Iron rich foods

This handout shows you which foods are rich in iron and gives suggestions to help you increase your intake of iron.

Name: ___________________________________________________

Dietitian: _______________  Dietetic Assistant: ________________

Phone: __________________________  Extension: ______________
Table of Contents

What is iron? .................................................................1
How much iron do I need in my diet? .................................1
What foods have iron? ....................................................1
Ways to add more iron to your diet .....................................3
What if my iron level is low? ..........................................4
What causes low iron? ....................................................4
Iron deficiency anemia and supplementation .....................4
Dietitian’s suggestions ..................................................5

Dietitian’s suggestions:

1. _______________________________________________________
2. _______________________________________________________
3. _______________________________________________________
What if my iron level is low?
If your iron level is low, your blood carries less oxygen to the cells. This may make you feel weak, tired and look pale.

What causes low iron?
Low iron can be caused by:
- low intake of iron rich foods
- donating blood or bone marrow
- surgery
- pregnancy
- large blood loss through menstruation
- other health conditions

Iron deficiency anemia and supplementation
If you have iron deficiency anemia, you will need to take iron supplements and follow a high iron diet to rebuild your body’s iron stores.

Take iron supplements only when prescribed by your doctor.

To increase the absorption:
- Take your iron supplement on an empty stomach or at least 2 hours before or 1 hour after a meal. If the iron upsets your stomach, take it with or after meals.
- If your doctor has prescribed a higher dose, you can gradually increase your dose after 4 to 5 days.
- If you take a calcium supplement, take it at least 2 hours before or after taking your iron supplement.

Pregnant women may also need to take an iron supplement in order to meet their daily needs. Talk to your doctor.

What is iron?
Iron is a mineral found in food that your body needs. It helps carry oxygen to all parts of your body.

How much iron do I need in my diet?
The amount of iron you need depends on your age, gender and life stage.

<table>
<thead>
<tr>
<th>Age</th>
<th>Amount needed each day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
</tr>
<tr>
<td>14 to 18 years</td>
<td>11 mg</td>
</tr>
<tr>
<td>19 years and over</td>
<td>8 mg</td>
</tr>
<tr>
<td>Females</td>
<td></td>
</tr>
<tr>
<td>14 to 18 years</td>
<td>15 mg</td>
</tr>
<tr>
<td>19 to 50 years</td>
<td>18 mg</td>
</tr>
<tr>
<td>51 years and over</td>
<td>8 mg</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>27 mg</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td></td>
</tr>
<tr>
<td>18 years and under</td>
<td>10 mg</td>
</tr>
<tr>
<td>19 years and over</td>
<td>9 mg</td>
</tr>
</tbody>
</table>

What foods have iron?
You get iron from a number of foods. There are 2 types of iron in our diet: heme and non-heme iron.

**Heme iron** is found in animal products such as red meat, fish and poultry.

**Non-heme iron** is found in plant products such as grains, nuts, beans, legumes, vegetables and fruit.
Iron from animal products (heme iron) is better absorbed than iron from plant products (non-heme iron).

If you do not eat any animal products, you will need to eat twice as much non-heme iron. Look at the chart “Sources of Iron” in this handout.

The amount of absorption of non-heme iron can be increased or decreased by other foods in the diet. Here are some tips to help your body absorb the iron from food:

- Combine heme iron rich foods with non-heme iron rich foods when possible.
- Include a source of vitamin C with your meals. Vitamin C helps iron absorption. Some sources of vitamin C include:
  - broccoli
  - grapefruit
  - potatoes
  - green/red peppers
  - strawberries
  - cabbage
  - cantaloupe
  - oranges
  - orange juice
  - brussel sprouts
  - tomatoes
  - peas

Here are some ideas of food to combine:
- spinach salad with red peppers
- whole grain cereal with strawberries
- chili with tomato sauce and kidney beans

- Tea and coffee contain compounds that can decrease iron absorption. Have tea and coffee at least one hour before or after your iron-rich meal.

Include at least one iron-rich food and a food that increases iron absorption at most meals and snacks.

