

# Anemia and Pregnancy



Allina Health



## General Information

During pregnancy, your body is hard at work making significant changes. It is growing a placenta, adding breast tissue, increasing blood volume, making amniotic fluid, and creating a baby. In general, you will gain 5 to 7 pounds in extra blood and fluids.

Every red blood cell uses iron as part of hemoglobin, a protein in red blood cells that carries oxygen to other cells in your body.

Your body cannot make iron. You can only get it through foods and supplements. If your body doesn't get enough iron you can become anemic.

If your hemoglobin is less than 11 mg/dL, you are at an increased risk for having a very low hemoglobin that may cause you to feel dizzy or very tired, or may require treatment with IV (intravenous) iron or a blood transfusion after delivery. If you have a low hemoglobin your health care provider may do more blood tests to get more information about how to treat it.

## Anemia

Anemia is a condition in which your body doesn't make enough red blood cells to carry the oxygen your body needs. Anemia causes your body to work harder to deliver the oxygen.

Having mild anemia during pregnancy is normal because your body is making extra blood.

If you have severe anemia, you are at risk of having your baby too early (preterm labor), having a baby with a low birth weight, losing more blood than normal during labor, or needing a blood transfusion.

## Risks for Anemia

You are at risk for anemia if you:

- do not get enough iron
- are low on vitamin B<sub>12</sub> or folic acid
- are pregnant with more than one baby
- have two pregnancies close together
- throw up often
- have a history of heavy periods
- have certain medical conditions (such as Crohn's disease or long-term renal disease).

## Symptoms of Anemia

Anemia can cause you to:

- feel tired, weak or dizzy
- have a rapid heartbeat
- have shortness of breath
- have headaches
- have problems sleeping
- have pale skin.

If you have any of those symptoms, tell your health care provider.

## Taking Iron Supplements

If your health care provider recommends iron supplements, it is important for you to take them, especially if you are told that your hemoglobin is low. He or she may order lab tests to help guide what kind of iron supplements you may need.

There are different levels of what is called “elemental iron” in iron supplements which is the kind of iron your body can use. Pregnant women with normal hemoglobin and iron stores should have at least 27 mg of supplemental elemental iron each day. Pregnant women with anemia are usually treated with 60 to 120 mg of supplemental elemental iron each day until the hemoglobin is normal.

Different iron supplements contain different levels of elemental iron. For example: ferrous sulfate in the 325 mg size tablet has 65 mg of elemental iron, while a 325 mg tablet of ferrous gluconate has 35 mg of elemental iron. Follow your health care provider’s directions about how much iron to take.

It is common to have some side effects like feeling bloated, having constipation or diarrhea, having a metallic taste in your mouth, or having thick green or black stools. Tell your nurse and health care provider if you are having problem taking iron pills.

If you have severe anemia and have problems taking iron pills, you may need to get iron through an IV. The goal of this is to try to get your hemoglobin up to a safer level before delivery.

## **How to Take Iron Supplements**

- Take iron at least 1 hour before a meal. (Iron absorbs better on an empty stomach.) If iron pills upset your stomach, you may need to take them with food.
- Do not take iron with coffee, tea, grains, seeds or legumes.
- Do not take iron with dairy products, antacid pills or calcium supplements because they can affect the absorption.
- Take iron with a glass of orange or tomato juice or a vitamin C tablet, which helps the iron absorb.

- If you get constipated, you may need to take a stool softener. Your health care provider may ask you to take iron and vitamin C one to three times each day.
- It can take weeks for your anemia to get better from taking iron supplements. You should start to feel better after about 1 week. Your health care provider will check your blood to see how well the iron pills are working.

## **Iron: Dos and Don'ts**

### **Eat More Foods Rich in Iron**

You need to increase the amount of iron you eat. The iron is needed to make red blood cells both for your blood supply and for your baby's. At about 34 weeks your baby will also start storing iron, increasing the amount you need.

Try to get at least 27 mg of iron each day. Most health care providers recommend an iron supplement in addition to eating iron-rich foods. (Check your prenatal vitamin or iron supplement for the amount of iron it contains.)

See the charts on pages 7 to 10 for good sources of iron.

### **Eat Vitamin C Foods With Iron**

Vitamin C helps your body use iron. Try to eat a food rich in vitamin C at the same time you are eating a source of iron or taking a supplement. Foods high in vitamin C include:

- citrus fruits (oranges, grapefruit)
- cantaloupe
- strawberries
- kiwi
- mangoes
- broccoli

- cabbage
- tomatoes
- peppers
- potatoes.

## **Limit Caffeine**

Caffeine makes you go to the bathroom more often, which can cause your body to lose nutrients. It's best to limit the amount of caffeine each day to two, 8-ounce cups of coffee, or 3 cups of tea, or 2 cans of caffeinated soda. Don't drink it all at once.

Coffee bought at coffee shops generally contains more caffeine than home-brewed coffee. The amount of caffeine can vary by coffee bean and blend. Limit your coffee shop purchase to less than 12 ounces each day. (This will be your total daily caffeine allowance.) Watch for the caffeine content in specialty coffees like espresso.

