

“Health Benefits of Beetroot Juice” - A Review

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Abstract

A major problem for adolescent girls is malnutrition and anaemia. Inadequate nutrition during adolescence has the potential to have a serious negative influence on the reproductive years and beyond. The likelihood that Indian girls would acquire anaemia is doubled since they typically marry and have children before their growth spurt is complete (Chatterjee, 2008). Because of its high nitrate concentration and beta carotene content (19690 mcg/100g), beetroot juice with jaggery aids in the mobilisation of stored iron and increases haemoglobin levels in anaemic people. With its potential to stabilise blood pressure, beetroot juice is used to treat anxiety. In persons with diabetes, it is believed to improve blood flow, lower blood pressure, and improve athletic performance. Because beetroot juice has a diuretic effect and is occasionally combined with Amla juice, eating beets is recommended in cases of gonorrhoea. Heart disease, diabetes, and obesity are all decreased by beetroot juice. Jaggery's high iron and folate content assists adolescent girls with a number of menstruation issues, including easing stomach pain during periods and preventing anaemia by maintaining a proper volume of blood cells. Increased blood counts, better circulation, and a rise in the capacity of erythrocytes to carry oxygen are all results of beetroot juice's assistance in the absorption of iron.

Keywords: Beetroot Juice, Health, Malnutrition, Jaggery, Anemia.

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INTRODUCTION

Anaemia can happen when the body doesn't produce enough healthy red blood cells. Adolescents are especially prone to iron deficiency anaemia due to their increased need for dietary iron. Anaemia can be brought on by decreased haemoglobin synthesis, which leads to decreased erythrocyte synthesis. The heme present in haemoglobin is where the body gets its two thirds of its iron. Loss of iron is brought on by chronic bleeding and regular menstruation. Lack of replacement for the stored iron reduces the amount of haemoglobin produced, resulting in deficiency anaemia.

These days, a widespread issue is anaemia, which is characterized by a deficiency in blood iron. The greatest natural treatment for your iron deficiency anaemia is beetroot, if you've just received a diagnosis.

Beetroot contains iron, which is necessary. 1.1 mg of iron, or 6% of the daily required value, may be found in a cup of sliced beets. Iron is a crucial nutrient that is needed for the synthesis of haemoglobin, a protein that is found in red blood cells (RBCs) and is responsible for transporting oxygen throughout the body.

Red beets have an adequate amount of iron. Consuming beets and beet juice can help red platelet repair. The health issues brought on by anaemia are lessened and prevented with the help of beetroots. Additionally, it has been shown to be a trustworthy at-home remedy for menstrual irregularities and menopausal symptoms.

Health Advantages of Beetroot Juice

Beetroot is particularly rich in iron. One cup of diced beets, which contains 1.1 milligrammes of iron, will help you meet 6% of your required daily intake of iron. The development of haemoglobin, a protein found in red blood cells (RBCs) and in charge of delivering oxygen to various parts of your body, depends on iron, a vital dietary supplement.

Red beets contain a significant amount of iron. Eating beets and drinking beet juice can speed up the recovery of red platelets. Beetroots are advantageous in the prevention and treatment of pallor. It is also well-known as an effective at-home treatment for menstrual irregularities and menopausal side effects.

The beet plant yields tasty, curled-rooted vegetables that many people either adore or loathe. The beetroot plant is not very new; it has been there for a long; but, over the past ten years, it has become much more significant in terms of nutrition. Consuming beetroot juice has been proved to be beneficial for health.

Beetroot Juice Has 12 Wonderful Additional Benefits

- 1. Reduces Circulatory Stress:** Beetroot juice may cause your heartbeat to slow down. Eight ounces of squeezed beetroot consumed daily, according to research, lowered both systolic and diastolic blood pressure. Nitrates, a component of beetroot juice that turns into a corrosive similar to nitric in human blood, aid in stretching and releasing veins, which is recognized as an essential step in their preparation.
- 2. Based on the results of this most recent study,** further areas in which nitrates in beetroot juice should be studied should be considered. In those who are suffering from cardiovascular deterioration, this might help with muscle control. The study found that people with cardiovascular breakdown experienced an increase (13%) in muscle control after eating beetroot juice for just two hours.
- 3. Increases Practise Endurance:** According to a 2012 study, ingesting beetroot juice helps to raise the required levels of plasma nitrate and improves actual performance. When the experiment was being run, some cyclists who drank two cups of beetroot juice per day noticed a progressive increase in their 10 km speed, which was practically exactly 12 seconds as recorded. It also demonstrated improvement by lowering the amount of the most damaging oxygen produced by the bikers.
- 4. May Prevent the Onset of Dementia:** According to a new study, nitrates may improve blood flow to the brain in older people and slow cognitive decline. On magnetic resonance imaging, people who fed diets high in nitrate and beetroot juice displayed enlarged circulatory systems in the frontal folds. Frontal projections are related to mental initiative and logic. There should be additional testing. In any case, a diet heavy in nitrates can help prevent and control possibly fatal dementia.
- 5. Helps you keep a Healthy Weight: Properly** prepared beetroot juice has a low calorie and fat-free composition. When choosing a smoothie in the morning to provide the body an energy boost before the day even gets started, it is best advised to make a mind-blowing choice.
- 6. The Deep Colour of Beets is Due to Betacaine,** which inhibits the growth of cancer. Water dissolves betacaine cell fortifications. A 2014 analysis found that betalaines contain chemo-preventive limits that combat hazardous cell lines that have been around

