

## Health Benefits of Beetroot Juice: An Overview

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### Abstract

Malnutrition and anemia are major concerns for adolescent girls. The reproductive years of life and beyond can be severely impacted by inadequate nutrition during adolescence. In India, girls frequently get married and have children before their development spurt is over, which doubles their chance of developing anemia (Chatterjee, 2008). Because of its high nitrate concentration and beta carotene content (19690 mcg/100g), beetroot juice with jaggery helps anemic individuals mobilize stored iron and raise their hemoglobin levels. Beet juice is used to relieve anxiety and is thought to have a blood pressure stabilizing effect. It is thought to enhance athletic performance, reduce blood pressure, and improve blood flow in people with diabetes. Eating beets is advised in cases of gonorrhoea due to the diuretic action of beetroot juice, which is occasionally used with Amla juice added. Beetroot juice reduces diabetes, obesity, and heart disease. In addition to relieving stomach pain during periods and preventing anemia by maintaining a normal amount of blood cells, jaggery's high iron and folate content helps adolescents with a variety of menstruation difficulties. Beetroot juice aids in the absorption of iron, which raises blood counts, improves circulation, and increases erythrocytes' ability to carry oxygen.

**Keywords:** Beetroot Juice; Health; Malnutrition; Anemia; Jaggery.

### INTRODUCTION

When the body's supply of healthy red blood cells is insufficient, anemia can occur. Due to their increased need for dietary iron, adolescents are especially prone to iron deficiency anemia. Reduced erythrocyte production, which happens as a result of reduced hemoglobin synthesis, can cause

anemia. Two thirds of the body's iron comes from the heme found in hemoglobin. Chronic bleeding and frequent menstruation cause iron loss. Lack of replacement for the stored iron causes hemoglobin to produce less, which causes deficiency anemia.

Anemia, caused due to lack of iron in the blood, is a common problem these days. If you have been recently diagnosed with iron deficiency anemia, here's the best natural remedy for your problem beetroot.

Iron is important and can be found in beetroot. You can get 1.1 mg of iron from a cup of sliced beets, which is 6% of the daily recommended amount. The production of hemoglobin, a protein found in red blood cells (RBCs) and in charge of carrying oxygen to various parts of your body, requires iron,

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an essential vitamin.

Iron is present in sufficient amounts in red beets. Red platelet healing is promoted by eating beets and drinking beet juice. Beetroots aid in preventing and alleviating the health problems associated with anemia. It is also proven to be a reliable at home treatment for menstruation problems and menopause symptoms.

### ***Health Benefits of Beetroot Juice***

Iron is particularly abundant in beetroot. You may satisfy 6% of your recommended daily intake of iron with one cup of chopped beets, which provides you with 1.1 milligrams of iron. Hemoglobin, a protein found in red blood cells (RBCs) and responsible for carrying oxygen to various parts of your body, is developed with the help of iron, which is a crucial dietary supplement.

Large amounts of iron are present in red beets. Red platelet healing is aided by eating beets and drinking beet juice. In order to prevent and treat pallor, beetroots are beneficial. Additionally, it is recognized as a reliable at home remedy for menstruation problems and side symptoms of menopause.

The beet plant produces delicious, curled rooted veggies that many people either love or detest. The beet plants have been around for a while; they are not particularly new, but they have gained tremendous importance in terms of nutrition over the past decade. It has been shown that consuming beetroot juice can improve health.

