

Iron Essentials

















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The Importance of Iron

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Interesting Fact:

Iron is so essential that your body needs every bit that it acquires; none of the iron is excreted as waste!³ However, women are susceptible to losing iron due to the blood loss associated with menstruation. Replenishing the body's iron supply is particularly important for women.

Iron is an essential nutrient for energy and vitality. A deficiency can leave you feeling weak and tired. Iron comes in two distinct forms: heme iron, and non-heme iron. Heme iron is found in animal protein, such as meat, poultry and fish, while non-heme iron is present mostly in cereals, legumes, fruits and vegetables.¹

Red blood cells (RBC) carry oxygen from the lungs to all other parts of the body. Each RBC contains hemoglobin. Hemoglobin molecules include iron, which is essential for binding oxygen. Without iron, RBCs cannot carry oxygen throughout the body. Since RBCs only live for about 120 days, the body needs iron to replenish them frequently.



Disclaimer:

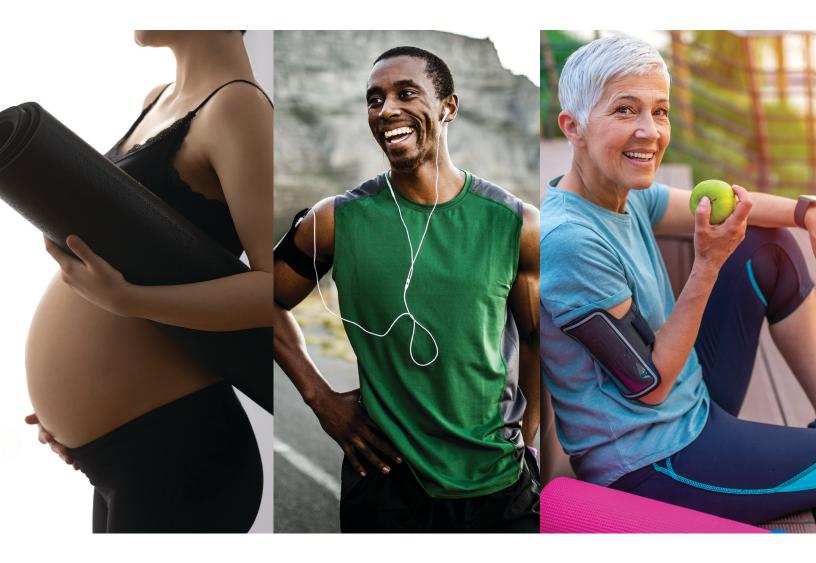
Please consult your healthcare professional if you think you may have an iron deficiency or iron deficiency anemia. The information provided in this ebook is for a general audience and should not replace the advice from your healthcare professional.

Iron deficiency occurs when your body's need for iron exceeds your intake and the small amounts stored in your body. Iron deficiency is the leading cause of anemia. Anemia occurs when the number of RBCs in your blood is decreased. Mild and moderate anemia can impair your immune system, energy level and ability to function at your best.²

Auerbach, M et al (2016) Am J Hematol 91(1): 31-8
 Abbaspour, N et al (2014) J Res Med Sci 19(2): 164-174

Who's at Risk?

People who are most at risk of iron deficiency include women with heavy periods or who are pregnant, vegetarians, vegans, seniors or those with chronic health conditions. 4-6



There are two ways you can help address an iron deficiency:

- 1) Meal planning to incorporate iron-rich foods
- 2) Taking iron supplements

Joosten, E (2018) Geriatr Gerontol Int 18(3): 373-379,
 Cappellini M D et al (2017) Am J Hematol 92(10): 1068-1078
 Alaunyte, I et al (2015) J Int Soc Sports Nutr. 12:38

