

BY: DR VIGNESHWARA VARMUDY

COCO-WATER: THE NEXT BEST CANNED DRINK

Tender coconut water has wide range of health and nutritional benefits. Hence, its demand has been increasing in recent years not only in India but all over the world.



Tender coconut

Coconut palm (*Cocos nucifera*) is one of the most useful palms in the world. Owing to multifarious uses, it is aptly referred to as *Kalpavriksha*—the tree of eternal bliss.

India is the third-largest coconut producing country in the world with an estimated area of 1895 thousand hectares and annual produc-

tion of 15,729 million nuts. Philippines stands first while Indonesia is second in its production. In India, Kerala ranks first in production followed by Tamil Nadu, Karnataka and Andhra Pradesh. These states account for more than 90 per cent of the area and production of coconut in India. However, it is also cultivated with varying success in other states like Assam, Goa, Gujarat, Ma-

harastra, Nagaland, Orissa, Tripura, West Bengal, Andaman and Nicobar Islands, Lakshadweep and Puducherry.

Coconut and its products are demanded all over the country. It is used for drinking at the tender nut stage, as seed nut, for edible household uses, religious and social purposes and for value addition in different forms. Of the total production, around 20 per cent is used for consumption in the form of tender coconut. The demand for tender coconut has been increasing over years because of its health benefits.

Health benefits of tender coconut water

Tender coconut water is a natural isotonic beverage with the same level of electrolytic balance as we have in our blood. During the Pacific war of 1941-45, coconut water siphoned directly from the nut was used to give emergency plasma transfusions to wounded soldiers.

Tender coconut water has wide range of health and nutritional benefits, hence its demand has been increasing in recent years not only in India but all over the world. There are numerous medicinal and health benefits of tender coconut water:

It hydrates the body. It is an isotonic solution which replaces the

Table I
**Analysis of
Tender Coconut Water**

Descriptions (per cent)	Tender coconut water
Total solids	6.5
Reducing sugars	4.4
Minerals	0.6
Protein	0.01
Fat	0.01
Acidity (mg)	120.0
Potassium (mg)	290.0
Sodium (mg)	42.0
Calcium (mg)	44.0
Magnesium (mg)	10.0
Phosphorous (mg)	9.2
Iron (mg)	106.0
Copper (mg)	26.0

Source: Satyavati Krishnankutty (1987)

fluids and minerals that the body loses during physical activities. This is the main reason that athletes drink coconut water so as to replace the minerals and fluids that they lose.

Relieves urinary problems. Consuming tender coconut water on a regular basis can reduce urinary problems. People who suffer from strangury, polyurea and other urinary ailments are advised to drink it to relieve the symptoms.

Kills intestinal worms. Drinking coconut water with one teaspoon of olive oil for three days is known to kill worms and clear the stomach resulting in better digestion.

Breaks kidney stones. People with kidney problems such as stones are advised to drink coconut water regularly along with other prescriptions. It helps to break kidney stones making it easier to push these out.

It is an antibacterial. Tender coconut water contains monolaurin—an antiviral, antibacterial and antiprotozoal monoglyceride—which is used to kill lipid-coated viruses such as HIV, Herpes, Cytomegalovi-

rus and various pathogenic bacteria.

Controls vomiting. People suffering from typhoid or malaria fevers—which are known to induce vomiting—are advised to drink tender coconut water to settle the stomach. It is also a good remedy for a hangover.

During pregnancy. Doctors recommend drinking tender coconut water during pregnancy due to its wide range of nutritional benefits.

Prevents dehydration. Tender coconut water helps to prevent dehydration and relieves exhaustion by replenishing the natural salts lost by the body. It is widely used in tropical countries as a means for oral rehydration needed during diarrheal attacks.

Prevents prickly heat. Application of tender coconut water on the body prevents prickly heat and summer boils. It is also useful in subsiding the rashes caused by small-pox, chicken-pox, measles, etc.

Provides vitamins. Tender coconut water helps in curing malnourished people by providing them the required dose of vitamins and minerals.

Demand for tender coconut

Tender coconut water is rich in vitamins, minerals and proteins. The harmful effects of synthetic drinks on human health have induced health-conscious consumers worldwide to go for natural drinks like tender coconut water.

Within India the demand for tender coconut has been increasing over the years. Of the total production of coconut in India, nearly 20 per cent is harvested in tender form, which was only 5 per cent in 2000. According to a rough estimate, at present about 3200 million tender coconuts are consumed annually in India.