## **Constipation**

Iron can cause constipation. To help avoid this:

- Drink 8 to 10 glasses of liquids (at least 64 ounces) a day.
- Try a hot or warm drink first thing in the morning.
- Eat high-fiber cereals, whole grains, fruits vegetables (such as pears, mangoes, plums, prunes, beets, and peaches) and legumes.
- Walk or exercise daily.

Take a fiber supplement, stool softener or both each day. Over-the-counter brands are Colace® or Senokot®. You can take Miralax® if the others don't work.

Talk with your health care provider if you have not had a bowel movement in at least 2 days and you have tried the above suggestions.

## High-iron Foods

To get essential nutrients, you need to eat a balanced diet that includes at least:

- 2 to 3 servings of milk and milk products
- 2 to 3 servings of meat or meat substitute
- 3 to 5 servings of vegetables
- 2 to 4 servings of fruit
- 6 to 11 servings of bread or cereal products
- sparingly desserts, sweets and fats.

Following a balanced diet should provide you with 10 to 15 mg (milligrams) of iron.

You may need to follow a high iron diet if you:

- need to treat types of anemia due to loss of iron stores
- have poor iron absorption
- follow a vegetarian diet with little or no animal protein
- need to replace iron lost from significant blood loss.

Choose a minimum of 30 mg of iron each day. When you go shopping, it is necessary to choose bread products, cereals and pastas that have been “enriched” or “iron fortified.” These words must appear on the labels.



## Major Sources of Iron

This chart shows average servings of foods that are high in iron (more than 4 mg).

Food	Serving	Amount of Iron
Cream of Wheat® (quick/instant)	1 cup	15.6 mg
liver (beef)	2 ounces	5.8 mg
liverwurst	3 ounces	5.4 mg
prune juice	½ cup	5.1 mg
liver (calf)	1 ounce	4.5 mg

*Fortified cereals which list 10 mg of iron per ounce or 100 percent recommended dietary intake per serving are also major sources of iron.*

## Moderate Sources of Iron

This chart shows average servings of foods that are moderate sources in iron (2 to 4 mg).

Food	Serving	Amount of Iron
pork (cooked)	3 ounces	3 to 4 mg (depends on cut)
beef (cooked)	3 ounces	3 to 4 mg (depends on cut)
mung beans (dry)	¼ cup	3.6 mg
red beans (dry)	¼ cup	3.5 mg
sardines	8 medium	3.5 mg

## Moderate Sources of Iron

This chart shows average servings of foods that are moderate sources in iron (2 to 4 mg).

<b>Food</b>	<b>Serving</b>	<b>Amount of Iron</b>
lentils (dry)	¼ cup	3.4 mg
peanuts (roasted, no skins)	3 ½ ounces	3.2 mg
veal (cooked)	3 ounces	3 mg
almonds (dried, unblanched)	½ cup	3 mg
dried baked beans (no pork)	½ cup	3 mg
chicken liver (cooked)	1 ounce	3 mg
All-Bran® cereal	½ cup	2.9 mg
green peas (cooked)	½ cup	2.7 mg
soybeans (cooked)	½ cup	2.7 mg
apricots (dried)	8 large halves	2.7 mg
navy beans (cooked)	½ cup	2.6 mg
lima beans (cooked)	½ cup	2.5 mg

## Contributing Sources of Iron

This chart shows average servings of foods that have 2 mg or less of iron.

Food	Serving	Amount of Iron
spinach	½ cup	2 mg
tomato juice (canned)	½ cup	2.05 mg
dandelion greens	½ cup	1.8 mg
mustard greens	½ cup	1.8 mg
chicken heart	9 to 10 medium	1.7 mg
tuna (canned)	3 ounces	1.6 mg
turnip greens	½ cup	1.6 mg
strawberries (raw, cleaned)	1 cup	1.5 mg
chard	½ cup	1.5 mg
chicken	3 ounces	1.5 mg
shrimp (raw)	3 ounces	1.4 mg
dates (dried)	¼ cup	1.3 mg

## Contributing Sources of Iron

This chart shows average servings of foods that have 2 mg or less of iron.

Food	Serving	Amount of Iron
waffle (enriched)	1 to 1 ½ (½ inch diameter)	1.3 mg
raisins (dried, seedless)	¼ cup	1.25 mg
egg (large)	1	1.2 mg
kale	½ cup	1.2 mg
salmon (canned)	3 ounces	1 mg
spaghetti	½ cup	.8 mg
noodles (enriched)	½ cup	.7 mg
peanut butter	2 tablespoons	.6 mg
rice (long grain or instant)	½ cup	.6 mg
macaroni (enriched)	½ cup	.6 mg
bread (white, enriched)	1 slice	.6 mg
bread (whole wheat)	1 slice	.5 mg



## Questions or Notes



## Questions or Notes





Allina Health

[allinahealth.org](http://allinahealth.org)

© 2016 ALLINA HEALTH SYSTEM. TM – A TRADEMARK OF ALLINA HEALTH SYSTEM.  
OTHER TRADEMARKS USED ARE OWNED BY THEIR RESPECTIVE OWNERS.  
THIS BOOKLET DOES NOT REPLACE MEDICAL OR PROFESSIONAL ADVICE, IT IS ONLY A GUIDE.

ob-ah-25587 (10/16)