### ***Beetroot juice has 12 wonderful additional benefits.***

1. **Reduces circulatory strain:** Beet juice may slow down your heartbeat. Researchers discovered that those who had eight ounces of squeezed beetroot daily reduced their systolic and diastolic blood pressure. Nitrates, a component of beet juice that transforms into a nitric like corrosive in human blood, help to stretch and release veins, which are acknowledged as a necessary component of their preparation.
2. The findings of this latest investigation suggest additional areas where nitrates in beetroot juice should be focused. This may improve muscle control in those who are experiencing cardiovascular breakdown. The study showed that after consuming beetroot juice for just two hours, those with cardiovascular breakdown had an increase (13%) in muscular control.
3. **Increases practice endurance:** A 2012 study found that consuming beet juice helps to increase the necessary levels of plasma nitrate and enhances actual performance. As of the time the experiment was conducted, some cyclists who consumed two cups each of beetroot juice gradually saw an improvement in their 10 km speed, which was essentially exactly 12 seconds as documented. By reducing the bikers' most harmful oxygen production, it also showed improvement.
4. **May prevent the onset of dementia:** A recent study found that nitrates may increase blood flow to the brain in more senior individuals and lessen cognitive decline. Individuals who consumed diets high in nitrate, which also contained beetroot juice, showed increased circulatory systems in the frontal folds on magnetic resonance imaging. Frontal projections are linked to mental leadership and reasoning. There needs to be more testing. In any case, the ability of a highly nitrated diet aids in preventing and containing potentially fatal dementia.
5. **Helps you maintain a healthy weight:** Beet juice that has been properly prepared has a low calorie content and is free of fat. Better advised to make a mind blowing decision when choosing one's smoothie in the morning to provide the body an energy boost before the day even gets going.
6. Betacaine gives beets their rich coloring, which helps prevent malignant development. Betacaine cell fortifications dissolve in water. According to a 2014 investigation, betalaines have demonstrated to have chemo-preventive restrictions that fight against risky cell lines established over time. Betalains dyes are now recognized as exceptional free foragers that greatly aid in finding and crushing unstable bodily cells.
7. **Good minerals sources:** A human body will hardly function well with non-essential minerals. A couple of essential minerals are needed by the body to shelter the structure of the body while other minerals support bones as well as teeth that are solid. Other than just potassium, juice from beetroot gives:
  - Selenium
  - Manganese
  - Phosphorous

- Magnesium
  - Zinc
  - Sodium
  - Calcium
  - Copper
  - Iron
8. Potassium is a good supply of electrolytes, which are minerals that give the nerves and muscles the energy they need to function properly. Exhaustion, a lack of potassium, and muscle fits will occur when potassium levels are excessively low. A low potassium level in the body may lead to risky abnormal heart rhythms. Potassium minerals are known to be abundant in beets. Potassium levels can be optimally increased by consuming beetroot juice in moderation.
  9. **Provides a source of vitamin C:** It has been determined that beet juice is a superior source of vitamin C. Vitamin C aids in the defense against free radicals that can strengthen one's protected structure and protect the body cells from harmful elements. Additionally, it helps with collagen production, iron absorption, and wound healing.
  10. **Offer support for the liver:** A disorder called as nonalcoholic oily liver infection may be brought on by an individual's liver becoming overworked as a result of the following: poor dietary habits, excessive alcohol consumption, exposure to toxic substances, and a sedentary lifestyle. Beetroot contains betaine, a characteristic chemical that prevents or lowers the amount of fatty storage in the liver. Additionally, betaine may aid in protecting the liver from toxins.
  11. **Excellent source of foliate:** Folate is a B vitamin that may prevent neural cylinder defects such as anencephaly and spinal bifida. Additionally, it might lessen your risk of becoming pregnant too soon. A common source of foliates is beetroot juice. If you are a woman of childbearing age, including foliate in your diet can help you reach the recommended daily intake of 600 mcg.
  12. Adding beetroot juice to your diet may help lower cholesterol levels after you observe a rise in your readings. A recent study on rodents discovered that beetroot extract increased HDL (exceptional) cholesterol and decreased hard and rapid triglycerides and cholesterol. Furthermore, it decreased

the direct oxidative stress on human liver. Analysts acknowledge that flavonoids, which are beetroot's phytonutrients, have a hidden positive effect on lowering cholesterol.

A vital amount of iron is present in red beets. Consuming beets and drinking beet juice both aid in the restoration of red platelets. Beetroots support and improve anemia related health issues. Additionally, it is recognized as a reliable at home treatment for menstruation problems and menopause symptoms.

**Tip to include beetroot in the diet:** A study found that anemic people can take plain beetroot juice for 20 days to raise their hemoglobin level, according to a diet tip published in the IOSR Journal of Nursing and Health Science. A mixed salad with fresh vegetables like carrots, cucumber, and onions as well as grated beetroot is an alternative. You can also serve the beetroot with other vegetables like potatoes and green beans after lightly roasting it.

## CONCLUSION

A widespread issue today is anaemia, which is brought on by a deficiency in blood iron. The greatest natural cure for iron deficiency anaemia is beetroot, which you should try if you've recently received a diagnosis.

Beetroot contains the essential mineral iron. One cup of sliced beets has 1.1 milligrammes of iron, which is 6% of the daily required value. Iron is a crucial vitamin since it's needed to make hemoglobin, a protein that's present in red blood cells (RBCs) and is responsible for delivering oxygen to various parts of your body.

Red beets contain an adequate amount of iron. Eating beets and consuming beet juice both aid in red platelet repair. Beetroots help prevent and treat the health issues brought on by anaemia. It has additionally been demonstrated to be an effective at home remedy for menstrual irregularities and menopausal symptoms.

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