

#FruitVeg4You

Nutritional Fact Sheet: **Beetroot**

Nutritional and Dietary Information

Beetroot provides a wide range of minerals and in particular contributes to recharging the body with potassium, which acts to regulate blood pressure and allows the transmission of nerve impulses. Beetroot also helps to cover the daily needs regarding magnesium as a portion of 100 g provides 6-7% of the recommended daily intake. Due to its natural richness in sodium it must be consumed with moderation in a low-sodium diet. Rich in fibre, beetroot helps to fight against intestinal laziness as its cellulose and hemicellulose are indeed very effective in stimulating bowel movements. These fibres are tenderized by cooking, so that the beetroot is better tolerated by sensitive intestines when eaten cooked. Best when used raw, it is recommended to grate it very finely. Beetroot fibres also have the property to slow and regulate the assimilation of carbohydrates.



Beetroot contains an appreciable amount of Vitamin B9 (or folic acid) which is necessary for cell division and protein synthesis. A deficiency of this vitamin can cause fatigue, loss of appetite and a particular form of anemia called 'megaloblastic anemia' and would also favour the occurrence of cardiovascular disorders. The recommended daily intake for vitamin B9 is 300 mcg (increased need for pregnant women), and it is currently estimated that 5-10% of young women and elderly do not have an adequate intake of this vitamin. Beetroot can play a useful role as a source of folic acid, since a portion of 100 grams can cover 28% of the recommended daily intake.

Principle characteristics

The red beet (*Beta vulgaris* var. *Esculenta*) is a root vegetable, such as the carrot or turnip. It is unusual for the red beet to develop reserves of carbohydrates (sugars) during the final stages of its vegetative development. However, it contains 8 to 10 g per 100 g, which is more than most vegetables (in which the rate of carbohydrates is around 2 to 4 g per 100 g). Such as the sugar beet (which is a close relative), red beet has the characteristic of having its carbohydrate composed almost exclusively of sucrose (it represents more than 90% of the total carbohydrates). They are accompanied by small amounts of pentosans and hexosans and traces of glucose and fructose.

Due to this relative wealth of carbohydrates, the energy intake is rather high for a vegetable with on average 40 kcal (167 kJ) per 100 g. This amount comes mainly from carbohydrates as other energy components (protein and fat) are present in small proportions (1.5 g and 0.1 g per 100 g). Fibres are abundant in red beet, as they reach 2.5 to 3.1 g. per 100 g. These are mostly (80% of total) insoluble fibres (cellulose and hemicellulose), which form the walls of plant cells and are largely responsible for the consistency and texture of this vegetable. The red beet provides also many

minerals and trace elements, which are well diversified: Potassium is at the top with a level exceeding 300 mg per 100 g. It is followed by sodium, which is at a level of around 60 mg present (a high rate for a vegetable). Calcium (29 mg per 100 g) and magnesium (25 mg) have quite high rates as well. Besides iron, copper, zinc and manganese one also finds substances such as boron, chromium, nickel, fluorine, selenium, all of them micronutrients which are very useful in cellular metabolism.

Red beet is well endowed with vitamins, especially from the vitamin B group (which are essential for the proper assimilation of carbohydrates by the cells of the body). Vitamin B9 (or folate) is particularly well represented, with a content of 83 mg per 100 g. Vitamin C is present at a level of 10 mg per 100 g raw beetroot, and still 5 mg in the cooked beetroot. Finally, there are also small amounts of vitamin E (0.047 mg per 100 g) present.

Nutritional Content

Components	(g)
Carbohydrates	8.40
Proteins	1.50
Lipids	0.10
Water	86.2
Fibres	2.50

Minerals	(mg)
Phosphorus	45.00
Calcium	29.00
Magnesium	25.00
Sodium	58.00
Boron	2.100
Iron	0.900
Copper	0.080
Zinc	0.340
Manganese	0.150
Nickel	0.008
Fluorine	0.020

Vitamins	(mg)
Vitamin C	10.00
Provitamin A	0.011
Vitamin B1	0.020
Vitamin B2	0.040
Vitamin B3 or PP	0.230
Vitamin B5	0.130
Vitamin B6	0.050
Vitamin B9	0.083
Vitamin E	0.047

Energy Intake	
KCalories	40.00