

Technology for the production of Virgin Coconut Oil

In the production process, oil entrapped in coconut cells is extracted without subjecting to heat below 60 °C.

Main steps in production of virgin quality oil are:

1. Scraping of coconut flesh into fine particles
2. Drying to 8-10% moisture content (wb) by sun drying or using mechanical drier,
3. Extraction of oil,
4. Heating in a water bath to remove excess moisture, followed by
5. Filtration to remove any sediment.

Three types of extractors are developed depending on the capacity as follows.

1. Extractor for domestic use:
extractor which can produce about 100ml oil from one coconut at a time.
2. Cottage level extractors:
 - i. Manually operated extractor: The extractor can produce 300 to 350ml of oil per batch.
 - ii. Hydraulic Jack operated extractor: The extractor can produce 1 to 1.25 liters of oil per batch.
3. Electrically operated screw type machine:
The extractor can produce 8 to 9 liters of oil per hour.

Oil cleaning:

Oil is heated in a double-jacketed water bath for about 30 minutes followed by filtering using filter papers and cotton wool.

Quality of Virgin Coconut Oil:

Free fatty acid value of oil stands at 0.15 – 0.2, which is 100% natural and the oil is rich with vitamins and nutrition.