

### Miracle Oil

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#### SUMMARY

Virgin coconut oil is a new high-value-added product of coconut oil. The extraction of virgin coconut oil from coconut kernels is a crucial stage in the marketing of these products. There are a variety of extraction procedures, with cold and hot extraction being the most common. The hot extractions are carried out by pressing clean, crushed, and fresh coconuts to obtain coconut milk, which is then heated at a high temperature, potentially removing the beneficial micronutrient. In the cold method, coconut oil is extracted by destabilising the coconut milk emulsion without the use of heat, such as fermentation, cooling and thawing, centrifugation, and enzymatic treatment.

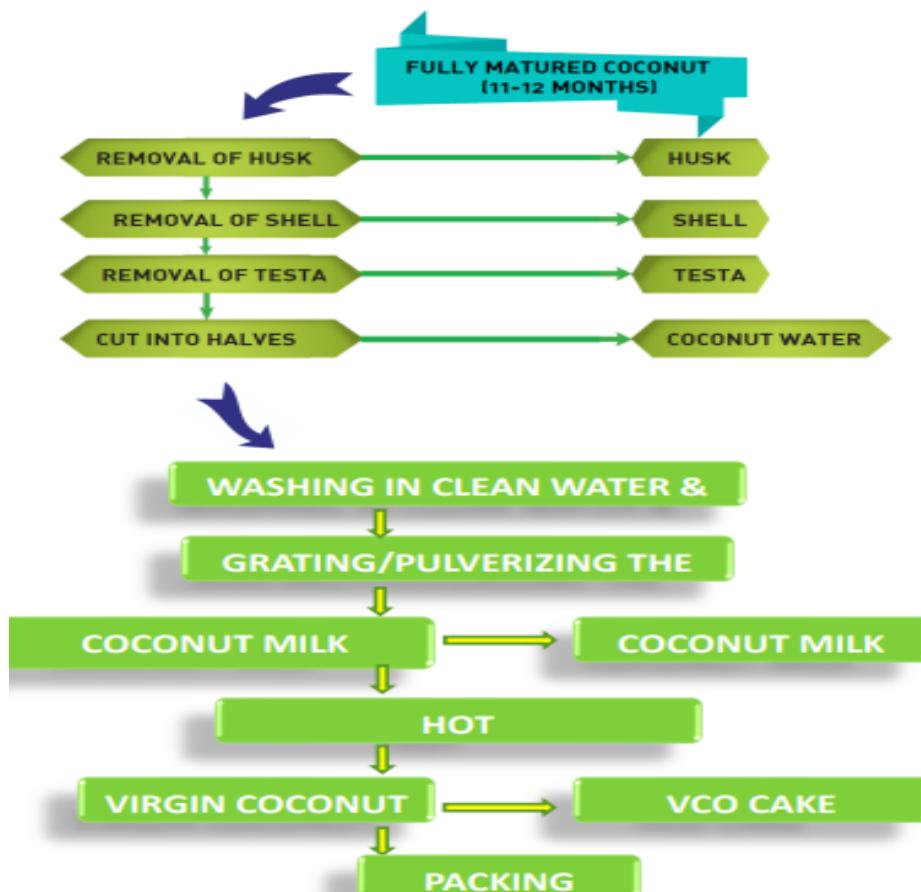
#### INTRODUCTION

There are two types of coconut oil: refined, bleached, and deodorized copra oil (RCO) and virgin coconut oil (VCO). In essence, VCO is produced directly from the fresh endosperm of the coconut while RCO is obtained from copra and requires further processing using chemical treatment and heat. Both RCO and VCO have similar fatty acids profiles. However, VCO retains a higher content of bioactive compounds such as tocopherols, sterols, and polyphenols as refining removes a portion of these compounds.

“Virgin coconut oil (VCO) is defined as the oil resulting from the fresh and mature kernel of the coconut (*Cocos nucifera L.*) through mechanical and natural means, either with the use of heat or not provided that it does not lead to alteration or transformation of the oil”. (Mansoor *et al.*, 2012). Virgin Coconut Oil Ideal fat next only to mother’s milk due to its unique composition of saturated fatty acids Medium chain length, predominantly lauric acid.

#### Contains :

- A. Medium chain fatty acids
- B. Natural vitamin-E
- C. Provitamin-A
- D. Polyphenols
- E. Phytosterols
- F. Lauric acid



**Fig. 1: Process flow chart for the production of virgin coconut oil**

**Methods of virgin coconut oil extraction :****Fermentation method**

Milk and distilled water-1:1 (Mixture)  
 Inoculums- (*Saccharomyces cerevisiae*)-2.0 g/l  
 Made homogenous by vigorous mixing  
 Left stand for 36 hrs at room temperature  
 Then, upper layer oil removed and filtered

**Chilling and Thawing method**

Milk centrifuged at 3000 RPM for 10 min  
 Chilling at 5 °C for 24 hrs  
 Chilled cream separated and thawed in water bath at 50 °C

**Enzymatic treatment:**

Papain enzyme at 0.1 % (w/w) of the milk  
 Mixture made into homogenous solution by stirring  
 It was left to stand for 3 h at 55 °C (optimum temperature for papain)  
 Mixture centrifuged at 4900 rpm for 25 min to obtain oil

**Fresh dry method:**

White meat shredded and dried in oven at 35 °C for 48 hrs.  
 Meat homogenously dried and frequent turning  
 After drying it, screw pressed for oil extraction  
 Then filtered in whatman filter paper No. 1. (Ravindra Kumar Agarwal *et al.*, 2017)

**Health Benefits Of Virgin Coconut Oil:**

There are many miraculous benefits of virgin coconut oil and it is total bliss for people who want to remain healthy. Here are some of the benefits of virgin coconut oil adding in your regular diet:

- Virgin coconut oil helps in the management of weight and keeps you fit.
- It balances the thyroid gland and also provides energy
- Keeps the skin and hair moisturized, keeps them healthy, prevents damage.
- Virgin coconut oil is anti-viral and anti-bacterial and regular consumption makes the immune system strong.
- This oil reduces the level of bad fat and maintains the level of cholesterol in the body. Regular consumption of extra virgin coconut oil helps in burning down the belly fat.
- It keeps the intestine healthy by killing all the bad bacteria present there.
- Virgin coconut oil is good for the stomach and reduces acidity, inflammation and boosts up the metabolism.
- Use of coconut oil reduces cardiac problems. (Preetu nair. 2017)
- Used for curing Alzheimer disease (Gandotra *et al.*, 2014)
- Properties of oil that make it, “A Miracle Oil”
- Precursor of monolaurin
- Insulinotropic properties (anti-diabetic properties).

**Best Time To Use Virgin Coconut Oil:**

Virgin coconut oil can be used for many purposes as it has many health benefits. Here are some of the best time to use virgin coconut oil:

- **At night:** It helps in treating insomnia. You can take one tablespoon of virgin coconut oil before going to bed.

- **Empty stomach:** Taking virgin coconut oil empty stomach helps in curing stomach inflammation, reduces bacteria and improve digestion.
- **At the time of breakfast:** Virgin coconut can also be taken at the time of breakfast or in the early morning as it helps reducing belly fat faster.

## CONCLUSION

VCO is pure and doesn't undergo much changes in properties Rich in nutrients and health promoting components – “a super food”. Quality of final product vary with method of production. Saturated fatty acids (MCTs) are potential healthy additions to the diet Clinical studies proved various health benefits like anti-cancerous, anti-viral, anti-Alzheimer's and cardio protective properties.

## REFERENCES

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