In a metro city like Mumbai, the annual tender coconut turnover,

handled by some 40-50 wholesalers is estimated to be around Rs 750 million. At present, along with the roadside marketing, several international agencies are also involved in its trade. Jain Agro Food Products has a branded tender coconut water called 'Coco Jal.' Other brands available are 'Tender Coco' by Sakthi, 'Merriba' by Chaitanya Food Products, 'Coco-Zing' by Fortune Beverages and 'Ben-Fresh' by West Bengal Awadhoot. All these products are being sold in value added form either in pouches or in aluminium cans. On the other hand, road side traders are selling it in fresh form.

As far as fresh tender coconut trade in India is concerned, the major export originates from Mandya and Tiptur, Karnataka, Mangrol, Gujarat and Pollachi, Tamil Nadu. This trade is mostly under the control of middlemen who handle 75 per cent of the entire tender coconut water trade in the country.

Measures to promote the trade

Technology for preservation and packing. The Coconut Development Board in collaboration with the Defence Food Research Laboratory, Mysore has developed a technology for preservation and packing of tender coconut water in pouches and aluminium cans without loss of its inherent qualities and taste. The keeping quality of this product is



Table II
All India Estimates of Area and Production of Coconut

States/ union territories	2007-2008 (revised)			2008-2009 (final)		
	Area ('000 hectares)	Production (million nuts)	Productivity (nuts/ha)	Area ('000 hectares)	Production (million nuts)	Productivity (nuts/ha)
Andhra Pradesh	101.32	1119.26	11,047	104.00	970.00	9327
Assam	19.00	136.00	7158	18.80	147.10	7824
Goa	25.50	127.60	5004	25.61	128.18	5005
Gujarat	16.40	138.30	8433	15.98	157.42	9851
Karnataka	405.00	1635.00	4037	419.00	2176.00	5193
Kerala	818.80	5641.00	6889	787.77	5802.00	7365
Maharashtra	21.00	175.10	8338	21.00	175.10	8338
Nagaland	0.90	0.20	222	0.92	0.55	598
Orissa	51.00	275.80	5408	51.00	275.80	5408
Tamil Nadu	383.37	4968.20	12,959	389.60	5365.00	13,771
Tripura	5.80	11.40	1966	5.80	11.40	1966
West Bengal	28.60	355.50	12,430	28.60	355.50	12,430
A & N Islands	21.60	80.60	3731	21.69	82.00	3781
Lakshadweep	2.70	53.00	19,630	2.70	53.00	19,630
Pondicherry	2.20	26.60	12,091	2.10	30.70	14,619
All India	1903.19	14,743.56	7747	1894.57	15,729.75	8303

Source: Directorate of Economics & Statistics, Ministry of Agriculture, government of India

three months under ambient conditions and six months under refrigerated conditions.

Transfer of technology. The Coconut Development Board has transferred the technology for setting up industries. Jain Agro Food Products, Karnataka, Sakthi Coconut Products, Tamil Nadu, Chaitanya Food Products, Kerala, Fortune Beverages, Gujarat, West Bengal Awadhoot, West Bengal and Anu Coco Food Products are some players who have already established their units and entered in the domestic as well as foreign markets.

Food and Agriculture Organisation's interest. The United Nation's Food and Agriculture Organisation (FAO) has come up with cold preservation technology for bottling tender coconut water. This process helps coconut water to stay fresh from ten days to three weeks under refrigeration. This will help to meet domestic retail markets and allow export to developed countries where

good-quality tender coconut water is in demand.

Incentives from the union commerce ministry. The union commerce ministry in its recent foreign trade policy has decided to provide incentives to packaged tender coconut water, which will give a boost to its exports. Packed tender coconut has been included in the focus product scheme and made eligible for 2 per cent incentive.

Exporters entry into the global market. Indian tender coconut water exporters are already in the foreign market with tender coconut water in aluminium cans.

The road ahead

These days packed tender coconut water is a thirst drink of many developed countries such as the US, European Union and ASEAN countries. There is an emerging market for the same in Latin America, South America, Caribbean, Canada, Africa,

Germany, etc. The leading exporters to the US and European markets are Malaysia, Singapore, Vietnam and Thailand.

India is exporting a small volume of tender coconut water to some of the Asian countries. Recently, the Coconut Development Board has identified four regions of Russian Federation, Germany, America and West Indies as focus area to promote the trade of tender coconut water.

As a whole the demand for tender coconut water is increasing both in the internal and external markets. However, there is the need to address the problems like harvesting of tender coconut, marketing, problem of middlemen, transport, etc. The Board should develop high-yielding dwarf varieties to improve the market. To solve these problems a planned strategy is needed without any delay. ■

The author is from department of economics, Vivekananda College, Puttur, Karnataka