

# Iron

- Iron is an essential mineral in building blood and maintaining energy

Recommended Daily Intake for Women:				
<b>Ages 14-18:</b> 15 mg	<b>Ages 19-50:</b> 18 mg	<b>Ages 50+:</b> 8 mg	<b>Pregnant:</b> 27 mg	<b>Lactating:</b> 10 mg

Recommended Daily Intake for Men:	
<b>Ages 14-18:</b> 11 mg	<b>Ages 18+:</b> 8 mg

- Common symptoms of iron deficiency: fatigue, poor concentration, lethargy, weakness, Pica (the desire to eat unusual things such as matches, ice, clay, cardboard, paint, or starch) & impaired immune function (i.e. frequent infections, allergies, asthma, autoimmune conditions, etc)
- If a doctor diagnoses iron deficiency, then iron supplementation is necessary
  - Taking iron if not needed can be harmful, so please only take iron if diagnosed with a deficiency.
- There are heme and non-heme sources of iron:
  - Heme iron comes from animal sources of protein (ex. poultry, seafood, fish) This form of iron is generally more easily absorbed by the body.
  - Non-heme iron, is found in plant-based foods like grains, beans, vegetables, fruits, nuts, and seeds. This form of iron is less easily absorbed.
- **Warning:** Adult iron supplements are a common cause of fatal poisonings in children. Keep all iron supplements out of the reach of children
- Not all iron supplements are equivalent – poorly absorbed iron can cause constipation and abdominal cramping. Discuss iron supplementation with your naturopathic doctor to find one that is right for you.

## Iron Absorption

<u>Factors That Increase Iron Absorption</u>	<u>Factors That Decrease Iron Absorption</u> (ONLY if consumed at the same time)
Stomach acid/Always take iron supplement WITH FOOD.  If you are on an acid-blocking medication, try taking iron with a tablespoon of apple cider vinegar mixed with a sip of water.	Calcium: Always take calcium supplements AWAY from iron supplements (about 2 hours)
Cooking in a cast iron pan will leach iron into the food, especially if cooking acidic foods like tomato sauce, or eating with foods rich in vitamin C (for example: potatoes w/skins, tomatoes, cabbage).	Coffee and Tea: Consume these beverages AWAY from iron supplements
Vitamin C: non-heme iron is more absorbable if taken with vitamin C, either as a supplement or through vitamin C-rich foods like citrus fruits	Oxalates in foods such as spinach, kale, beets, nuts, chocolate, tea, wheat bran, rhubarb, strawberries and herbs such as oregano, basil and parsley inhibit absorption of non-heme iron

**Food Sources of Iron in Mg (milligrams):**

<p><b><u>Fruit</u></b>          10 Dried Figs          4.2 Fresh Figs          5.0 Dried Peaches          2.7-3.9 Fresh Peach halves          2.6 Raisins (1/2 cup)          2.4 Dates (10)          2.1 Prunes          1.3 Strawberries (1 cup)</p>	<p><b><u>Animal Sources (3 ounces)</u></b>          5.2-5.8 Liver (chicken,beef)          3.7-6.4 Clams          5.5 Oysters (raw)          1.7-3.0 Beef (ground)          1.5 Chicken (dark meat)          1.1 Chicken (white meat)          1.9 Turkey (dark meat)          1.0 Turkey (white meat)          1.5-2.4 Lamb          1.6-1.9 Fish (mackerel, trout, bass)          1.2-1.8 Large egg</p>	<p><b><u>Legumes/Beans (1 Cup Cooked)</u></b>          8.5 Mature soybeans (cooked)          6.6 Lentils          6.1 Hummus (1 cup)          5.2 Kidney beans          3.6 Black beans          5.0 Garbanzos          4.5-6.0 Pinto beans, Navy beans          4.4 Tempeh          3.7 Lima, Great Northern          2.7 Edamame, frozen          2.5 Split peas          2.1 Green peas, black-eyed, split peas          1.0-1.8 Soy milk          3.6-26.4 Tofu (firm)</p>
<p><b><u>Seeds/Nuts (1/4 cup)</u></b>          5.2 Pumpkin seeds          3.1 Pine nuts          2.7 Sesame tahini          2.4 Sunflower, flax seeds          2.1 Cashew nut</p>	<p><b><u>Miscellaneous</u></b>          3.5-5.0 Blackstrap molasses (1 tbsp)          3.0 Dry Kelp Seaweed (1/16 cup=2g)          1.9 Dandelion leaf (1 cup)          1.4 Brewers yeast (1 tbsp)</p>	<p><b><u>Grains (1 Cup Cooked)</u></b>          21.9 Rice bran raw          6.0 Amaranth          4.2 Quinoa          2.0 Barley, pearled          1.6 Millet, oatmeal          1.6 Wheat berries          1.0 Brown rice          1.0 Whole wheat bread, 1 slice</p>
<p><b><u>Vegetables (1 Cup Cooked)</u></b>          4.0 Spinach*          2.8 Beet greens*          2.2-4.0 Swiss chard*          2.7 Baked potato (1 medium size)          2.7-0.9 Tomato juice          2.0 Brussel sprouts (8)          1.4 Butternut/acorn squash          1.4 Beets          2.6 Kale          0.9 Parsley leaf (¼ cup, raw)          2.1 Asparagus (6 spears, raw)          3.4 Snow peas (cooked)          2.6 Green peas (cooked)          3-3.4 Turnip          * Highly limited absorption</p>		<p><b>References:</b>          Marz B, ND. Medical Nutrition from Marz. 2 nd Ed. Omni Press. Portland, Oregon:1999.          Nutribase. Clinical Nutrition Manager, v. 6.03.          Groff JL, Gropper SS. Advanced Nutrition and Human Metabolism. 3 rd Ed. Wadsworth. Belmont,CA: 2000.          Mahan K, Escott-Stump S. Krause's Food, Nutrition, and Diet Therapy. 11 TH Ed. Saunders: 2004.          Dieticians of Canada. Food Sources of Iron.  <a href="https://www.dietitians.ca/Downloads/Factsheets/Food-Sources-of-Iron.aspx">https://www.dietitians.ca/Downloads/Factsheets/Food-Sources-of-Iron.aspx</a>. Accessed June 25th 2018.          Iron Disorders Institute. Achieving Iron Balance with Diet.  <a href="http://www.irondisorders.org/diet/">http://www.irondisorders.org/diet/</a>. Accessed June 25th 2018.</p>