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FAMILY MEDICINE

PATIENT RESOURCE

# Iron Deficiency & Anemia

What every woman should know — symptoms, diet, supplements, and when to get checked.

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Based on Canadian and international evidence. General information only — not personal medical advice. Discuss your symptoms and blood work with your physician.

Content curated and designed by Mohammadreza Torbatimoghaddam, Clinical assistant

## 1 What is iron — and why does it matter?

Iron helps carry oxygen through your blood, supports your immune system, and plays a role in energy and brain function. When your body does not have enough stored iron, this is called **iron deficiency**. If levels drop so low that your blood cannot carry oxygen properly, it becomes **iron deficiency anemia**.

## 2 How common is it in Canada?

Iron deficiency is far more common among Canadian women than many people realize:

**~1 in 5**
Teenage girls (14–18) and women of reproductive age (19–50) in Canada are iron deficient

**~40%**
Of non-pregnant women of reproductive age in Ontario had iron deficiency *without* anemia

**~13%**
Had iron deficiency anemia in that same Ontario study

**Up to 84%**
Of women may be affected by iron deficiency in the third trimester of pregnancy

Rates are lower after menopause (~4%). Women with lower household incomes are more likely to be anemic and less likely to be screened — an important gap in care.

## 3 What are the symptoms?

Iron deficiency can cause symptoms **even before anemia develops**:

- **Fatigue / low energy** — most common
- **Shortness of breath** with activity
- **Restless legs** (24–40% of those deficient)
- **Pale skin**, nail beds, or inner eyelids
- **Feeling cold** more easily
- **Brain fog**, poor concentration, irritability
- **Headaches**, dizziness, lightheadedness
- **Pica** — cravings for ice, dirt, starch (40–50%)
- **Hair thinning**, dry skin, brittle nails
- **Mood changes** or depression; rapid heartbeat

Many women live with these symptoms for months or years without knowing iron is the cause. If you have persistent fatigue, hair loss, or restless legs, ask your physician about checking your iron levels.

## 4 Who is most at risk?

- **Heavy menstrual periods** — the most common cause in premenopausal women
- **Pregnancy** — iron needs rise sharply
- **Vegetarian or vegan diets** — plant iron is harder to absorb
- **Bariatric surgery, celiac disease, or IBD** — reduced absorption
- **Frequent blood donation**
- **Adolescent girls** — growth plus the start of periods

## 5 Iron in your diet

| Stage | Recommended daily iron |
|---|---|
| **Women of reproductive age** | **18 mg/day** |
| **Pregnancy** | **27 mg/day** |
| **After menopause** | **8 mg/day** |

### Heme iron (animal sources)

Absorbed much more efficiently (~10× better than plant iron)

- Red meat (beef, lamb, bison)
- Poultry — especially dark meat
- Fish & shellfish (oysters, clams, sardines)
- Organ meats (liver)

### Non-heme iron (plant sources)

Less well absorbed, but still important

- Lentils, chickpeas, kidney beans
- Tofu and tempeh
- Fortified cereals and breads
- Dark leafy greens, nuts, seeds, dried fruit

### Tips to boost absorption

- Pair iron-rich foods with **vitamin C** (oranges, strawberries, peppers, tomatoes, broccoli)
- Add a little meat, fish, or poultry to plant-based meals to enhance absorption
- Avoid tea, coffee, and cocoa with meals — wait at least 1 hour (they can cut absorption by 80–90%)
- Limit dairy at the same time as iron-rich foods — calcium can interfere

**Diet alone is usually not enough** to correct iron deficiency once it has developed. A healthy diet helps prevent deficiency, but if you are already low, you will likely need a supplement.

## 6 Iron supplements

### Types

**Ferrous sulfate** is the most common and least expensive. Other forms include ferrous gluconate, ferrous fumarate, ferrous bisglycinate, and heme iron polypeptide. No single form has been proven clearly better — ask your pharmacist or physician which suits you best.

### How to take them

- Best absorbed in the **morning on an empty stomach**, with vitamin C (juice or a tablet)
- Do **not** take with tea, coffee, dairy, or antacids — wait at least 1 hour
- **One dose per day is enough** — more often does not improve absorption and increases side effects
- Some evidence suggests **every-other-day dosing** may improve absorption and reduce side effects

| Common side effects | Tips to reduce them |
|---|---|
| **Constipation (~12%), nausea (~11%), diarrhea (~8%)** | Try with a small meal; ask about a lower dose or different form |
| **Stomach cramps, metallic taste** | Every-other-day dosing may help |
| **Dark or black stools** | Normal and harmless — not a sign of bleeding |

You may feel better in **2–4 weeks**, but it usually takes **3–6 months** to refill iron stores. Do not stop just because you feel better. Your physician will recheck blood work.

**IV iron** may be recommended if you cannot tolerate pills, cannot absorb oral iron, have ongoing heavy blood loss, or have high needs in later pregnancy.

## 7 When to see your physician

### Talk to your doctor or nurse practitioner if you…

- Have persistent fatigue, weakness, or shortness of breath
- Notice unusual hair loss or brittle nails
- Have heavy periods (soaking a pad/tampon every hour, or periods lasting more than 7 days)
- Have restless legs or unusual cravings (ice, dirt, starch)
- Are pregnant or planning pregnancy
- Follow a vegetarian or vegan diet and worry about iron intake
- Have been told you are anemic or iron deficient in the past

A simple blood test (**ferritin** and complete blood count) can diagnose iron deficiency — often before anemia develops.

## 8 Key takeaways

1. Iron deficiency is very common in Canadian women who menstruate, are pregnant, or have heavy periods.
2. Fatigue, brain fog, and hair loss are real and treatable — do not dismiss them.
3. Diet helps prevent deficiency, but usually cannot fix it alone once stores are low.
4. Supplements work best once daily (or every other day), with vitamin C, away from tea and coffee.
5. Treatment takes months — keep going even after you start feeling better.
6. Ask about a blood test if you have symptoms or risk factors.

**Disclaimer:** This guide provides general health information based on Canadian and international evidence. It is not a substitute for medical advice, diagnosis, or treatment. Always discuss symptoms, diet, and supplements with your physician or a registered dietitian.

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