## Ways to add more iron to your diet …

<table>
<thead>
<tr>
<th>Food</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molasses</td>
<td>Use it in baking instead of sugar. Or use as a partial substitute to sugar.</td>
</tr>
<tr>
<td>Dried peas, beans, lentils</td>
<td>Add to soups, salads, and casseroles.</td>
</tr>
<tr>
<td>Cream of Wheat™, fortified</td>
<td>Enjoy it for breakfast or as a bedtime snack.</td>
</tr>
<tr>
<td>Prune and tomato juice</td>
<td>Good to drink or use in cooking or baking.</td>
</tr>
<tr>
<td>Wheat germ</td>
<td>Sprinkle over cereals. Add to muffins, breads, and casseroles.</td>
</tr>
<tr>
<td>Barley</td>
<td>Use to thicken soups and stews.</td>
</tr>
<tr>
<td>Granola</td>
<td>Make your own with whole grain and fortified cereals, dried fruits, wheat germ, molasses, seeds and nuts.</td>
</tr>
<tr>
<td>Dried fruit</td>
<td>Add to cereals, breads, cookies and desserts.</td>
</tr>
<tr>
<td>Eggs</td>
<td>Use as a main dish. Enjoy hard boiled as a snack or added to salads.</td>
</tr>
<tr>
<td>Sardines</td>
<td>Serve in a salad or as a snack on whole grain crackers.</td>
</tr>
<tr>
<td>Beef</td>
<td>Add cooked strips of red meat to soups, salads, and pasta dishes.</td>
</tr>
<tr>
<td>Liver, kidney and other organ meats</td>
<td>Add to meatloaf or stew. Serve paté as an appetizer on whole grain crackers or toast.</td>
</tr>
</tbody>
</table>
Iron from animal products (heme iron) is better absorbed than iron from plant products (non-heme iron).

If you do not eat any animal products, you will need to eat twice as much non-heme iron. Look at the chart “Sources of Iron” in this handout.

The amount of absorption of non-heme iron can be increased or decreased by other foods in the diet. Here are some tips to help your body absorb the iron from food:

- Combine heme iron rich foods with non-heme iron rich foods when possible.
- Include a source of vitamin C with your meals. Vitamin C helps iron absorption. Some sources of vitamin C include:
  - broccoli
  - grapefruit
  - potatoes
  - green/red peppers
  - strawberries
  - cabbage
  - cantaloupe
  - oranges
  - orange juice
  - brussel sprouts

  Here are some ideas of food to combine:
  - spinach salad with red peppers
  - whole grain cereal with strawberries
  - chili with tomato sauce and kidney beans

- Tea and coffee contain compounds that can decrease iron absorption. Have tea and coffee at least one hour before or after your iron-rich meal.

  Include at least one iron-rich food and a food that increases iron absorption at most meals and snacks.

---

### Ways to add more iron to your diet ...

<table>
<thead>
<tr>
<th>Food</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molasses</td>
<td>• Use it in baking instead of sugar. Or use as a partial substitute to sugar.</td>
</tr>
<tr>
<td>Dried peas, beans, lentils</td>
<td>• Add to soups, salads, and casseroles.</td>
</tr>
<tr>
<td>Cream of Wheat™, fortified</td>
<td>• Enjoy it for breakfast or as a bedtime snack.</td>
</tr>
<tr>
<td>Prune and tomato juice</td>
<td>• Good to drink or use in cooking or baking.</td>
</tr>
<tr>
<td>Wheat germ</td>
<td>• Sprinkle over cereals. Add to muffins, breads, and casseroles.</td>
</tr>
<tr>
<td>Barley</td>
<td>• Use to thicken soups and stews.</td>
</tr>
<tr>
<td>Granola</td>
<td>• Make your own with whole grain and fortified cereals, dried fruits, wheat germ, molasses, seeds and nuts.</td>
</tr>
<tr>
<td>Dried fruit</td>
<td>• Add to cereals, breads, cookies and desserts.</td>
</tr>
<tr>
<td>Eggs</td>
<td>• Use as a main dish. Enjoy hard boiled as a snack or added to salads.</td>
</tr>
<tr>
<td>Sardines</td>
<td>• Serve in a salad or as a snack on whole grain crackers.</td>
</tr>
<tr>
<td>Beef</td>
<td>• Add cooked strips of red meat to soups, salads, and pasta dishes.</td>
</tr>
<tr>
<td>Liver, kidney and other organ meats</td>
<td>• Add to meatloaf or stew. Serve paté as an appetizer on whole grain crackers or toast.</td>
</tr>
</tbody>
</table>

---
What if my iron level is low?
If your iron level is low, your blood carries less oxygen to the cells. This may make you feel weak, tired and look pale.

