

Coconut Oil in A Nutshell: How BCC Lanka Limited preserves the Lankan touch in edible coconut oil products

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Can you tell us about the products your organization currently manufactures?

Our products are mainly centered on edible oil, soap, detergents and disinfectant. The types of edible oil products that we manufacture are white coconut oil and RBD coconut oil.

How do you obtain the raw material for those products? Are they 100% local raw material?

BCC currently does not have an oil mill; it used to own one, however its operation was halted following the lack of raw material (copra). Hence, we purchase coconut oil from a selected number of local oil mills, which are ideally located near coconut plantations and satisfy the standards followed by BCC. These standards include the storing conditions of copra, maintenance of oil storage tanks, cleaning of machinery, environmental factors and quality parameters. Different quantities are purchased each week as per the requirement.

100% local raw material is employed for the manufacture of our products, and mixing is prohibited to ensure unadulteration. We confirm this by testing for random samples at least twice or thrice a week. Earlier, we didn't check for aflatoxins, but ever since the issue regarding aflatoxins came to light, we test for them by sending samples batchwise to SGS. Oil which has a level well below the maximum limit of permissible aflatoxins, is then chosen for further operations. We, at BCC, always try to maintain our standards above those available in the market.

What are the challenges faced in the edible oil market today due to the low productivity caused by pests and diseases?

There is a drastic decline in the harvest and the size of the coconut fruit is smaller compared to those in the olden days, thus causing the price of a coconut to increase over the years. Earlier, oil mills used to purchase the

coconut fruit for its size; now they purchase according to its number, since there aren't any significantly larger coconut fruits available. Crop diseases and infestations are the major causes for this phenomenon, which results in a low harvest.

Nowadays people try to avoid using too much cooking oil due to the fact that cardiovascular diseases have become quite common. What are your thoughts on this?

Coconut oil comprises 92% saturated fat out of which 62% are medium chain fatty acids and 30% are long chain fatty acids. 7% of unsaturated fat constitutes the rest. Cholesterol is absent in coconut oil, however repeated use of the same cooking oil might stimulate its formation, particularly when reusing it multiple times. Hotel kitchens use their cooking oil one time and discard it, without reusing the same oil over and over again. However, certain restaurants, eateries and street vendors purchase this discarded oil for a low price and use it for their food items, repeatedly. Upon the repeated use of this oil, particularly in deep frying, oxidized products are being formed. Consumption of food containing this oxidized fat may contribute in the risk of developing cardiovascular diseases.

Coconut oil helps maintain the LDL (Low Density Lipoprotein), which is considered as "bad cholesterol" and HDL (High density Lipoprotein) levels, which is considered as "good cholesterol", in the human body. It is a natural antioxidant and shows anti-bacterial, anti-viral and anti-fungal properties.

Can you explain briefly how you improve the shelf life of cooking oil and fats?

Normally, in BCC, we are focused on maintaining the shelf life for a longer period of time. Generally, shelf life decreases upon increasing rancidity of the oil. Hence, by preventing rancidification, we can improve shelf life. Exposure of the stored coconut oil to air and

sunlight is kept at a bare minimum, and in addition, the absence of impurities is vital. One common practice to remove impurities is filtration of the oil whilst some manufacturers add preservatives. However, instead of adding preservatives, BCC employs the RBD (refined, bleached, and deodorized) process to increase the shelf life of edible coconut oil. The shelf life of RBD oil is found to be twice than that of normal coconut oil.

What would you expect from a fresh graduate or food chemist working in your organization?

We expect all our employees to follow the standard procedures involving product manufacture, from maintaining the necessary quality parameters. They should familiarize themselves and have a sound

knowledge on the whole manufacturing procedure, from obtaining the raw material after checking its quality and releasing a product to the market following the standard procedures of quality checking. Even though our organization is not SLS certified, we follow the standards and maintain the necessary quality parameters defined by SLSI.

What are the future prospects of your organization?

We hope to supply more coconut-related products to the market. We have already submitted our proposals to commence the manufacture of coconut water and coconut milk.

Mr. Jayantha Wickramasinghe obtained his GIC qualification from the College of Chemical Sciences and is currently reading for his M.Sc. in Food Science and Technology at the University of Sri Jayawardenapura. He has been working at BCC Lanka Limited since 2006, and currently serves as the Acting Production Manager and Assistant Quality Controller.