

# Diet tips for low blood cell counts

For people with cancer who have low blood cell counts

---

## What does it mean to have low blood cell counts?

- Cancer and treatments, like chemotherapy and radiation, can cause the bone marrow to make fewer blood cells than normal. This can lead to low blood cell counts.
- You may have low counts of white blood cells, red blood cells or platelets.
- These counts may go back to normal before your next round of treatment or after you are done treatment.

## Can my diet help raise my blood cell count?

There are no special foods or diet changes shown to raise blood cell counts. However, your body needs nutrients to make new blood cells, like:

- protein
- iron
- folate
- vitamin B12



If you do not get enough of these nutrients, especially protein, your blood cell counts can get worse. Try to eat foods with these blood-building nutrients each day.

## What foods have blood-building nutrients?

<b>Protein</b>	<p>Try to eat a protein food at each meal and snack. Foods high in protein include:</p> <ul style="list-style-type: none"><li>• meat, poultry, fish, seafood</li><li>• eggs and dairy products, like cheese, yogurt, milk, and skim milk powder</li><li>• legumes, like lentils, chickpeas, split peas, kidney beans, baked beans, and hummus</li><li>• soy foods, like tofu, tempeh and soy milk</li><li>• nuts and seeds, like almonds, peanut butter, pumpkin seeds, sesame seeds</li></ul>
<b>Iron</b>	<p>Try to eat a few foods high in iron each day. Foods high in iron include:</p> <ul style="list-style-type: none"><li>• meat and seafood</li><li>• egg yolks</li><li>• fortified cereals and foods made from “enriched” or whole grain flour</li><li>• soy foods, like tofu, tempeh, and soy milk</li><li>• legumes, like lentils, kidney beans, chickpeas, lima beans, and navy beans</li><li>• cooked spinach, snow peas, Swiss chard, asparagus, beets, beet greens</li><li>• blackstrap molasses</li></ul>

<b>Folate</b>	<p>Try to eat a few foods high in folate each day. Foods high in folate include:</p> <ul style="list-style-type: none"><li>• legumes, like lentils, kidney beans, chickpeas, lima beans, and navy beans</li><li>• beets, green peas, asparagus, avocado, parsnips, spinach, romaine lettuce, Brussels sprouts, broccoli</li><li>• fortified cereals and foods made from “enriched” or whole grain flour</li><li>• orange juice</li></ul>
<b>Vitamin B12</b>	<p>Try to eat a few foods high in vitamin B12 each day. Foods high in vitamin B12 include:</p> <ul style="list-style-type: none"><li>• meat, poultry, fish, seafood</li><li>• egg yolks and dairy products, like cheese, yogurt, milk, and skim milk powder</li><li>• fortified non-dairy drinks, like fortified soy milk</li><li>• fortified nutritional yeast</li></ul>

**Note:** It is best to get your vitamins and minerals from food. If you have lost weight or have problems eating and are not meeting your vitamin or mineral needs, your doctor or dietitian may recommend taking vitamin and/or mineral supplements. Do not start taking supplements unless your doctor tells you to.

## Why is food safety important?

Cancer treatment can weaken your immune system, making it harder to fight infection. This is especially true if you have low white blood cell counts. Follow these food safety practices to lower your risk of foodborne illness:

- Wash your hands and surfaces with warm soapy water before and after cooking and eating
- Avoid undercooked or raw meat, poultry, eggs, and seafood, like sushi
- Avoid unpasteurized dairy products, juices and home-canned foods
- Cover and refrigerate uneaten food within 1 hour
- Avoid eating food that may have been left out for many hours like buffets and salad bars



More information on food safety for people with weakened immune systems is available on [Health Canada's website](#).

If you are a patient at the Odette Cancer Centre and you would like more nutrition information, please visit the Patient & Family Support office in TG 230 (T-wing, ground floor, room 230), call 416-480-4623, or visit [sunnybrook.ca/cancernutrition](https://sunnybrook.ca/cancernutrition)

This resource should be used for information and does not replace medical advice. For questions, concerns, or additional information, contact your dietitian. This resource is for personal use only.