What causes low iron?
Low iron can be caused by:
- low intake of iron rich foods
- donating blood or bone marrow
- surgery
- pregnancy
- large blood loss through menstruation
- other health conditions

Iron deficiency anemia and supplementation
If you have iron deficiency anemia, you will need to take iron supplements and follow a high iron diet to rebuild your body’s iron stores.

Take iron supplements only when prescribed by your doctor.

To increase the absorption:
- Take your iron supplement on an empty stomach or at least 2 hours before or 1 hour after a meal. If the iron upsets your stomach, take it with or after meals.
- If your doctor has prescribed a higher dose, you can gradually increase your dose after 4 to 5 days.
- If you take a calcium supplement, take it at least 2 hours before or after taking your iron supplement.

Pregnant women may also need to take an iron supplement in order to meet their daily needs. Talk to your doctor.

What is iron?
Iron is a mineral found in food that your body needs. It helps carry oxygen to all parts of your body.

How much iron do I need in my diet?
The amount of iron you need depends on your age, gender and life stage.

<table>
<thead>
<tr>
<th>Age</th>
<th>Amount needed each day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
</tr>
<tr>
<td>14 to 18 years</td>
<td>11 mg</td>
</tr>
<tr>
<td>19 years and over</td>
<td>8 mg</td>
</tr>
<tr>
<td>Females</td>
<td></td>
</tr>
<tr>
<td>14 to 18 years</td>
<td>15 mg</td>
</tr>
<tr>
<td>19 to 50 years</td>
<td>18 mg</td>
</tr>
<tr>
<td>51 years and over</td>
<td>8 mg</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>27 mg</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td></td>
</tr>
<tr>
<td>18 years and under</td>
<td>10 mg</td>
</tr>
<tr>
<td>19 years and over</td>
<td>9 mg</td>
</tr>
</tbody>
</table>

What foods have iron?
You get iron from a number of foods. There are 2 types of iron in our diet: heme and non-heme iron.

**Heme iron** is found in animal products such as red meat, fish and poultry.

**Non-heme iron** is found in plant products such as grains, nuts, beans, legumes, vegetables and fruit.
Table of Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is iron?</td>
<td>1</td>
</tr>
<tr>
<td>How much iron do I need in my diet?</td>
<td>1</td>
</tr>
<tr>
<td>What foods have iron?</td>
<td>1</td>
</tr>
<tr>
<td>Ways to add more iron to your diet</td>
<td>3</td>
</tr>
<tr>
<td>What if my iron level is low?</td>
<td>4</td>
</tr>
<tr>
<td>What causes low iron?</td>
<td>4</td>
</tr>
<tr>
<td>Iron deficiency anemia and supplementation</td>
<td>4</td>
</tr>
<tr>
<td>Dietitian's suggestions</td>
<td>5</td>
</tr>
</tbody>
</table>

Dietitian’s suggestions:

1. 

2. 

3. 
Iron rich foods

This handout shows you which foods are rich in iron and gives suggestions to help you increase your intake of iron.

