

What are the common types of iron supplements?

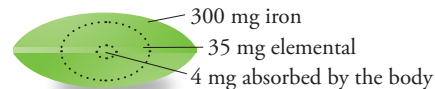
Tablet name	Iron content (mg)	Elemental iron (mg)*
Heme iron polypeptide (Proferrin)	11	11**
Ferrous gluconate	300	35
Ferrous sulfate	300	60
Ferrous fumarate	300	100
Polysaccharide iron complex (FeraMax)	150	150

*1.5% of elemental iron is absorbed in the first trimester and increases to 15% in the third trimester

** 20 mg of Proferrin is similar to 60 mg of ferrous sulfate in terms of absorption

What is elemental iron?

The iron in the food or supplement that is available for absorption is called elemental iron. Only a small amount of elemental iron is actually absorbed by the body. The example below is for ferrous gluconate.



Why is it important for me to take iron supplements?

- Iron supplements lower the chance of needing a blood transfusion at delivery.
- Iron supplements lower the chance of having a very small baby.
- Iron supplements improve the baby's iron level.
- Babies of mothers with untreated iron deficiency anemia are more likely to develop anemia in the first year of life.
- Infants and children with iron deficiency have poorer neurologic function.

What are the side effects of iron supplements?

Iron supplements may cause darker bowel movements. This is normal and is nothing to worry about.

Iron supplements can cause mild nausea, constipation or diarrhea. These symptoms usually go away if you stay on iron for a few weeks.

Should I take iron supplements after my baby is born?

- Only take iron supplements if you had a large amount of blood loss at delivery, eat a diet that is low in iron-rich foods, or if you had iron deficiency at any point during pregnancy (ferritin below 30).
- You should take your prenatal vitamin after your baby is born for at least 6 months, and longer if you continue to breast feed.

What should I do if I cannot take the iron supplements due to side effects?

Speak to your healthcare provider. Here are options that may be tried: (1) Changing to a different iron tablet, (2) Taking the iron tablets with food (although absorption drops by half), (3) Using intravenous iron (for severe iron deficiency or severe anemia).



For more information please speak to your healthcare provider

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**Iron
Supplementation
in Pregnancy**

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What is iron deficiency?

Iron deficiency means the body is not getting enough iron. Iron is an essential mineral that helps blood carry oxygen through the body.

What is anemia?

The protein in the blood that carries oxygen from the lungs to the rest of the body is called hemoglobin. Iron is an essential part of hemoglobin. When your blood hemoglobin levels are low, this is called anemia.

How common is iron deficiency in pregnancy?

- One in 4 pregnant women have iron deficiency.
- Some women are at higher risk of developing iron deficiency, including women:
 - with heavy periods
 - who eat vegetarian or vegan diets
 - who donate blood regularly
 - who have been pregnant many times
 - who have a gluten sensitivity

Will iron deficiency impact me and/or my baby's health?

For mothers, iron deficiency can cause low energy levels and can lead to the need for blood transfusions. In babies, it may cause low birth weight and affect brain or nerve function.

What are the symptoms of iron deficiency?

Iron deficiency makes it harder to exercise and concentrate, and causes tiredness.

How much iron do I need to eat from food during pregnancy?

Pregnant women should aim to get 27 mg of iron from food each day. Only 4 mg of this is absorbed by the digestive system. Most pregnant women get less than 15 mg a day from food. To meet the target of 27 mg per day would require major changes to the average diet of women (see the table below for iron rich foods). Iron supplements are recommended for pregnant women, as well as an iron rich diet.

What foods have more iron in them?

There are two types of iron found in food. Animal foods have heme iron which is more easily absorbed by your body; 15-35% of the iron in these foods is absorbed. Plant foods have non-heme iron. Only 2-4% of this iron is absorbed. You can improve the absorption of non-heme iron by eating these foods with sources of vitamin C (an orange, kiwi, strawberries, red pepper, lemon juice, or vitamin C tablet).

Foods with heme iron

Food	mg of iron per 75 gram serving
Liver (Pregnant women should avoid liver as it is too high in vitamin A)	4.5-13
Mussels	5
Oysters	7-9
Beef and lamb	1-3
Shrimp and sardines	2
Chicken	0.5-1
Pork	0.8
Salmon	0.3



Foods with non-heme iron

Food	mg of iron per serving
Pumpkin seeds, kernels (60 mL)	8.5
Tofu, medium or firm (150 g)	2-7
Legumes (175 mL)	2-6.5
Hot cereal with iron enrichment (175 mL)	3-6
Cold cereal with iron enrichment (30 g)	4
Vegetables (pumpkin, peas, spinach, potatoes)	1-2
Nuts (60 mL)	0.5-2
Bread with iron enrichment (1 slice)	1
Egg (one egg)	0.9

Is it possible to avoid taking iron supplements during my pregnancy?

Nine of 10 women who do not take iron supplements will use up all of their iron stores during pregnancy and 1 in 5 will develop iron deficiency anemia. So, almost all pregnant women need iron supplements for the rest of their pregnancy starting at 12-16 weeks.

If my hemoglobin (blood) level is okay, does that mean my iron level is okay?

No. Hemoglobin level is a poor measure of iron levels and will miss 90% of women with iron deficiency.

How much iron do I need to get from supplements?

Low dose iron supplements, like prenatal multivitamins, are not enough for most women. Three of 4 women on prenatal multivitamins will have iron deficiency when they deliver their baby. At your first prenatal visit your blood level (hemoglobin) and iron level (ferritin) will be checked. Based on these results, the table below will be used to decide on how much iron you need. Take iron on an empty stomach at bedtime with a source of vitamin C to improve absorption. If you are found to have iron deficiency *with anemia*, your doctor or midwife will have more treatment recommendations.

Iron level (ferritin) at first visit (µg/L)	Treatment	Routine reassessment requirements
<15	300 mg ferrous sulfate tablet, once daily (60 mg of elemental iron)	Re-test iron level at 24-28 weeks
15-400	300 mg ferrous gluconate tablet, once daily (35 mg of elemental iron)	No further ferritin tests in pregnancy
Above the normal range	Prenatal multivitamins only; Additional iron supplementation not recommended	Discuss reason for high ferritin with your healthcare provider