Meal planning to incorporate iron-rich foods

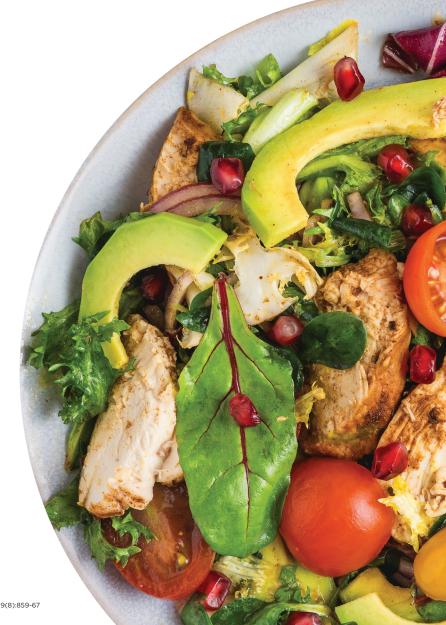
Non-heme iron is found in cereals, legumes, fruits and vegetables, and is 2-3 times more difficult to absorb than heme iron. This is why vegetarians and vegans are particularly at risk for iron deficiency. Diets that include little to no animal protein would benefit from including vitamin C rich foods to help improve the absorption of non-heme iron.8 Foods that are high in vitamin C include fruit juice, tubers, cabbage, carrots, cauliflower, cantaloupe, strawberries, broccoli, tomatoes and peppers. It is also important to consider that vitamin C degrades when it is cooked, highly processed, or stored long-term. Using fresh, raw sources is the most effective.8 Fermented or germinated foods, such as sauerkraut, kimchi, and soy sauce, can also promote iron absorption. Cast-iron pots and pans may increase the iron content of the foods cooked in them. This durable cookware may also effectively raise the iron levels for those with iron deficiency anemia.9

Apart from including foods to improve iron absorption, there are foods that you should avoid eating with an iron-rich meal because they can reduce iron absorption. These foods include dairy products, tea, coffee, wine, and some spices such as oregano.10 Increasing your daily intake of meat, poultry and fish can help increase your iron intake. These foods contain heme iron, which is very easy to absorb.

Challenges:

As you can see, enjoying iron-rich meals with the best absorbency on a regular basis depends on thoughtful meal planning.

See page 9 for healthy iron-rich foods and recipes



[·] Pallorey, Let al (1979) Scalid o Gastroentein 14(7),76979 ^g Plucher, B et al (2004) Int J Vitam Nutr Res. 74(6):403-19 ^g Alves, C et al (2019) PLoS One 14(9): e0221094 ¹⁰ Hurrell, R et al (2010) Am J Clin Nutr. 91(5):1461S-1467S, Cook, J D et al (1976) Am J Clin Nutr. 29(8):859-67



Taking iron supplements

Iron supplements are ideal for people who aren't getting what they need from their diet.

Ferrous iron salts (ferrous sulfate, ferrous fumarate and ferrous gluconate) are common forms of iron used in supplements, but they are not readily absorbed by your body. In other words, they have low bioavailability.

A common iron prescription of ferrous gluconate has a bioavailability of 30%. This low bioavailability means that to correct an iron deficiency you must take more iron to reach your daily requirement. The unabsorbed iron accumulates in your digestive tract which can result in discomfort, nausea and constipation.¹¹

How do other forms of irons compare?

Type of Iron	Elemental Iron (mg)	Bioavailability	Amount of Bioavailable Iron (mg)
Iron (II) Bisglycinate	18	91%	16
Ferrous Sulfate	60	20%	12
Ferrous Fumarate	100	30%	30
Ferrous Gluconate	35	30%	10.5
Polydextrose Iron Complex (Ferric)*	150	20%	30

*Ferric must be converted to Ferrous to be absorbed.

Most forms of iron have low bioavailability, which can lead to the loss of iron in the colon causing symptoms of GI upset, constipation, or dark stools. Iron bisglycinate found in Easylron provides 91% bioavailability which is greater than other leading forms of iron. Greater bioavailability results in less GI upset.



Introducing Easylron®

Easylron is formulated with iron bisglycinate. Iron bisglycinate is a chelated form of iron that is bound to two glycine amino acids and is more easily absorbed by the body. It has an elemental iron bioavailability of 91%. Iron bisglycinate has been clinically shown to be absorbed 4.5 times more efficiently than other forms of iron. It is well-suited for vegetarians and vegans. It is also free of binders, fillers, artificial colours and preservatives such as magnesium stearate.

Easylron leverages Platinum Naturals' Omega Absorb delivery system that suspends the iron bisglycinate in cold pressed extra virgin olive oil to further increase the iron absorption by 3 times compared to other forms. In addition, olive oil protects the stomach and the GI system from the harshness of iron itself.

Absorption of iron bisglycinate in oil occurs throughout the entire small intestine, reducing symptoms of nausea, stomach pain, constipation, and even allowing for Easylron to be taken with meals because there is no risk of interaction with other foods. Apart from iron, our Easylron formulas are a source of vitamin C, B6, B12, zinc and copper that are essential blood-building factors that help your body produce oxygen-carrying red blood cells.¹³

Iron Bisglycinate is

4.5x better absorbed than the other forms of iron the details.

better absorbed when it is suspended in oil

Which Easylron[®] is right for me?



