



Papaya (*Carica papaya* L.) : Indispensable fruit of human being and prosperity

Shardulya Shukla¹, Munendra Singh², Ashish Kumar¹, Yogesh Rajbhar¹, Shivendra Pratap Singh³ and Aarti Sharma⁴

¹Department of Horticulture S.V.P.U.A. and T, Modipuram, Meerut (U.P.) India

²Department of Horticulture, Navjeevan Kisan P.G. College, Mawana, Meerut (U.P.) India

³Department of Agriculture Extension, C.C.S. University, Meerut (U.P.) India

⁴Department of Botany, C.C.S. University, Meerut (U.P.) India

Email: shardulyashukla@gmail.com

Papaya (*Carica papaya*) belongs to Family Caricaceae, is reddish yellow fruit, grown all over the world, mostly in the regions of hot climate and heavy rain. Papaya is a common man's fruit which is reasonably priced and has a high nutritive value. The fruit is available throughout the year. Papaya, a general tonic is an appetizer, anti phlegmatic, anti flatulent, carminative, digestive, diuretic, vermifuge and pyreutic. Papaya helps to prevent

blindness caused by vitamin A deficiency, which is quite common among a large number of children in India. Consumption of fruit even little amount per day may lower the risk of age-related macular degeneration, the primary cause of vision loss in older adults. Papaya is regarded as a wholesome fruit. It is an energy giving food. The papaya has remarkable medicinal values. It is most easily digested fruits which helps the digestion of other foods also. Ripe papaya is excellent tonic for pregnant women, nursing mothers and growing children. The ripe fruit,

if eaten regularly, corrects habitual constipation, chronic diarrhoea and bleeding piles. Papaya is a rich source of β -carotene, a precursor of vitamin A and C. It is cholesterol free, an excellent source of calcium, potassium, iron, vitamin B and proteins. Very low in sodium and high in the vitamins C, A, E, K and folate. The health benefits of vitamin C are long and varied. The vitamin C contents in papaya increases with the maturity of the fruits. Vitamin E is another well known antioxidant found in the papaya abundantly which is well known for skin health and as a blood thinner. Papayas are an excellent fruit for

antioxidants, containing not only vitamin E, but also more vitamin A than carrots and more vitamin C than oranges. Potassium present in papaya helps in checking blood pressure and improving mental alertness.

The Papaya milk is a very rich in papain, a digestive enzyme which is very useful as medicine. Papain is present in all parts of the plant and fruit which help to digest the protein in food. It is similar to pepsin in its digestive action and is capable of digestive protein that is 200 times its own weight. It helps the body's own digestive enzymes assimilate the maximum nutrients of the fruit. Papaya has the property of tenderizing meat which is often cooked together with raw papaya pieces to make it easily digestible. Papain assists in transforming proteins into various amino acids, which directly influences the human growth hormone to increase muscle tone and decrease fat. Papain, remains active whether it is in an acidic, alkaline, or neutral environment. It is said that papain can be effective in



fighting cancer as it breaks down a protein substance called fibrin which are found on all cancer cells, and thus preventing metastasis, including inhibiting the growth of human breast cancer cells. It has been shown that the patients taking papaya, recover faster from surgery, radiation, and chemotherapy. The latex of papaya also exhibits pain relieving properties and the US food and drug administration (FDA) has approved its medicinal use to ease the discomfort of slipped discs (prolapsed inter vertebral disc). This is used for injection into herniated inter vertebral lumbar discs to relieve pain caused by

pressure on nerves.

