



## Nutritional value, uses and benefits of lemon

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The lemon, *Citrus limon* (L.), is a species of small evergreen tree in the flowering plant family Rutaceae, native to Asia. Citrus limon belongs to the family Rutaceae, Lemons are very high in vitamin C which protects against various diseases and contributes to a strong immune system. Lemon also contain phytochemicals flavonoids giving it a greater antioxidant boost. They also contain good amount of B-complex vitamins, like folate as well as minerals like calcium, iron, copper and potassium. The tree's ellipsoidal yellow fruit is used for culinary and non-culinary purposes throughout the world, primarily for its juice, which has both culinary and cleaning uses. The pulp and rind (zest) are also used in cooking and baking. The juice of the lemon is about 5 per cent to 6 per cent citric acid, with a pH of around 2.2, giving it a sour taste. The distinctive sour taste of lemon juice makes it a key ingredient in drinks and foods such as lemonade and lemon meringue pie.

### Nutritional value of lemon (Janati *et al.*, 2012) :

Lemons contain very little fat and protein. They consist mainly of carbohydrates (10%) and water (88-89%). A medium sized lemon only contains about 20 calories.

### Uses of lemon (Aronson, 2001):

– Lemon slices are served as a garnish on fish or meat or with iced or hot tea, to be squeezed for the flavorful juice.

– In Colombia, lemon soup is made by adding slices of lemon to dry bread roll that has been sautéed in shortening until soft and then sieved.

– Sugar and a cup of wine are added and the mixture brought to a boil and then served. Lemon juice, fresh, canned, concentrated and frozen, or dehydrated and powdered, is primarily used for lemonade, in carbonated beverages, or other drinks.

– It is also used for making pies and tarts, as a flavouring for cakes, cookies, cake icings, puddings, sherbet, confectionery, preserves and pharmaceutical products. A few drops of lemon juice, added to cream before whipping, gives stability to the whipped cream.

– Lemon peel can be candied at home and is preserved in brine and supplied to manufacturers of confectionery and baked goods.

– It is the source of lemon oil, pectin and citric acid.

	Fruit (fresh, peeled)	Juice (fresh)	Juice (canned, unsweetened)	Juice (frozen, unsweetened)	Lemonade (concentrate, frozen)	Peel (raw)
Calories	27	25	23	22	195	
Moisture	90.1 g	91.0 g	91.6 g	92.0 g	48.5 g	81.6 g
Protein	1.1 g	0.5 g	0.4 g	0.4 g	0.2 g	1.5 g
Fat	0.3 g	0.2 g	0.1 g	0.2 g	0.1 g	0.3 g
Carbohydrates	8.2 g	8.0 g	7.6 g	7.2 g	51.1 g	16.0 g
Fibre	0.4 g	Trace	Trace	Trace	0.1 g	
Ash	0.3 g	0.3 g	0.3 g	0.2 g	0.1 g	0.6 g
Calcium	26 mg	7 mg	7 mg	7 mg	4 mg	134 mg
Phosphorus	16 mg	10 mg	10 mg	9 mg	6 mg	12 mg
Iron	0.6 mg	0.2 mg	0.2 mg	0.3 mg	0.2 mg	0.8 mg
Sodium	2 mg	1 mg	1 mg	1 mg	0.2 mg	6 mg
Potassium	138 mg	141 mg	141 mg	141 mg	70 mg	160 mg
Vitamin A	20 I.U.	20 I.U.	20 I.U.	20 I.U.	20 I.U.	50 I.U.
Thiamine	0.04 mg	0.03 mg	0.03 mg	0.03 mg	0.02 mg	0.06 mg
Riboflavin	0.02 mg	0.01 mg	0.01 mg	0.01 mg	0.03 mg	0.08 mg
Niacin	0.1 mg	0.1 mg	0.1 mg	0.1 mg	0.3 mg	0.4 mg
Ascorbic acid	53 mg	46 mg	42 mg	44 mg	30 mg	129 mg



– It is much employed as a flavoring for hard candies. Cauliflower tend to turn brown with even the slightest cooking. You can make sure the white vegetables stay white by squeezing a teaspoon of fresh lemon juice on them before heating.

– Lemon water can also prep up your mood and relieve you from depression and stress.

– Lemon water can reduce phlegm and can also help you breathe properly and aids a person suffering with asthma

– Lemon water reduces the production of free radicals which are responsible for aging skin and skin damage. Lemon water is calorie free and an antioxidant.

**Benefits of lemon:** There are many benefits of consuming lemon. A few of them are discussed below:

– The benefit of consuming lemon early morning with a glass of lukewarm water is a remedial measure to weight loss and also detoxification.

– It helps in lowering stroke, risk, cancer prevention and maintaining a healthy complexion.

– It also help to prevent asthma.

– It also increasing iron absorption, rich in vitamin-C.

– Lemons help to strengthen the immune system and promote calcium production.

– Lemons also contain more potassium than an apple, which is particularly beneficial to the heart.

– It also help to reduce weight.

– Cleans your bowels, lemons helps to neutralize free radicals linked to aging and most types of disease, it is sour, warm, promoter of gastric fire, light, good for vision, pungent and astringent, lemon helps in prevention of kidney stones.

– Lemon is a diuretic – assists in the production of

urine which helps you to reduce inflammation by flushing out toxins and bacteria while also giving you relief from arthritis and rheumatism.

– Lemon contains potassium which controls high blood pressure and reduces the effect of nausea and dizziness.

– Lemon water can fight throat infections thanks to its antibacterial property. If salt water does not work for you, try lime and water for gargling.

– Lemon juice also stops bleeding gums and reduces toothaches, the lemon is always a helpful remedy for chills and fevers.

– Diluted lemon juice makes a safe and sane method of vaginal hygiene. Drinking lemon water and honey can assist your body's natural flow.

– Drinking dried lemon leaves that have been steeped in hot water twice daily can alleviate stomach cramps. Lemons are packed with vitamins and minerals, and their powerful constituents help to build up healthy enzymes in the liver, which help to detoxify any toxins in the bloodstream.

– The acidic content of lemons is good for speeding the rate of burning food particles in the stomach, thus boosting the metabolism.

– Lime juice and its oil are very beneficial for skin when consumed orally or applied externally.

#### References:

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