

# Eating, Diet, & Nutrition for IRON DEFICIENCY- ANEMIA



مؤسسة الرعاية الصحية الأولية  
PRIMARY HEALTH CARE CORPORATION

الخطوة الأولى لصحة عائلتك  
The First Step to your Family's Health

## Iron-Deficiency Anemia:

Iron is very important in maintaining many body functions, including the production of hemoglobin, the molecule in your blood that carries oxygen. Iron is also necessary to maintain healthy cells, skin, hair, and nails.



## Highest risk people for iron-deficiency anemia:

- Women who menstruate, particularly if menstrual periods are heavy.
- Women who are pregnant or breastfeeding or those who have recently given birth.
- People who have undergone major surgery or physical trauma.
- People with gastrointestinal diseases such as celiac disease (sprue), inflammatory bowel diseases such as ulcerative colitis, or Crohn disease
- People with peptic ulcer disease.
- People who have undergone bariatric procedures, especially gastric bypass operations.
- Vegetarians, and other people whose diets do not include iron-rich foods (Iron from vegetables, even those that are iron-rich, is not absorbed as well as iron from meat, poultry, and fish.).
- Children who drink more than 16 to 24 ounces a day of cow's milk (Cow's milk not only contains little iron, but it can also decrease absorption of iron).



## Symptoms of iron-deficiency anemia:

- Being pale or having yellow “sallow” skin
- Unexplained fatigue or lack of energy
- Shortness of breath or chest pain, especially with activity
- Unexplained generalized weakness
- Rapid heartbeat
- Pounding or “whooshing” in the ears
- Headache, especially with activity
- Craving for ice or clay - “pica”
- Sore or smooth tongue
- Brittle nails or hair loss

## Dietary interventions:

- If IDA is related to inadequate iron in diet, usually adding three portions of lean red meat (heme iron sources) per week, along with essential vitamins and minerals will correct the anemia.
- The average mixed diet contains approximately 6 mg of iron per 1000 kcal.
- Iron absorption increases as stores become depleted.
- Good sources of iron include liver, dried beans, egg yolks, kidney, lean beef, and dark meat of chicken, salmon, tuna, dried fruits, enriched whole-grain cereals, molasses and oyster.
- For vegetarians – advise fortified breakfast cereals and whole wheat bread, oatmeal, raisins; peas, lentils and beans, cashews, nuts and seeds, molasses, dairy and eggs.
- Non heme iron absorption is greatly affected by other foods. Absorption of non heme iron is best in the presence of foods rich in vitamin C (oranges, grapefruit, guava, tomatoes, broccoli, cabbage, strawberries, cantaloupe, and green peppers), especially with an iron supplement.
- Tea, coffee, wheat brans, and soya products inhibit absorption of non heme iron. Limit intake to in-between meals.
- Recommend a variety of fruits and vegetables which are good sources of zinc and other micronutrients like selenium to maintain B12 adequacy.
- Vitamin B12 deficiency (pernicious anemia) is effectively treated with oral vitamin B12 supplementation.



# IRON-RICH FOODS

## Heme Iron

**3.5 milligrams**

OR MORE PER SERVING, INCLUDE:

**3 OUNCES OF**



BEEF OR CHICKEN LIVER



CLAMS OR MUSSELS



OYSTERS

**2.1 milligrams**

OR MORE PER SERVING, INCLUDE:

**3 OUNCES OF**



COOKED BEEF



CANNED SARDINES IN OIL

**0.6 milligrams**

OR MORE PER SERVING, INCLUDE:

**3 OUNCES OF**



CHICKEN



COOKED TURKEY

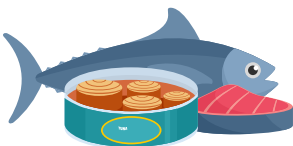


VEAL

**0.3 milligrams**

OR MORE PER SERVING, INCLUDE:

**3 OUNCES OF**



HALIBUT, HADDOCK, PERCH, SALMON, OR TUNA

# IRON-RICH FOODS

## Non-Heme Iron

**3.5 milligrams**

OR MORE PER SERVING, INCLUDE:



Breakfast cereals enriched with iron



One cup of cooked beans

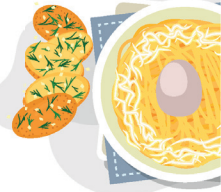


One-half cup of tofu

**2.1 milligrams**

OR MORE PER SERVING, INCLUDE:

- One-half cup of canned lima beans, red kidney beans, or chickpeas
- One cup of dried apricots
- One medium baked potato
- One cup of cooked enriched egg noodles
- One-fourth cup of wheat germ
- 1 ounce of pumpkin, sesame, or squash seeds



**0.7 milligrams**

OR MORE PER SERVING, INCLUDE:

- One-half cup of cooked split peas
- 1 ounce of peanuts, pecans, walnuts, pistachios, roasted almonds, roasted cashews, or sunflower seeds
- One-half cup of dried seedless raisins, peaches, or prunes
- One medium stalk of broccoli
- One cup of raw spinach
- One cup of pasta (cooked, it becomes 3-4 cups)
- One slice of bread, or bran muffin
- One cup of brown or enriched rice



## Recommended Dietary Allowances (RDAs) for Iron:

AGE	MALE	FEMALE	PREGNANCY	LACTATION
Birth to 6 months	0.27 mg*	0.27 mg*		
7-12 months	11 mg	11 mg		
1-3 years	7 mg	7 mg		
4-8 years	10 mg	10 mg		
9-13 years	8 mg	8 mg		
14-18 years	11 mg	15 mg	27 mg	10 mg
19-50 years	8 mg	18 mg	27 mg	9 mg
51+ years	8 mg	8 mg		

## Health Risks from Excessive Iron:

- Adults with normal intestinal function have very little risk of iron overload from dietary sources of iron. However, acute intakes of more than 20 mg/kg iron from supplements or medicines can lead to gastric upset, constipation, nausea, abdominal pain, vomiting, and faintness, especially if food is not taken at the same time.
- Taking supplements containing 25 mg elemental iron or more can also reduce zinc absorption and plasma zinc concentrations. In severe cases (e.g., one-time ingestions of 60 mg/kg), overdoses of iron can lead to multisystem organ failure, coma, convulsions, and even death.

## Iron and Healthful Diets:

- Includes a variety of vegetables, fruits, whole grains, fat-free or low-fat milk and milk products, and oils.
- Many ready-to-eat breakfast cereals are fortified with iron, and some fruits and vegetables contain iron.
- Includes a variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), nuts, seeds.
- Oysters and beef liver have high amounts of iron.
- Beef, cashews, chickpeas, and sardines are good sources of iron.
- Chicken, tuna, and eggs contain iron.
- Limits saturated and trans fats, added sugars, and sodium.
- Stays within your daily calorie needs.

## REFERENCES

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