

NUTRITIONAL HEALTH BENEFIT OF COCONUT (*COCOS NUCIFERA*) WATER

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ABSTRACT

Coconut is one of the most valuable foods known to humankind, and the various edible products of coconut palm only enhance the importance of this remarkable tree, and it is widely distributed in the tropics. This paper gives an insight into the nutrition and health benefits derived from coconut water. The lauric acid present in coconut water has antifungal, antibacterial, and antiviral properties, which boost the body's immune system. It improves digestion and absorption of other nutrients. The potassium and magnesium benefit blood pressure and heart functions. Above all, it contains lower calories.

Keywords: Coconut water, Antifungal, Antibacterial, Antiviral properties.

INTRODUCTION

According to Ihekoronye and Ngoddy [1], the scientific name of coconut is *Cocos nucifera*. Early Spanish explorers called it Cocos, which means, "Monkey face" because the three indentations (eyes) on the hairy nut resemble the head and face of a monkey *nucifera* means nut bearing.

Coconut provided a nutritious source of meat, juice, milk, and oil that has fed and nourished populations around the world for generation.

Coconut juice is highly nutritious and rich in vitamins and minerals. It is classified as a functional food because it provides many health benefits beyond its nutritional content [3]. Tender coconuts are one of the richest sources of electrolytes, chlorides, potassium, and magnesium with some amount of sugar and protein. The potassium content benefits blood pressure and heart function. Coconut water is also found to have dietary fiber, manganese, calcium, riboflavin, and Vitamin C.

Vita Coco 100% young green coconut water (juice)

Young green coconut water is a perfect medium for fermenting the different probiotic cultures from the body ecology diet as well as having many benefits on its own as documented below. Once fermented the coconut water becomes a powerful probiotic food with numerous health benefits.

Vita Coco is 100% young green coconut water with nothing added or taken away. This unique product the same as you would get from a fresh young green coconut known throughout the world for its health benefits.

Some information about natural coconut water from the young green coconut, "Coconut" water is the very stuff of nature, biologically pure, full of natural sugars, salt, and vitamins to the ward off fatigue and is the next wave of energy drinks. But "Natural" according to Mortin Satin Chief of the United Nation's Food and Agriculture Organization. Coconut water contains medium chain triglycerides, which actively promote weight loss.

- Coconut water is more nutritious than whole milk - less fat and no cholesterol
- Coconut water is more healthy than orange juice - much lower calories
- Coconut water is better than processed baby milk - it contains lauric acid, which is present in human mother's milk
- Coconut water is naturally sterile - water permeates though the filtering husk!
- Coconut water is a universal donor - its identical to human blood plasma

- Coconut water is a natural isotonic beverage - with the same level of electrolytic balance as we have in our blood. It is the fluid of life, so to speak. In fact, during the Pacific War of 1941-1945, both sides in the conflicts regularly used coconut water - siphoned directly from the nut - to give emergency plasma transfusions to wounded soldiers.
- Coconut water contains more potassium (at about 294 mg) than most sports drinks (117 mg) and most energy drink.
- Coconut has less sodium (25 mg) where sports drinks have around (41 mg), and energy drinks have about 200 mg!
- Coconut water has 5 mg of natural sugars where sports and energy drinks range from 10 to 25 mg of altered sugars. Data are based on a 100 ml drink.

All natural coconut water from the young green coconut

- Want to rehydrate?
- Raise your metabolism and boost your immune system?
- Cleanse your digestive tract?
- Detox and fight viruses?
- Balance your pH and reduce risk of cancer?

Coconut water

Coconut water has been used for rehydration and as a health and beauty aid in tropical regions around the world for countries. Many people know of the healing benefits of coconut oil. Coconut water now joins the pantry's cabinet. Coconuts are antiviral, antifungal, and antimicrobial. Other uses are as follows: Mix coconut water with other juices for a tasty blend that increases the health benefit and decreases the amount of calories and sugars in your drink. Boost the benefits and cut the sugar of the fruit juice by adding Vita Coco coconut water. For your health, coconut water is as follows:

- Rehydrates naturally, free of added sugars or chemicals
- Lowers arterial pressure
- Eliminates swelling in hands and feet
- Normalizes the intestinal function and raises metabolism
- Relieves spasms and stomach pain
- Ease burns
- Heals damage induced by antibiotics and toxins in the digestive tract [2].