Easylron®

18 mg of iron bisglycinate Moderate iron deficiency Iron deficiency anemia Women with heavy menstrual cycles **Blood donors** Pre- and post-surgery



Easylron® **Extra Gentle**

9 mg of iron bisglycinate Mild iron deficiency Vegetarians/ Vegan Athletes People who are sensitive to iron



Easylron® **Extra Strength**

45 mg of iron bisglycinate Severe iron deficiency Therapeutic dose for those with iron deficiency anemia



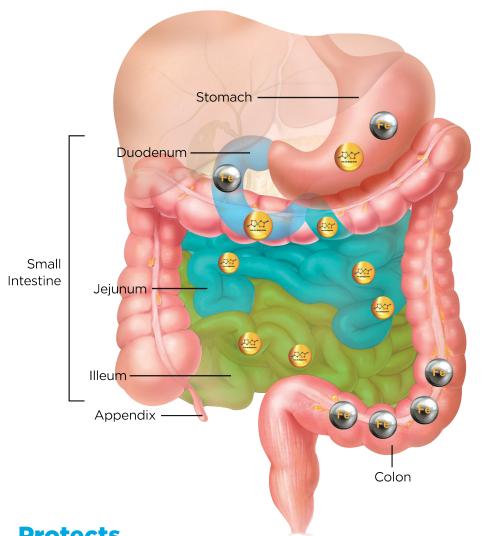
Prenatal Easylron® Extra Gentle

9 mg of iron bisglycinate Pregnant and nursing women Mild iron deficiency



Absorb more with healthy oils. Through the power of healthy oils, our award-winning delivery system allows our bodies to absorb the nutrients it needs to improve our health and achieve our wellness goals.

How Omega Absorb[™] works







With healthy oils, iron can be absorbed anywhere throughout the intestinal tract which helps alleviate unpleasant GI side effects.



Without oils, iron can be absorbed in the Duodenum. This results in much of the iron ending up in the colon causing unpleasant GI side effects.

Protects

Ingredients are emulsified in a healthy oil to help protect both the stomach lining from the harshness of some ingredients such as iron, copper and zinc and preserving the integrity of the ingredients.

Absorbs

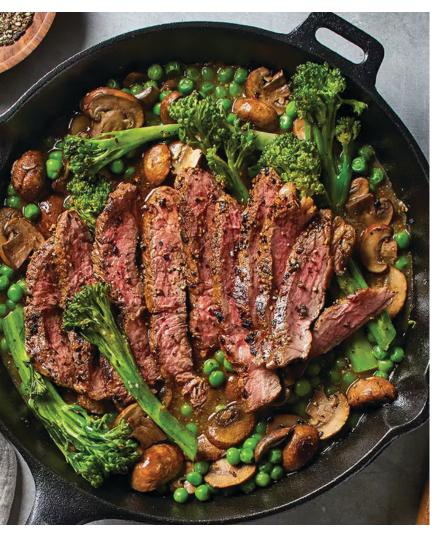
Nutrients have specific receptor sites for absorption in the body; however, by suspending the active ingredients in healthy oils the opportunity for absorption increases anywhere throughout the intestinal tract.

Delivers

When suspended in healthy oils, nutrients have increased bioavailability and can be delivered throughout the body where they are needed most.

Iron-rich recipes

These simple and delicious recipes have been specially selected to maximize iron content and absorbency, while avoiding ingredients that would reduce iron absorption. Feel free to add in your favourite spices and ingredients for taste preference.



Skillet Steak with Mushroom Sauce

Serves: 2 | Ingredients:

12 ounces boneless beef top sirloin steak, cut 1 inch thick and trimmed (For Vegetarians and Vegans substitute a plant based protein, portobello mushrooms, tempeh or tofu)

- 2 teaspoons salt-free steak grilling seasoning
- 2 cloves garlic, minced
- ½ teaspoon salt, divided
- 2 teaspoons canola oil
- 6 ounces broccolini, trimmed
- 2 cups frozen peas
- 1 teaspoon chopped fresh thyme
- 3 cups sliced fresh mushrooms
- 1 cup unsalted beef broth
- (Can be substituted with vegetable broth)
- 1 tablespoon whole-grain mustard
- 2 teaspoons cornstarch

