried	1oz	28.4
Quinoa grain, dry	1cup	15.7
Rice bran	1cup	15.4
Amaranth grain, dry	1cup	14.8
Tofu, firm, raw	½ cup	13.2
Sesame seeds	1cup	10.5
Wheat germ	1cup	10.3
Molasses, black strap	2tbsp	10.1
Sunflower seeds	1cup	9.7
Soybeans, cooked	1cup	8.8
Chili with beans	1cup	8.7
Pistachio nuts	1cup	8.6
Rye flour	1cup	8.2
Cashews, dry roasted	1cup	8.2
Spirulina, dried	1oz	8.0
Soy flour, full fat	1cup	8.0
Lima beans, dried	3.5oz	7.8
Lentils, cooked	1cup	7.0
White beans, cooked	1cup	6.6
Spinach, cooked	1cup	6.4

Food Source	Amount	Iron (mg)
Parsley, raw	3.5oz	6.2
Peaches, dried	3.5oz	6.0
Black walnut, raw	3.5oz	6.0
Apricots, dried	3.5oz	5.5
Almonds, dried whole	1cup	5.2
Kidney beans, cooked	1cup	5.2
Jerusalem artichokes	1cup	5.1
Chick peas, canned	1cup	4.5
Refried beans, canned	1cup	4.4
Pinto beans, cooked	1cup	4.4
Prunes, dried	3.5oz	4.4
Blackeyed Peas, cooked	1cup	4.2
Figs, dried	5	4.0
Swiss chard, cooked	1cup	3.9
Hummus (chick peas)	1cup	3.8
Miso, natto	¼ cup	3.8
Raisins	½ cup	3.5
Beechnuts, filberts, brasilnuts	3.5oz	3.5
Coconut, dried	3.5oz	3.5
Beets, canned	1cup	3.2
Potato, medium baked	1	1.0
Sesame butter (tahini)	1tbsp	1.0