Health benefits

Indigenous people of tropical countries relied on natural plants for their medicine young coconut juice is literally a well-supplied medicine chest that comes in its own container and is used in folk healing for a number of ailment: Relieving fevers, headaches, stomach upset, diarrhea, and dispensary. The juice is also given to strength the heart and restores energy to the ill. Pregnant woman in the tropics eagerly drinks large

quantities of young coconut juice because they believe it will give their babies strength vitality.

Kabara, Ph.D, Professor Emeritus from Michigan State University writes, "Never" before in the history of man is it so important to emphasize the value of lauric acid. The lauric acid present in coconut water has antifungal, antibacterial, and antiviral properties, which boost the body's immune system. The medium chain fats in coconut oil are similar to fats in mother's milk and have similar nutritive effect because of its potent antiviral and antibacterial properties, thereby fighting against yeast fungi and other viruses such as measles, herpes simplex, and influenza.

It also improves digestion and absorption of other nutrients including vitamins, minerals, and amino acids [5].

Coconut oil

Coconut oil for health and vitality antiviral, antimicrobial, and antiobesity coconut oil has a unique role in the diet as an important physiologically functional food. The health and nutritional benefits that can be derived from consuming coconut oil have been recognized in many parts of the world for centuries. A review of the diet/heart disease literature relevant to coconut oil clearly indicates that coconut oil is at worth neutral with respect to atherogenicity of fats and oil and, in fact, is likely to be a beneficial oil for prevention and treatment of some heart disease. In addition, coconut oil provides a source of antimicrobial liquid for individual with compromised immune systems and is a no promoting fat with respect to chemical carcinogenesis.

Physiochemical characteristics of coconut oil

Chemical properties and chemistry

In the 1020s and 1930s, it was discovered that coconut oil differed from other fats and oils in that it was found to be composed predominantly medium chain triglycerides (MCTs). The composition of fatty acids in virgin coconut oil (VCO) as determined by gas-liquid chromatography includes saturated fats: Lauric acid, myristic acid, palmitic acid, linoleic acid, etc. VCO is colorless, free of rancidity and has specific fresh natural coconut aroma, etc. MCTs found in VCO are considered essential nutrient for infant according to Johnson and Cotter [8].

Antioxidant and antistress activity

A study carried out by Yaep *et al.* [7] evaluated the antistress and antioxidant effects of VCO *in vivo*. VCO has been reported to be rich in polyphenols and these contribute to the increased antioxidant enzyme levels, which, in turn, reduces inflammation and lipid peroxidation in VCO treated in mice. Restoration of brain antioxidant levels hinders further neuronal damage, thereby preventing subsequent monoamine depletion. The potential of VCO to prevent exercise and chronic cold restraint stress-induced damage and to restore the antioxidant balance was demonstrated, and this was attributed to the polyphenols and medium chain fatty acids present in VCO.

Anti-inflammatory, analgesic, and antipyretic activities of VCO

A study conducted by Intahphuak *et al.* [6] evaluated the anti-inflammatory, analgesic, and antipyretic effects of VCO in rats using ethyl phenyl. Propiolate-induced ear edema and carrageenan and arachidonic acid-induced paw edema. VCO was found to possess moderate anti-inflammatory effects. Furthermore, there are anticancer effects on coconut oil according to Sylianco [9].

CONCLUSION

Coconut juice does not only provide a refreshing drink. It has been observed that it has a lot of health and nutritional benefits and as such should not be overlooked.

REFERENCES

1. Ihekoronye AI, Ngoddy RO. Integrated Food Science and Technology for the Tropics. London and Basingstoke: Macmillan Published L.T.D.; 1985.
2. Available from: <http://www.e-f-t.co.uk/younggreencoconutwater.html>.
3. Available from: http://www.coconutresearchcenter.org/coconut_juice.html.
4. Available from: <http://www.geology.wr.usgs.gov/docs/usgsnes/province/coloplatt.html>.
5. Available from: <http://www.vegparadise.com/highestperch58.html>.
6. Intahphuak S, Khonsung P, Panthong A. Anti-inflammatory antipyretic activities of virgin coconut oil. *Pharm Biol* 2010;48:151-7.
7. Yaep SK, Beh BK, Ali NM, Yusof HM. Antistress and antioxidant effects of virgin coconut oil *in vivo*. *Exp Ther Med* 2015;9:39.
8. Johnson RC, Cotter R. Metabolism of medium chain triglyceride lipid emulsion. *Nutr Int* 1996;2:150-8.
9. Sylianco CY. Anticarcinogenic effect of coconut oil. *Coconut Stud* 1987;12:89-102.