#FruitVeg4You

Nutritional Fact Sheet: Lemon

Nutritional and Dietary Information

Lemons are particularly valuable as a natural source of vitamin C. The juice of one lemon (about 50 ml) covers almost a third of the recommended daily intake of this vitamin. Moreover, the density in vitamin C (that is to say the vitamin C content per 100 kcal) is also one of the highest with 180 mg per 100 kcal. Its density in calcium, iron, and minerals in general is also high. Available at any time of the year, the lemon may appear in any menu. It can accompany as a refinement, and without unnecessary calories, fish fillets or seafood. It goes also very well with white cheeses and yoghurts, fruit compotes and fresh fruit salads. Finally, there are not a lot of drinks more refreshing with fewer calories than fresh water flavoured with lemon juice.

Principle characteristics

Like all other citrus fruits the lemon is a fruit with a remarkable high vitamin C content (52 mg per 100 g), which remains very stable over time. Protected by the thick skin and preserved by its acid environment, the vitamin C rate is found almost completely for several weeks after harvest. The vitamin C content of freshly squeezed lemon juice is substantially the same as that of the pulp (50 to 60 mg per 100 g), but in the juice vitamin C is in contact with the air, which means it is rapidly oxidized. Therefore, it is best to quickly use and consume the juice of the lemon. Vitamin C is accompanied by flavonoid compounds (naringosides, hesperidins), generally called “vitamin P”, which reinforce the physiological action of vitamin C and have a protective effect against blood capillaries. Finally, the lemon also provides a wide range of B vitamins and some vitamin E (0.8 mg per 100 g).

Being a very juicy fruit, the lemon contains about 90% water, in which various nutrients are dissolved. The lemon is much less rich in carbohydrates than other fruits, since one finds not more than 2.5 g per 100 g on average (in most fruits, the intake is generally between 8 and 10 g per 100 g). These are in equal parts glucose and fructose, with traces of sucrose. Its organic acid content is particularly high ranging from 3.5 to 7.2 g per 100 g (with an average of about 5 g per 100 g). It is basically citric acid, with small amounts of malic, caffeic and ferulic acid. These organic acids give the lemon a very marked sour taste. The proteins of the lemon do not exceed 1 g per 100 g. These proteins mostly constitute the cell membranes of the fruit. Lipids (fatty substances) are present at 0.4 g per 100 g. With an energy intake of 29 kcal (121 kJ) per 100 g, the lemon provides a particularly low energy level.

A broad sampling of minerals and trace elements is present in the lemon, which provides about 0.5 g per 100 g. Potassium is well ahead (153 mg per 100 g), with calcium (25 mg per 100 g) and iron (0.5 mg per 100 g) also being present at interesting levels. Traces of selenium, fluorine, iodine and boron are present at physiological doses and in a form which can easily be used by the human body. The fibres of the lemon represent approximately 2.1% of the total net weight. They are composed of cellulose and hemicellulose and form the frame of the cell membranes

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(representing two-thirds of total fibres) as well as pectin, which is especially abundant in the outer bark. In lemon juice, the fibres are virtually absent.

Nutritional Content

Components	(g)
Carbohydrates	2.50
Proteins	0.90
Lipids	0.40
Water	88.5
Fibres	2.10

Minerals	(mg)
Phosphorus	18.00
Calcium	25.00
Magnesium	16.00
Sulfur	12.00
Sodium	4.000
Iron	0.500
Copper	0.090
Zinc	0.100
Manganese	0.030
Nickel	0.020

Vitamins	(mg)
Vitamin C	52.00
Provitamin A	0.011
Vitamin B1	0.050
Vitamin B2	0.020
Vitamin B3 or PP	0.200
Vitamin B5	0.230
Vitamin B6	0.070
Vitamin B8	0.005
Vitamin B9	0.009
Vitamin E	0.800

Energy Intake	
KCalories	29.00