

Beetroot Capsules

The **beetroot** (*Beta vulgaris* subsp. *vulgaris* var. *vulgaris*), also known as the **table beet**, **garden beet**, **red beet** or informally simply as **beet**, is one of the many cultivated varieties of beets and arguably the most commonly encountered variety in North America and Britain.

As a root vegetable

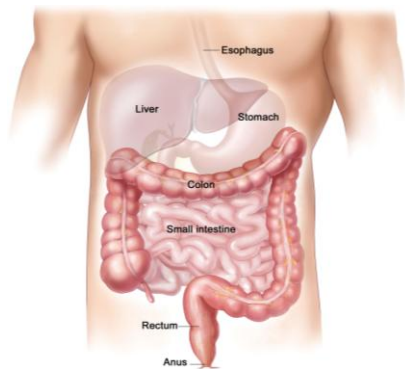
Indian Vegetable Salad containing Lemon, Tomato, Radish, Beetroot, Cucumber and Green Chillies. The usually deep-red roots of beetroot are eaten boiled either as a cooked vegetable, or cold as a salad after cooking and adding oil and vinegar, or raw and shredded, either alone or combined with any **salad vegetable**.

A large proportion of the commercial production is processed into boiled and sterilised beets or into pickles. In Eastern Europe beet soup, such as cold borscht, is a popular dish. Yellow-coloured beetroots are grown on a very small scale for home consumption.

As a leaf vegetable

The green leafy portion of the beet is also edible. It is most commonly served boiled or steamed in which case it has a taste and texture similar that of spinach.

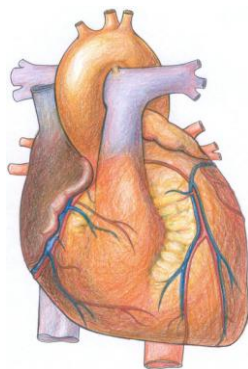
Health benefits



Beetroots are rich in the nutrient betaine, which is **important for cardiovascular health**. It functions by acting with other nutrients to reduce the concentration of homocysteine, a homologue of the naturally occurring amino acid cysteine, which can be harmful to blood vessels and thus contribute to the development of heart disease, stroke, and peripheral vascular disease. Betaine functions in conjunction with S-adenosylmethionine, folic acid, and vitamins B6 and B2 in order to carry out this function. Additionally, several studies on both rats and humans have shown that betaine may **protect**

against liver disease, particularly the build up of fatty deposits in the liver caused by alcohol abuse, protein deficiency, or diabetes, among other causes. The nutrient also helps individuals with hypochlorhydria, a condition causing abnormally low levels of stomach acid, by increasing stomach acidity.

Beetroot juice has been shown to **lower blood pressure** and thus help **prevent cardiovascular problems**. Research published in the American Heart Association journal *Hypertension* showed drinking 500 ml of beetroot juice led to a **reduction in blood pressure within one hour**. The reduction was more pronounced after three to four hours, and was measurable up to 24 hours after drinking the juice. The effect is attributed to the high nitrate content of the beetroot. The study correlated high nitrate concentrations in the blood following ingestion of the beetroot juice and the drop in blood pressure. Dietary nitrate, such as that found in the beetroot, is thought to be a source for the biological messenger nitric oxide, which is used by the endothelium to signal smooth muscle, triggering it to relax. This induces vasodilation and increased blood flow.



The Human Heart

As a dye

Betanin, obtained from the roots, is used industrially as red food colourants, e.g. to improve the colour of tomato paste, sauces, desserts, jams and jellies, ice cream, sweets and breakfast cereals. Within older bulbs of beetroot, the colour is a deep crimson and the flesh is much softer. Beetroot dye may also be used in ink. Betanin is not broken down by digestion in the stomach, and in higher concentration can, in some people, temporarily cause urine (termed beeturia) and stool to assume a reddish colour. This effect can cause distress and concern due to the visual similarity to bloody stools or urine, but is completely harmless and will subside once the food is out of the system.



As a traditional remedy

Since Roman times, beetroot juice has been considered an aphrodisiac. It is a rich source of the element boron, which plays an important role in the production of human sex hormones. Field Marshal Montgomery is reputed to have exhorted his troops to 'take favours in the beetroot fields', a euphemism for visiting prostitutes. From the Middle Ages, beetroot was used as a treatment for a variety of conditions, especially illnesses relating to digestion and the blood. Platina recommended taking beetroot with garlic to nullify the effects of 'garlic-breath'. It is known as the "unlikable fruit" because so many children do not like to eat beetroot.

Beetroot Capsule Dosage

As an addition to the daily diet, take **2 capsules three times daily**, preferably with food. Increase dose to **5 capsules three times daily** if liver is stressed.

BEETROOT



Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Core eudicots
Order:	Caryophyllales
Family:	Chenopodiaceae
Genus:	Beta
Species:	<i>B. vulgaris</i>
Subspecies:	<i>B. v. vulgaris</i>
Variety:	<i>B. v. v. vulgaris</i>
Trinomial name:	<i>Beta vulgaris</i> (sub species; vulgaris)

Beetroots (raw)

Nutritional value per 100 g (3.5 oz)

Energy	180 kJ (43 kcal)
Carbohydrates	9.56 g
Sugars	6.76 g
Dietary fiber	2.8 g
Fat	.17 g
Protein	1.61 g
Vitamin A equiv.	2 µg (0%)
Thiamine (Vit. B1)	.031 mg (2%)
Riboflavin (Vit. B2)	.04 mg (3%)
Niacin (Vit. B3)	.334 mg (2%)
Pantothenic acid (B5)	.155 mg (3%)
Vitamin B6	.067 mg (5%)
Folate (Vit. B9)	109 µg (27%)
Vitamin C	4.9 mg (8%)
Calcium	16 mg (2%)
Iron	.80 mg (6%)
Magnesium	23 mg (6%)
Phosphorus	40 mg (6%)
Potassium	325 mg (7%)
Sodium	78 mg (3%)
Zinc	.35 mg (3%)

*Percentages are relative to recommendations for adults.