Preparation:

- Preheat oven to 350°F. Sprinkle steak with steak seasoning, garlic and 1/4 teaspoon salt
- Heat oil in a 12-inch cast-iron skillet over medium-high heat. Add the steak and broccolini
- Cook for 4 minutes, turning the broccolini once (do not turn the steak)
- Place peas around the steak; sprinkle with thyme
- Transfer the skillet to oven and bake until the steak is medium-rare (145°F), about 8 minutes
- Transfer the steak and vegetables to a plate (leave the drippings in the pan); cover and keep warm
- Add mushrooms to the drippings in the pan. Cook over medium-high heat for 3 minutes, stirring occasionally
- \bullet Whisk broth, mustard, cornstarch and the remaining $\frac{1}{4}$ teaspoon salt in a small bowl or measuring cup; add to the pan with the mushrooms
- Cook, stirring, until thick and bubbly, about 1 to 2 minutes
- Cook, stirring, for 1 minute more. Serve the steak and vegetables with the sauce



Vegan Lentil Soup

Serves: 4 | Ingredients:

1/4 cup extra virgin olive oil

1 medium yellow or white onion, chopped

2 carrots, peeled, chopped

4 garlic cloves, pressed or minced

2 teaspoons ground cumin

1 teaspoon curry powder

½ teaspoon dried thyme

1 can (28 ounces) diced tomatoes, drained 1 cup brown or green lentils, picked over and rinsed

4 cups vegetable broth

2 cups water

1 teaspoon salt, more to taste

Pinch red pepper flakes and ground black pepper

1 bunch swiss chard, leaves ripped from stalks and shredded

½ teaspoon lemon juice, to taste

Preparation:

- Warm the olive oil in a large Dutch oven or pot over medium heat
- One-fourth cup olive oil may seem like a lot, but it adds a lovely richness and heartiness to this nutritious soup
- Once the oil is shimmering, add the chopped onion and carrots and cook, stirring often, until the onion has softened and turns translucent, about 5 minutes.
- Add the garlic, cumin, curry powder and thyme and cook until fragrant while stirring constantly
- Stir constantly, about 30 seconds and pour in the drained diced tomatoes and cook for a few more minutes stirring often in order to enhance their flavour
- Pour in the lentils, broth and water and add 1 teaspoon salt and pinch of red pepper flakes
- Season generously with freshly ground black pepper. Raise heat and bring the mixture to a boil, then partially cover the pot and reduce heat to maintain a gentle simmer
- Cook for 30 minutes, or until the lentils are tender but still hold their shape
- Transfer 2 cups of the soup to a blender but protect your hand from steam with a tea towel placed over the lid and puree the soup until smooth
- Pour the pureed soup back into the pot and add the shredded greens and cook for 5 more minutes, or until the greens have softened to your liking
- Remove the pot from heat, stir in the juice of half of a lemon, and taste and season with more salt, pepper and/or lemon juice
- Serve immediately Leftovers will keep well for about 4 days in the refrigerator, or frozen for several months (just defrost before serving)



Green Pasta Primavera

Serves: 6 | Ingredients:

½ cup plus 3 Tbs. pine nuts ¼ cup olive oil, divided 1 Tbs. lemon juice 8 cloves garlic, minced (3 Tbs.) 2 medium leeks, sliced (2 cups) 1 lb. broccoli raab, chopped 2 cups frozen peas, thawed 6 cups baby spinach 8 oz. farfalle pasta

Preparation:

- Toast pine nuts in skillet over low heat for 5 minutes, or until golden, stirring frequently
- Remove pan from heat and blend 1/2 cup toasted pine nuts in food processor with 2 Tbs. oil, lemon juice, and 1 Tbs. water until smooth
- Set aside remaining 3 Tbs. toasted pine nuts
- Heat remaining 2 Tbs. oil in large skillet over medium heat
- Add garlic, sauté 1-2 minutes, or until golden
- Stir in leeks, and season with salt, if desired sauté 5 minutes
- Add broccoli raab, cook 10 minutes, stirring occasionally
- Add peas, and cook 2 minutes more
- Stir in spinach, and remove from heat
- Meanwhile, cook pasta according to package directions
- Drain pasta, reserving 1/3 cup cooking water
- Return pasta to pot; stir in sauce and reserved pasta cooking water
- Fold in broccoli mixture
- Serve topped with toasted pine nuts