

# **HOW IS IRON DEFICIENCY DIAGNOSED AND TREATED?**

## Iron deficiency is determined by the value of lab markers in your blood. Talk to your doctor if your lab values are below normal\*



Normal Values*	Male	Female
Hemoglobin (Hb)	13.2 - 17.1 g/dL	11.7 - 15.5 g/dL
Ferritin	12-300 ng/mL	12 - 150 ng/mL
Ferritin saturation (TSAT)	20-50%	20-50%

<sup>\*</sup>Please note that normal values can vary significantly for a lot of different reasons, including age, comorbid conditions, or where the lab test was done. Additionally, iron deficiency may be diagnosed even if the lab markers fall within the normal range. Please consult with your doctor to better interpret what your lab results mean for you

Once Iron Deficiency is diagnosed, your doctor may prescribe iron supplementation. This usually may involve oral iron supplements/pills, increasing your dietary iron intake, or intravenous iron therapy.\*



#### **Oral Iron Pills**

Pros: Readily available and inexpensive

Cons: • Oral iron pills are not absorbed well, and you might not get a full dose of iron from pills

- Can cause GI side effects
  - Simply do not work as well, particularly to treat iron deficiency in patients with heart failure



#### Consumption of Iron-Rich Foods

- Red and white meats (beef, pork, lamb, and poultry, especially dark meat chicken or turkey)
- Eggs
- Liver
- Beans and peas
- Dark leafy vegetables: broccoli, kale, collared greens, turnip, arugula, spinach
- Iron-enriched pasta, rice, and cereals
- Fruits: Berries, apples, bananas, pomegranate



#### Intravenous Iron

Pros: • Iron is delivered directly into the bloodstream, bypassing GI side effects and impact

- Has been studied extensively (in the form of ferric carboxymaltose) to treat iron deficiency in HF patients, and can improve heart failure symptoms and quality of life, as well as reduce the risk of heart failure hospitalizations
- Is recommended in guidelines to treat iron deficiency in order to improve HF symptoms and quality of life

- Cons: Have to go to an infusion center to get treatment
  - May lead to serious side effects like serious allergic reactions or high blood pressure.
  - Has not been studied or approved to treat symptoms of iron deficiency

### Other Lifestyle Measures that Can Help Maintain Your Iron Levels:\*



- Adopt healthy lifestyle changes like heart-healthy eating patterns
- Reduce alcohol consumption
- Keep active
- Increase intake of vitamin C to help your body absorb iron
- Avoid drinking black tea, which reduces iron absorption

\*This information is not intended to replace medical advice by a healthcare professional. Please consult your doctor if you like to learn more about treatment options and before making any lifestyle changes.

#### **REFERENCES:**

- Ponikowski, Piotr, and Ewa A. Jankowska. "Targeting Iron Deficiency in Heart Failure: Existing Evidence and Future Expectations." Circulation Heart Failure (2021): e008299.
- CDC Iron Deficiency Anemia, https://www.nhlbi.nih.gov/health-topics/iron-deficiency-anemia

