Cantaloupe (muskmelon) nutrition facts

Wonderfully delicious and unique musky-flavored cantaloupe or "muskmelon" is a member of the large *Cucurbitaceae* family. Some of the popular fruits and vegetables in the Cucurbita family include <u>squash</u>, <u>pumpkin</u>, <u>cucumber</u>, <u>gourd</u>, etc., and like its relatives, melons grow along the ground surface as a trailing vine.

Muskmelons thought to have originated either from India or ancient Persia or Africa. They grow best on well-draining sandy soil with good irrigation facility and require honeybees for adequate pollination. Melons, just as <u>mangoes</u>, <u>watermelon</u>, etc., are summer season fruits. Their season runs from April through August, when they are at their best.



Many varieties of cantaloupes grown all over the world. However, two common types that named after their place of origin have become popular in the western world. The **European cantaloupe** (Cucumis melo cantalupensis) derives its name from the Italian papal village of "Cantalup" and features lightly-ribbed, pale green skin that looks quite different from the North American cantaloupe. **Galia melon** and **charentais** belong to this category. **North American cantaloupe** (Cucumis melo reticulatus), famous in the United States and some parts of Canada, is named *reticulatus* due to its net-like (or reticulated) skin covering. *Honeydew melons* have sweet, characteristic pale green succulent flesh.

Yubari melon (Yubari king) is a special hybrid cultivar type grown in Yubari city in Hokkaido, Japan. Surrounded by mountains and well-drained volcanic ash soil, the produce commands special prize for its sweet mellow flavor.



In general, cantaloupe fruits feature round or oblong shape, measure 4.5- 6.5 inches in diameter and weigh 450 – 850 gm, often more than a kilo. Internally, its flesh color ranges

from orange-yellow to salmon, has a soft consistency and juicy texture with a sweet, musky aroma that emanates best in the completely ripe fruits. At its center, there is a hollow cavity filled with small off-white color seeds encased in a web of mucilaginous netting.

Health Benefits of Cantaloupe

- Wonderfully delicious with rich flavor, muskmelons are very low in calories (100 g
 fruit has just 34 calories) and fats. Nonetheless, the fruit is rich in numerous health
 promoting polyphenolic plant derived compounds, vitamins, and minerals that are
 absolute for optimum health.
- The fruit is an excellent source of **Vitamin-A**, (100 g provides 3382 IU or about 112% of recommended daily levels) one of the highest among cucurbita fruits. Vitamin-A is a powerful antioxidant and is essential for healthy vision. It also required for maintaining healthy mucosa and skin. Consumption of natural fruits rich in vitamin-A has been known to help protect from lung and oral cavity cancers.
- It is also rich in antioxidant flavonoids such as *beta-carotene*, *lutein*, *zeaxanthin*, and *cryptoxanthin*. These antioxidants have the ability to help protect cells and other structures in the body from oxygen-free radicals and hence; offer protection against colon, prostate, breast, endometrial, lung, and pancreatic cancers.
- Total antioxidant strength regarding oxygen radical absorbance capacity (ORAC) of cantaloupe melons is 315 µmol TE/100 g. The value for honeydew melon is 241 µmol TE/100 g.
- Zeaxanthin, an important dietary carotenoid, selectively absorbed into the retinal
 macula lutea in the eye where it is thought to provide antioxidant and protective UV
 light-filtering functions. It, thus, offers protection of eyes from "Age-related macular
 degeneration" (ARMD) disease in the elderly.
- It is an ideal source of electrolyte, potassium. 100 g fruit provides 267 mg of this
 electrolyte. Potassium is an important component of cell and body fluids and helps
 control heart rate and blood pressure. It thus offers protection against stroke and
 coronary heart diseases.
- The fruit also contains moderate levels of B-complex vitamins, such as niacin, pantothenic acid, and vitamin C, and minerals like manganese. Consumption of

foods rich in **vitamin-C** helps the human body develop resistance against infectious agents and scavenge harmful oxygen-free radicals. The human body uses manganese as a co-factor for the antioxidant enzyme, *superoxide dismutase*. Commercially, muskmelons are being used to extract an enzyme superoxide dismutase (SOD), which plays a vital role as a first-line antioxidant defenses in the human body.

Cantaloupe (Cucumis melo), Fresh, Nutritive Value per 100 g		
(Source: USDA National Nutrient data base)		
Principle	Nutrient Value	Percentage of RDA
Energy	34 Kcal	1.5%
Carbohydrates	8.6 g	6.5%
Protein	0.84 g	1.5%
Total Fat	0.19 g	<1%
Cholesterol	0 mg	0%
Dietary Fiber	0.9 g	2.25%
Vitamins		
Folates	21 μg	5%
Niacin	0.734 mg	4.5%
Pantothenic acid	0.105 mg	2%
Pyridoxine	0.072 mg	5.5%
Riboflavin	0.026 mg	2%
Thiamin	0.017 mg	1%
Vitamin A	3382 IU	112%
Vitamin C	36.7 mg	61%
Vitamin E	0.05 mg	0.5%
Vitamin K	2.5 mcg	2%
Electrolytes		
Sodium	1 mg	0%
Potassium	267 mg	6%
Minerals		
Calcium	9 mg	1%
Copper	41 µg	4.5%
Iron	0.21 mg	2.5%
Magnesium	12 mg	3%
Manganese	0.041 mg	2%
Zinc	0.18 mg	1.5%
Carotene-a	2020 μg	
Crypto-xanthin-β	1 μg	
Lutein-zeaxanthin	26 µg	

Selection and storage

Cantaloupes best grow during the summer months. In the markets, try to buy organically produced muskmelons since they are richer in taste as well as nutrients.

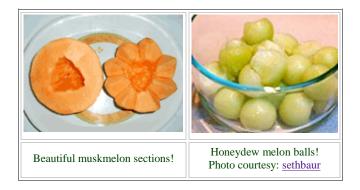
Often, it could be difficult to judge the ripeness and flavor without checking out a wedge section of the melon. Look for one that weighs heavy for its size with a firm rind that is neither overly shiny nor lusterless, without any cuts or bruises on the surface, which might have occurred while transporting the fruit.

At home, place them in cool, well-ventilated place. Cut sections, however, should be kept in the refrigerator.

Preparation and serving methods

Cantaloupe outer surface may harbor harmful *salmonella* bacteria, especially at areas of minor cracks and cuts. Therefore, wash the whole fruit in cold running water thoroughly before consumption.

Depending on the size you desire, the fruit can be sliced, cubed *or* scooped into balls.



Here are some serving tips:

- Eat fresh cantaloupe as it is without any additions to experience its delicious, natural taste.
- The fruit sections are a great addition to fruit salad.
- Jam, sorbet, and juice are some nutritious and delicious items you can prepare with muskmelon.
- Add cantaloupe sections in the desserts, with ice-cream, or custard.

Safety profile

Muskmelons have no known reported cases of allergic reactions and may be safely eaten during pregnancy and in nursing mothers. However, being a member of Cucurbita, some fruits may carry cucurbitacin toxin. For the same reason, avoid unripe/bitter tasting melons.

Further Reading and Resources:

- 1. <u>USDA National Nutrient Database.</u>
- 2. Stanford School of Medicine Cancer information Page- Nutrition to Reduce Cancer Risk.
- 3. Muskmelon-<u>University of Kentucky</u> -PDF.
- 4. Yubari melon-Japan Agricultural cooperative- pdf.