



Uses of Coconut Oil for Nutrition and Health in Sri Lanka

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Coconut is one of the most important plantation crops grown in Sri Lanka covering an extent of about 394,000 ha or 20% of the total agricultural land area. The major growing areas are in the North Western province and part of the Western province constituting the coconut triangle, totaling 54.4% of the total area. The rest of the coconut growing areas are located in the Southern province and non-traditional areas of the Eastern and Northern provinces. The total annual production varies from 2900 – 3000 mn nuts. The annual domestic consumption is about 70% amounting to about 2000 mn at per capita consumption of 116 nuts. Coconut is a livelihood crop of Sri Lankans. Coconuts play a major role as food providing 70% fat, 15% calories and 5% proteins in the food basket of Sri Lankan people. Number of value added coconut products are exported annually contributing 1% to the GDP. The total foreign earnings from these exports amounted to Rs. 48 billion in 2013.

Coconut oil is the main vegetable used in Sri Lanka. The annual production of coconut oil is about 50-60 MT, although the total annual requirement is 165,000 – 170,000 MT. To meet the deficit about 150,000- MT of vegetable oils, mainly palm oil is imported annually at a cost of about 20 billion US dollars.

Sri Lanka produces different types of coconut oil which are used as edible oil. Most common is the coconut oil extracted by crushing and pressing dried copra. The traditional coconut oil is produced in homes in rural areas where coconuts are scraped and oil is extracted. VCO refers to the oil that is extracted from fresh mature coconuts by mechanical or natural means with or without the use of heat and without chemical refining. VCO which is a new product has created tremendous impact in the coconut oil trade in Sri Lanka and abroad. Already there exist 1500 oil mills concentrated in the coconut triangle producing VCO. Due to the demand for VCO more entrepreneurs are investing on modern machinery for producing VCO mainly for export. A further development is the production of organic VCO which claims health benefits due to the non-use of chemicals in cultivation. Organic VCO is certified by international certifying agencies to maintain organic integrity. In Sri Lanka, several oil mills

have diversified into truly organic VCO production units. As evident from export data, international demand is increasing for VCO and Sri Lankan exports have nearly doubled from 3976 – in 2013 to 7278 MT in 2014. The main buyers are western countries such as USA, Canada, UK, France, Belgium, Germany, Pakistan, Japan, Australia and New Zealand.

Coconut oil is also known as a lauric oil in trade as it contains 44 - 51% lauric acid, containing 92% saturated fatty acids and these medium chain triglycerides in coconut oil are also easily digested than other types of cooking oils. The growing demand for VCO/organic VCO is due to the high fibre and nutrient content and that makes coconut oil a truly remarkable food and medicine. It is the traditional cooking medium in the households because of its intrinsic qualities such as taste, stability, shelf life and functionality. Only sources of medium chain triglycerides are found in coconut and palm oil kernels. Due to this they are used extensively in cosmetics and in the drug industry to treat more than 100 diseases.

Many researchers have also shown that coconut oil can reduce the risk of atherosclerosis, heart diseases, cancer, diabetes and other neurologically degenerative diseases such as Alzheimer's. However, the effect of consumption of CO/VCO and other coconut products on these diseases have not been clinically proved. Therefore, the Coconut Research Institute has initiated a series of clinical trials jointly with the local universities to investigate the effect of CO/VCO on heart diseases, diabetes and Alzheimer's.

The government has established quality control mechanisms to maintain high standards of exportable CO/VCO through Sri Lanka Standards Institute (SLSI) and GMP has been made compulsory for all mills. A separate HS code has been opened for VCO exports and a differential tax system introduced. The major constraints of the oil industry are inadequacy of raw materials for different kernel based industries and competition for coconuts between DC and oil millers, lack of training in entrepreneurial skills and exposure to new technologies, limited mill modernizing, marketing research and meager investment in research. ■