

## **Medicinal Properties of lemon against diseases?**

Lemon is an important medicinal plant of the family Rutaceae. It is cultivated mainly for its alkaloids, which are having anticancer activities and the antibacterial potential in crude extracts of different parts (viz., leaves, stem, root and flower) of Lemon against clinically significant bacterial strains. Citrus flavonoids have a large spectrum of biological activity including antibacterial, antifungal, antidiabetic, anticancer and antiviral activities. Flavonoids can function as direct antioxidants and free radical scavengers, and have the capacity to modulate enzymatic activities and inhibit cell proliferation. In plants, they appear to play a defensive role against invading pathogens, including bacteria, fungi and viruses. Flavonoids are generally present in glycosylated forms in plants, and the sugar moiety is an important factor determining their bioavailability.

Lemon grows on small, thorny trees which reaches a height of 10 to 20 feet. The leaves of the lemon are dark green in colour and they are arranged alternately on the stem. The lemon has a white, fragrant flower with five petals. This particular flower comes from a lemon cultivar called 'Pink Lemonade'. The leaves of this cultivar are variegated and the fruit is striped. Lemons are oval citrus fruits with smooth porous skin. Some fruits have a pointed tip on the bottom of the fruit while other lemons are rounded at the base. Some kinds of lemons are quite larger than other lemon varieties and resemble elongated grapefruits. Some important therapeutical uses of lemon are following.

**Scurvy:** Lime is so famous as a cure for scurvy, the disease which is caused due to deficiency of vitamin-C and characterized by frequent infections with cough and cold; cracked lips and lip corners; ulcers in tongue and mouth; spongy, swollen and bleeding gums etc. odor due to presence of a large amount of vitamin-C and Flavonoids, both of which are class-1 anti oxidants, anti biotic and disinfectants.

**Digestion:** It is very useful in digestion. The acids of the lemon pulp break down of the macro molecules of the food.

**Constipation:** Primarily, the ample of acids present in lime helps clear the excretory system by washing and cleaning off the tracts, just like some acids are used to clean floor and toilets. Then the roughage in it is also helpful in easing constipation. But it is mainly due to high acids. An overdose of lime juice with salt also acts as an excellent purgative without any side effects, thereby giving relief in constipation.

**Peptic Ulcer:** In addition to vitamin-C, lime contains special compounds called Flavonoids (Limonoids such as LimoninGlucoside) which have anti oxidant, anti carcinogenic, anti biotic and detoxifying properties which help healing of peptic and oral ulcers.

**Respiratory Disorders:** The oil, containing Flavonoids and certain oils, extracted from lime is extensively used in anti congestive medicines such as balms, vaporizers, inhalers etc. due to presence of Kaempferol. Just scratching the peel of a lime and inhaling it gives immediate relief in congestion and nausea.

**Eye Care:** Vitamin-C again! Its anti oxidant properties protect eyes from aging and macular degeneration. Flavonoids help protect them from infections.

**Gout:** There are two main causes of Gout. While the first reason is accumulation of free radicals in the body; the second is accumulation of toxins, primarily uric acid. Now, limes can help you with both of these. It is a reservoir of anti oxidants & detoxifiers (vitamin-C & Flavonoids) which free radicals as well as detoxify the body.

**Gums:** The root causes of gum problems are deficiency of vitamin-C (Scurvy, which gives bleeding and spongy gums) and microbial growth. Sometimes, the ulcers and wounds from bones, hard objects etc. are also the causes. In all of these, limes can help you. Its vitamin-C cures scurvy, Flavonoids inhibit microbial growth and potassium and Flavonoids help heal ulcers and wounds.

**Piles:** Since lime helps to heal up ulcers and wounds in the digestive system and excretory system and gives relief from constipation too, it eradicates all the root causes of piles.

**Weight Loss:** A glass of warm water with a full-lime juice in it is an excellent weight reducer as well as a brilliant refresher and anti oxidant drink. The citric acid present in lime is an excellent fat burner. Just have two glasses a day and see the remarkable result within a week.

## REFERENCES

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