

# Iron for Babies and Young Children

## What is iron?

Iron helps carry oxygen in blood through the body. It's also used to make red blood cells. Your child gets iron from the foods they eat. If your child does not eat enough foods with iron, they can get anemia.

## What is anemia?

Anemia is when you don't have enough red blood cells to carry oxygen through the body. This can make your child not want to eat, get sick more often or feel cranky, tired, or weak. Anemia can also slow down how well your child's brain grows.

## How much iron do babies and young children need?

Age	Recommended iron per day
7 months–1 year	11 mg
1–3 years	7 mg
4–8 years	10 mg

Children who eat a vegetarian diet may need more iron than amounts listed above.

## Offer foods with iron at meals and snacks every day

There are two types of iron in foods: heme iron and non-heme iron.

### Foods with heme iron

Heme iron is from animal foods. The body takes in this type of iron easier than non-heme iron.



#### 2–3 mg iron per 1 oz (30 g) serving

- Moose
- Oysters or mussels
- Wild duck or goose

#### 1 mg iron per 1 oz (30 g) serving

- Beef, elk, or venison
- Clams or sardines, canned

#### 0.5 mg iron per 1 oz (30 g) serving

- Chicken, lamb, pork, or turkey
- Light canned tuna

### Foods with non-heme iron

Non-heme iron is from plant foods.



#### 2–3 mg of iron per serving

- Baby cereal with iron, dry, 2 Tbsp (30 mL)
- Cashew butter, 2 Tbsp (30 mL)
- Cold cereal, enriched, 15 g
- Lentils, cooked, ¼ cup (60 mL)
- Soybeans, cooked, ¼ cup (60 mL)
- Spinach, cooked, ¼ cup (60 mL)

#### 1 mg of iron per serving

- Almond, peanut or sunflower butter, 2 Tbsp (30 mL)
- Amaranth, cooked, ¼ cup (60 mL)
- Beets, canned, ¼ cup (60 mL)
- Chard, boiled, ¼ cup (60 mL)
- Chia seeds, ground, 1 Tbsp (15 mL)
- Flax seeds, ground, 2 Tbsp (30 mL)
- Molasses, blackstrap, 1 tsp (5 mL)
- Potato, with skin, ½ medium
- Pumpkin, cooked/ canned, ¼ cup (60 mL)
- Red kidney beans or chickpeas, cooked, ¼ cup (60 mL)
- Sesame seeds, 2 Tbsp (30 mL)
- Tofu, firm, ¼ cup (60 mL)
- Wheat germ, 2 Tbsp (30 mL)

#### 0.5 mg per serving

- Egg, 1
- Green peas, cooked, ¼ cup (60 mL)
- Oatmeal, quinoa or pasta, cooked, ¼ cup (60 mL)
- Split peas, cooked, ¼ cup (60 mL)

*Iron amounts are from the Canadian Nutrient File 2015.*

**To help the body take in non-heme iron**, serve these foods along with *foods with heme iron* or *foods with vitamin C*.

Foods with vitamin C include bell pepper, broccoli, cantaloupe, grapefruit, kiwi, mango, orange, raspberries, and strawberries.

## Read labels to find foods with iron.

Look for the words “with iron”, “iron fortified”, or “added iron”.

Choose foods with at least 15% Daily Value (% DV) iron.

Nutrition Facts	
Per ¾ cup (175 mL/ 175 g)	
Amount	% Daily Value
<b>Calories</b> 160	
<b>Fat</b> 2.5 g	<b>4 %</b>
Saturated 1.5 g + Trans 0 g	<b>10 %</b>
<b>Cholesterol</b> 10 mg	
<b>Sodium</b> 75 mg	<b>3 %</b>
<b>Carbohydrate</b> 25 g	<b>8 %</b>
Fibre 3 g	<b>8 %</b>
Sugars 15 g	
<b>Protein</b> 8 g	
Vitamin A	2 %
Vitamin C	0 %
Calcium	25 %
<b>Iron</b>	<b>20 %</b>

**If you buy pouches or jars of baby food, choose the ones with the most iron.**

## Use baby cereals with iron for children of all ages.

- Sprinkle it on hot or cold cereals.
- Mix it into soups, stews, sauces, and yogurt.
- Use it in place of half the flour in recipes for pancakes, muffins, and loaves.



Choose a store-bought baby cereal with iron. Homemade baby cereal contains much less iron.

**Cook in cast-iron cookware to increase the amount of iron in food.**

## Cow's milk is not a good source of iron.

- Too much milk can make your child too full to eat foods with iron. Too much milk also makes it harder for the body to take in iron.
- When your baby is 9–12 months old, you can start giving them 3.25% (homogenized) milk, as long as they eat foods with iron at most meals. Infant formula and breastmilk provide more iron than cow's milk.
- By the time your child is 1 year old, they can have 2 cups (500 mL) of milk each day. Breastfed babies can continue to get their milk from breastmilk.
- If your child drinks too much milk, these tips may help:
  - Give smaller amounts at a time.
  - Give milk at the end of the meal.
  - Offer drinks in an open cup.
  - Offer water in between meals.

Plant-based beverages such as almond, cashew, coconut, pea, rice, or soy should not replace milk, breastmilk, or infant formula in the first 2 years. Plant-based beverages are generally lower in protein, energy, healthy fat, and iron.

## Meal ideas

- Baby cereal with iron and diced mango
- Ground beef, tomato sauce, and broccoli with pasta
- Pancakes made with baby cereal, topped with strawberries
- Scrambled eggs, whole grain toast strips, and orange slices
- Stir-fried chicken and broccoli with rice
- Vegetarian chili made with red kidney beans, served with mashed potatoes (skin on)



## Iron supplements

### Does my child need an iron supplement?

- If your child has anemia, they may need more iron than they can get through food.
- If you think your child needs more iron, talk to your doctor about your concerns.
- Your doctor will tell you if your child needs an iron supplement. They will also tell you how much your child needs.

### What are some tips for giving my child an iron supplement?

- Only give the type and amount of iron prescribed by the doctor. Do not give more.
- Iron comes in liquid, pill, and powder form. It may be easier to give babies and young children the liquid form.
- Give iron supplements with water or a small amount (2 Tbsp/ 30 mL) of 100% orange juice rather than milk. Milk makes it harder for the body to take in iron.



### How long will my child need to take an iron supplement?

- It takes at least 2–3 months to grow new red blood cells and to treat anemia.
- Your doctor will check the iron level in your child's blood and tell you how long to keep giving the iron supplement.
- Talk to your doctor to arrange follow-up blood work.

#### **Caution: Too much iron is toxic**

Keep iron supplements and multivitamins with iron out of children's reach. Children should only take an iron supplement if a doctor prescribes it.

### Is it normal to see changes like black stools, grey teeth and constipation when my child is taking iron supplements?

Yes, this is normal. These will go away when you stop giving iron supplements.

#### **Try these tips to help prevent grey coloured teeth:**

- Brush your child's teeth with toothpaste right after each dose.
- Take care of your child's teeth with healthy habits like brushing with toothpaste twice a day, flossing, and regular professional dental care.



Talk to your dentist or dental hygienist if you are concerned about your child's teeth.

#### **Try these tips to help with constipation:**

- Offer foods with fibre (such as whole grains, cereal, beans, lentils, peas, and vegetables and fruit with the skin left on) at meals and snacks.
- Ensure your child is getting enough fluid. Fluids include breastmilk, infant formula, milk, water, and juice.
- Ask your dietitian for tips and ideas.