



HEART FRIENDLY VEGETABLE OIL (C-HEART™)

TECHNOLOGY DESCRIPTION

The technology is a dietary product, named C-heart™ that substitutes unhealthy fat and maintains functionality needed in wide range of products.

TECHNOLOGY FEATURES

The C-heart™ oil contains superior phenolic compounds with balanced fatty acid composition that promotes healthy heart and longevity. It is an antioxidant, rich in natural fat obtained from the *Canarium odontophyllum* Miq. fruit that is available locally. Consumption of C-heart™ favorably increases the good cholesterol (HDL) and reduces malondialdehyde (MDA) in plasma and high cholesterol individuals. Comparison of the C-heart™ oil with the palm oil indicates that it is equally stable and has similar oil composition. It also contains higher antioxidant when compared to olive oil. Overall, the C-heart™ is a better choice for a healthy lifestyle. It is suitable for consumption for all ages.

ADVANTAGES

- Locally available raw material or fruit to produce oil
- Cost of production is lower with utilization of local fruits
- Promotes a healthy lifestyle

INDUSTRY OVERVIEW

Prospect: Food and Beverage Industry

Led by developing countries, global vegetable oil production is expected to increase by over 30% by 2020. In Malaysia and Indonesia, combined palm oil output will expand by almost 45%, raising their share in global output to 36%. Other major expected sources of vegetable oil production growth are China, Argentina, the EU and Brazil. Regarding vegetable oil exports, the combined share of Indonesia and Malaysia in total exports should climb to 68% by 2020. Developing countries in Asia led by India and China should account for almost 50% of global vegetable oil imports in 2020.

Canarium odontophyllum can produce C-heart, an antioxidant rich natural fat with cardio-protective effect. The prospect of the product is to be a new source of healthy vegetable oil for home and industrial use, and also as a specialty oil to be added in pharmaceutical and cosmeceutical products. The total number of households as of 2014 stands at 7 million with one household on average comprised of 4.3 members. In addition, the 2011 census highlighted that in Malaysia, there were 142,721 SMEs in the Food and Beverage services sub-sector; 6,016 SMEs in the Food and Beverages manufacturing sub-sector; while another 318 SMEs in the Basic Pharmaceutical Products and Pharmaceutical Preparations.



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