for a while. Nowadays, betalains dyes are regarded as outstanding free foragers that substantially facilitate the discovery and destruction of unstable physiological cells.

- 7. Good sources of minerals:** Non-essential minerals are hardly ever used by humans. The body needs a few key elements to protect the structure of the body, while other minerals promote strong bones and teeth. Beetroot juice provides more than simply potassium. It also provides: - Selenium
 - Manganese
 - Phosphorous
 - Magnesium
 - Zinc
 - Sodium
 - Calcium
 - Copper
 - Iron

8. A Useful Source of Electrolytes, Or Minerals: That provide the nerves and muscles the energy they require to work properly, is potassium. Potassium levels that are too low will result in exhaustion, a shortage of potassium, and muscular fits. Risky irregular cardiac rhythms may result from a low potassium level in the body. It is well known that beetroot minerals are rich in potassium. Beetroot juice, when consumed in moderation, is the best way to raise potassium levels.

9. Source of Vitamin C: Beetroot juice has been found to be an excellent source of vitamin C. Vitamin C supports the body's defence mechanisms against free radicals, which can fortify one's protective structure and shield the body's cells from potentially dangerous substances. Additionally, it aids in wound healing, collagen formation, and iron absorption.

10. Give the Liver Support: Poor dietary practices, excessive alcohol consumption, exposure to toxins, and a sedentary lifestyle can all cause an individual's liver to work too hard, which can lead to a condition known as nonalcoholic oily liver infection. A distinctive molecule found in betaine, which is found in beets, prevents or reduces the amount of lipid accumulation in the liver. Betaine may also help shield the liver from harmful substances.

11. Excellent Source of Folate: The B vitamin folate may help to prevent neural cylinder defects such spinal bifida and anencephaly. Additionally, it can make getting pregnant too quickly less likely for you. Beetroot juice is a common source of foliates. Including foliate in your diet can help you get the 600 mcg daily allowance if you're a woman of reproductive age.

12. After you notice an increase in your readings, incorporating beetroot juice into your diet may help lower cholesterol levels. Beetroot extract raised HDL (excellent) cholesterol and lowered hard and fast

triglycerides and cholesterol, according to a recent mouse study. Additionally, it lessened the direct oxidative stress on human liver. Analysts agree that flavonoids, which are phytonutrients found in beetroot, have a covertly advantageous effect on reducing cholesterol.

Red beets contain an essential amount of iron. Both eating beets and consuming beet juice help to replenish red platelets. Beetroots promote and enhance health conditions related to anaemia. It is also acknowledged as an effective at-home remedy for menstrual irregularities and menopausal symptoms.

A Diet Tip for Including Beetroot

According to a diet recommendation printed in the IOSR Journal of Nursing and Health Science, a study revealed that anaemic individuals can eat unsweetened beetroot juice for 20 days to increase their haemoglobin level. An alternative is a mixed salad with grated beetroot and fresh veggies like carrots, cucumber, and onions. After softly roasting the beetroot, you may also serve it with other vegetables like potatoes and green beans.

CONCLUSION

Today, anaemia, which is caused by a low blood iron level, is a common problem. If you've recently been diagnosed with iron deficiency anaemia, you know that iron, a vital mineral, is present in beetroot. 1.1 milligrammes of iron, or 6% of the daily recommended requirement, may be found in one cup of thinly sliced beets. Since iron is required to create haemoglobin, a protein found in red blood cells (RBCs) and in charge of carrying oxygen to various regions of the body, iron is a vital nutrient.

Iron is present in sufficient amounts in red beets. Both ingesting beets and beet juice promote red platelet healing. Beetroots aid in both the prevention and treatment of illnesses brought on by anaemia. Furthermore, it has been shown to be a successful at-home treatment for monthly irregularities and menopausal symptoms. should try beetroot, which is the most effective natural treatment.

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