

Carob Tree

Ceratonia siliqua



Carob tree or *Ceratonia siliqua* is an evergreen flowering shrub or tree in the pea family , Fabaceae. Carob is native in the Mediterranean region including Southern Europe, Northern Africa, Middle East , in the Canary Islands and Macronesia.

Carob tree can grow from 7 to 10 meters high with canopy reaching to about 20 meters. Carob tree has huge thick trunk with rough brown bark and sturdy branches.. Carob leaves are alternate and pinnate compound, 10 to 25 cm long. The leaves are leathery in texture, dark green and characterized by a thick unilayered upper epidermis showing clustered stomata on the under face. The leaves are frost tolerant and turns it leaves during spring time. Carob leaf is usually composed of 8-15 leaflets 3-7 cm and may or may not have terminal leaflet.



Carob flowers blossom in autumn (September to November). The flowers are small and numerous, spirally clustered along the inflorescence axis in catkin-like racemes borne on old wood and even on the trunk (cauliflory). Within the inflorescence the basal flowers open before the apical ones; they are pollinated by both wind and insects. Carob male flowers has characteristic odor, resembling semen

The fruit is a pod that can be elongated, straight or curved, color is green during the developmental stages, dark brown when ripe. Carob pod takes about 11 to 12 months to develop and ripen. The beans start to change their ground color and usually ripen a month later. Ripe pods fall to the ground and are eaten by various animals thus dispersing the seeds. Humans eat dried or roasted pods instead of the seeds.

Carob is widely cultivated for its edible seeds and pods. Carob is widely used in baking products, snack bars, cereals, cocoa derived

products and beverages, dairy products and others. Carob is highly nutritious and offers some medicinal benefits.

Carob has a long history of use. It is used by the early Egyptians as sweetener and was even believed as the food that sustained John the Baptist when he was young thus it is also called St. John's bread.

Active constituents that are found in Carob include the following: calcium, potassium, magnesium, sodium and phosphorus, the most abundant elements in carob fruits were rich sources of carbohydrates, proteins and minerals. The combination of these minerals provide the claimed health benefits of Carob although limited scientific research would support these claims.

Carob for diarrhea. Carob is effective in reducing the duration of symptoms of diarrhea if taken along with oral rehydration solution.

Reduce cholesterol level. Carob with its high fiber content is effective to lower the cholesterol level in the blood. It also improves the ratio of HDL and LDL in the blood.



Anti-diabetic activity. Carob has insulin lowering capability that may be helpful in managing type 2 diabetes.

Weight loss. Carob is popularly known as a weight reducing tonic by stimulating the body's metabolism, improving digestion, and effectively burning and eliminating fats.

Antioxidant. Carob is believed to be rich in antioxidants. It is used to repair and prevent damage to cells by free radicals.

Cancer. Carob is also being considered as a treatment for cervical and lung cancers due to its antioxidant activity.

Anti-fungal and antibacterial activity. A powder made from Carob pods and seeds are used as an anti-fungal, antibacterial agent in treating wounds and other skin disorders.

Analgesic action. Carob is also believed to relieve pain.

Carob can prevent anemia, treat cough and flu

Carob is rich in phosphorous and calcium and is used to prevent and treat osteoclasia and osteoporosis.

Generally safe. Carob is considered safe for most adults if taken in food amounts or as

herbal medicine. There are no reported side effects.

Special Precautions & Warnings:

Pregnancy and breast-feeding: There are no sufficient studies done to determine the safe use of Carob herbal medicine during pregnancy and breast feeding. It is best to avoid its use.