Name: ___________________________________________________

Dietitian: ____________  Dietetic Assistant: ____________

Phone: _______________________  Extension: ______________
# Sources of Iron

## Heme Iron – animal source

<table>
<thead>
<tr>
<th>Excellent Sources (3.5 mg or more)</th>
<th>Good Sources (2.1 to 3.4 mg)</th>
<th>Sources (0.7 to 2.0 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, chicken or pork liver (3 oz)</td>
<td>Beef, lean (3 oz)</td>
<td>Corned beef (2 oz)</td>
</tr>
<tr>
<td>Clams, 4 large or 9 small</td>
<td>Oysters, 3 medium</td>
<td>Canned sardines (2)</td>
</tr>
<tr>
<td>Mussels (2.5 oz or 15 small)</td>
<td>Scallops, 6 medium</td>
<td>Canned shrimp (3 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Egg yolk (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chicken and turkey (3 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ham, lamb and pork (3 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuna and salmon (3 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perch, halibut, bass, pickerel (3 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clam chowder, canned (1/2 cup)</td>
</tr>
</tbody>
</table>
## Non-Heme Iron – plant source

<table>
<thead>
<tr>
<th><strong>Excellent Sources (3.5 mg or more)</strong></th>
<th><strong>Good Sources (2.1 to 3.4 mg)</strong></th>
<th><strong>Sources (0.7 to 2.0 mg)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tofu, regular or firm (1/4 cup)</td>
<td>• Spinach, cooked (1/2 cup)</td>
<td>• Broccoli, chopped (1 cup)</td>
</tr>
<tr>
<td>• Soybeans, white beans, lentils, cooked (1/2 to 3/4 cup)</td>
<td>• Potato with skin (1 medium)</td>
<td>• Green peas, kale, bok choy (1/2 cup)</td>
</tr>
<tr>
<td>• Blackstrap molasses (1 tbsp)</td>
<td>• Egg noodles, cooked (1 cup)</td>
<td>• Tomato sauce (1/2 cup)</td>
</tr>
<tr>
<td>• Fortified whole grain cold cereals such as Corn Bran™, Raisin Bran™, Shreddies™ (1 cup)</td>
<td>• Pasta, enriched, cooked (1 cup)</td>
<td>• Almonds, cashews, hazelnuts, pine nuts, peanuts, soy nuts (1/4 cup)</td>
</tr>
<tr>
<td>• Fortified hot cereals such as Cream of Wheat™ (instant), Quaker Oatmeal™ (instant) (1 package)</td>
<td>• Kidney, chick peas and navy beans, cooked (3/4 cup)</td>
<td>• Nut butter (2 tbsp)</td>
</tr>
<tr>
<td>• Pumpkin, squash seeds, dry (1/4 cup)</td>
<td>• Lima beans, cooked (1/2 cup)</td>
<td>• Prune juice (1/2 cup)</td>
</tr>
<tr>
<td>• Teff, cooked (1 cup)</td>
<td>• Sesame seeds or paste (tahini) (2 tbsp)</td>
<td>• Brown rice, cooked (1 cup)</td>
</tr>
<tr>
<td>• Amaranth, cooked (1 cup)</td>
<td>• Fortified cold cereals such as Cheerios™, Rice Krispies™, Special K™ (1 cup)</td>
<td>• Bread, whole grain (1 slice)</td>
</tr>
<tr>
<td>• Sorghum (1 cup)</td>
<td>• Fortified hot cereals such as Cream of Wheat™ (1 cup)</td>
<td>• Dried figs (3), apricots (5), dates (10)</td>
</tr>
<tr>
<td>• Buckwheat (1 cup)</td>
<td>• Cereal bars such as Vector Bar™ (1)</td>
<td>• Raisins (1/4 cup)</td>
</tr>
<tr>
<td>• Cornmeal (1 cup)</td>
<td>• Tempeh (1/4 cup)</td>
<td>• Swiss chard, cooked (1/2 cup)</td>
</tr>
<tr>
<td></td>
<td>• Quinoa, cooked (1 cup)</td>
<td>• Wheat germ (1/4 cup)</td>
</tr>
<tr>
<td></td>
<td>• Baked beans, canned (3/4 cup)</td>
<td>• Hot cereals such as oatmeal (regular), Red River™ (1 cup)</td>
</tr>
<tr>
<td></td>
<td>• Barley (1 cup)</td>
<td>• Soy milk (1 cup)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Soy based meat analogs such as veggie burgers, hot dogs and deli slices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Millet (1 cup)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sunflower seeds (1/4 cup)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Edamame (1/2 cup)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Split peas, cooked (1/2 cup)</td>
</tr>
</tbody>
</table>