Powdered papaya dry leaves soaked in water overnight and taken in the morning is also useful in curing all types of stomach ailments. Boiled raw papaya, cures chronic diarrhoea. Mashed ripe papaya pulp when used on the affected parts half an hour before bath eliminates freckles and other blemishes of skin and imparts natural glow and luster. Fresh juice of raw papaya is also useful in pimples. Regular consumption of ripe papaya regulates menses and raw papaya as a salad with meal controls enlargement of liver and spleen of children. Papaya pickle is also helpful in curing the liver ailments. 10 to 12 drops of raw papaya juice with a spongy sugar candy for 10 to 15 days help in curing jaundice. Ripe papaya also helps in curing jaundice. Boiled water of papaya leaves, helps in cure of fever. Half-teaspoon ground seeds of papaya with water for 3 to 4 days help eliminates stomach worms. Consumption of ripe papaya regularly cures urinary problems. Eating ripe papaya half an hour before breakfast checks high blood pressure. Taking ripe papaya in the afternoon helps in curing of piles. Application of fresh juice of raw papaya on the affected parts cures skin ailments like eczema, ring worm and itching. Regular consumption of ripe papaya helps in improving lactation of breast feeding mother. Raw papaya as a salad with meals helps to increase breast milk. Regular consumption of ripe papaya cures chronic diarrhoea, habitual constipation and bleeding piles.

Mature papaya helps in contraction of muscle fibre on the womb and is thus beneficial in securing proper menstrual flow. It is especially helpful in case of cessation of menstruation due to exposure of the cold or due to fright in young unmarried girls. The whole papaya fruit is an excellent source of dietary fibre, which is also necessary for digestive health. Papaya pills are promoted for use as natural antacids, for ulcer relief and to relieve constipation. The skin of the fruit is considered to be the most potent part to be used for medicinal purposes. Papaya seed consists of a highly digestible protein which can be ground up and used to eliminate intestinal parasites. The seeds are soft enough to chew, they are very spicy and must be ground up and mixed with something or swallowed quickly with juice. About twenty seeds for about five days to eliminate most intestinal parasite effectively. Papaya bark is used as a toothache remedy and the flowers to treat bronchial infections. From centuries, teas made from the roots were used to expel

parasites and to alleviate bleeding piles, kidney colic and jaundice.

Papaya seeds are also useful for this purpose, they are rich in a substance called caricin which is a very effective medicine for expelling roundworms. The alkaloid carpaine found in the leaves has also the power to destroy or expel intestinal worms. They are given with honey. The juice of the raw papaya, being an irritant, is useful in several skin disorders. It is applied with beneficial results in swellings to prevent pus formation and in warts. Pimples, corns or an abnormal outgrowth of the skin and other skin diseases. The juice has a cosmetic property which, removes freckles or brown spots due to exposure to sunlight and makes the skin smooth and delicate. Papaya seeds paste is beneficial in skin diseases like ringworm.



Black seeds of papaya are highly beneficial in the treatment of liver cirrhosis causes by alcoholism, malnutrition, etc. Consumption of a table spoonful of juice obtained by grinding the seeds, mixed with ten drops of fresh lime juice, once or twice daily for about a month for remedy of this disease. For beneficial results, fresh juice of raw papaya mixed with honey can be applied with over inflamed tonsils for diphtheria and other throat disorders. Ripe papaya is highly valuable to cure in enlargement of the spleen. The skinned fruit should be cut into pieces and immersed in vinegar for a week. About 20 g of the preserved fruit should be consumed twice with meals in the treatment of this disease. Raw fruit slices with cumin seeds and pepper can also be used once daily to cure enlargement of the spleen due to malaria. Papaya fruit pulp and the dried latex are the basic component of many facial creams. The ripe papaya skin can be refrigerated and later used to wash face. The Java Island people have a clear skin which they credit to papaya. Papaya contains anti-cancerous properties and also helps in prevention of gall stones. 100 g of ripe papaya contains only 32 kcal. It contains comparative low calories which make this a favourite fruit of obese people who are eager to reduce the weight. Despite its sweetness, papaya fruit is not contraindicated in diabetes. Papaya latex is useful in respiratory disorders like cough, bronchitis and breathlessness. Mix some butter in the papaya juice and apply for quick drying and healing of chronic ulcers. Papaya leaves are very much useful to control dengue disease by increasing platelets in the blood.