

CBI Product Factsheet: Coconut Oil in the Netherlands

'Practical market insights into your product'

The Netherlands is an important end market and an important exporter of coconut oil in Europe. The country is responsible for more than half of total coconut oil imports into Europe. This makes it a major entry point for exporters in developing countries. Prices of coconut oil have increased due to availability of coconuts for oil production. This has an impact on the use of the oil in the food industry.

Product definition

Coconut oil is an edible oil extracted from either the kernel or the meat of the coconut (*Cocos nucifera*). Conventional coconut oil is produced from the dried kernel/meat (copra) of the coconut. While this factsheet deals with coconut oil used in the food industry, it is also used for cosmetics and various industrial uses.

Due to its high saturated fat content it can last up to two years. Coconut oil is a major foreign exchange earner for countries such as Mexico, India, Philippines and Indonesia who are the main producers and exporters.

Codes for coconut oil:

• Harmonised System (HS) →edible coconut oil is included in:

HS code	Description
1513 1191	Crude coconut oil for human consumption, in immediate packaging of a net content not exceeding 1 kg
1513 1199	Crude coconut oil for human consumption, in immediate packaging of a net content exceeding 1 kg
1513 1911	Refined coconut oil (solid fractions) for human consumption, in immediate packaging of a net content not exceeding 1 kg
1513 1919	Refined coconut oil (solid fractions) for human consumption, in immediate packaging of a net content exceeding 1 kg
1513 1991	Refined coconut oil for human consumption, in immediate packaging of a net content not exceeding 1 kg
15131999	Refined coconut oil for human consumption, in immediate packaging of a net content exceeding 1 kg

Product specifications

Quality

General:

- Coconut oil is derived from the kernel (meat) of the coconut. The oil is produced from the dried kernel (copra oil/conventional coconut oil).
- The main quality problem associated with coconut oil is contamination. This makes it crucial that special care is taken in all steps of the production process, from harvesting to distribution. Coconut oil is one of the vegetable oils most resistant to rancidity.
- Make sure that the raw material (i.e. coconut) is at the right maturity (partially or completely brown). The coconut should be cleaned of metals, dirt and other foreign material.
- Ensure proper extraction conditions: dosage of processing aids, temperature, pressure/vacuum, flow rate, etc.
- Prevent adulteration and contamination by other foreign materials (e.g. dust) by keeping facilities and equipment clean.
- Ensure proper storage and transportation (see 'Packaging').

Organic (if relevant)

- Comply with organic standards for the production of the raw material: no use of synthetic pesticides, use of natural fertilisers, natural control of weeds, full traceability, internal control system, etc.
- Do not use solvents or other chemical substances during oil extraction.
- Preferably dedicate the processing plant to the production of organic oils only, in order to avoid contamination from non-organic particles. If this is not possible, ensure thorough cleansing of machinery and equipment at all times.

Labelling

- Ensure traceability of individual batches.
- Use the English language for labelling unless your buyer has indicated otherwise.
- Labels must include the following:
 - Product name
 - o Manufacturers lot or batch code
 - o If the product is destined for use in food products
 - Declaration of allergenic substances
 - Name and address of exporter
 - Products country of origin
 - Shelf life: Best before date/ use by date
 - $\circ \quad \text{Net weight/volume in metric units} \\$
 - Recommended storage conditions

Organic (if relevant): Name/code of the inspection body and certification number.

Packaging

- Coconut oil is transported in different types of containers (e.g. tank containers, Intermediate Bulk Containers (IBCs), flexi tanks, drums) depending on volumes transported and local availability of such containers. Buyers might have specific packaging requirements as well.
- Organic coconut oil should remain physically separated from conventional oils.
- Ensure preservation of quality by:
 - Cleaning and drying the container before loading the oil.
 - Not loading rancid coconut oil.



Source: Elburg Global



Source: First Descents



Source: Trip'n Pop

- Filling the tanks or drums as full as possible in order to avoid ventilation and light. This will prevent oxidation, thus rancidity.
- Avoiding solidification by ensuring appropriate temperature control during loading, travel and pumping.

Trade and Macro-economic statistics

Imports





Source: Eurostat, 2016

- Coconut is a tropical fruit, and the extraction of the crude oil from it usually takes place in the coconut-growing / tropical regions. This implies that crude coconut oil is not produced in the Netherlands and has to be imported in order to meet its demand.
- Coconut oil mostly enters the country through the port of Rotterdam to be partly trans-shipped directly to other European countries via inland vessels or to be stocked and handled by storage companies located at the port.
- The Netherlands is one of the most important markets for coconut oil in Europe, accounting for almost half of total imports in 2015. Of the total 537 thousand tonnes coconut oil imported to Europe, the Netherlands imported 231 thousand tonnes, representing a share of 43%.
- In the period 2011-2015, Dutch imports of coconut oil recorded a decline in both volume (-7.0%) and value (-7.7%).
- The decrease in imports can be related to the availability of the raw material and substitution dynamics. Coconut production in the Philippines and Indonesia has declined over the years. The increasing popularity of coconut products made from young, green and fresh coconuts also affects the availability of dried coconut (copra) to make coconut oil. This has driven the price of coconut oil up. The increase in price has led the food industry to turn to palm kernel oil (and possibly other oils) as a substitute for coconut oil.

Tips:

Study your target market in order to make an educated decision when exporting coconut oil. It is important to understand factors such as product application, taste preferences, competing suppliers and potential buyers in the specific destination countries.

General sources for learning more about the Netherlands include <u>CIA's World</u> <u>Factbook</u>. An interesting source to get acquainted with the Dutch market and its trade dynamics is the website of the <u>Dutch Foreign Trade Agency</u>.



Figure 2: Imports of coconut oil to the Netherlands; largest markets (in terms of 2015 volume) exporting coconut oil to the Netherlands, 2011-2015 x 1,000 tonnes

Source: Eurostat, 2016

- Almost all Dutch imports of coconut oil originate directly from developing countries.
- In 2015, the leading developing country supplier of coconut oil to the Netherlands was by far the Philippines (88% of total imports in volume). Other important developing country suppliers were Indonesia (7.3 %) and Papua New Guinea (3.4%).
- In 2015, the Philippines supplied around 204 thousand tonnes / € 204 million of coconut oil to the Netherlands. Between 2011 and 2015, the Philippines recorded an annual average decrease of -1.6% in terms of volume and -3.1% in terms of value. However, an increase of imports from the Philippines was recorded in 2013.
- The Philippines' coconut industry is highly export-driven; it is estimated that coconut products account for 51% of the country's agricultural export earnings (Philippine Coconut Authority, 2016). But the sector has suffered heavily from Typhoon Haiyan in 2013, which destroyed around 15 million coconut trees and displaced millions of people. Full restoration of coconut production in the Philippines is estimated to take a few years, which can have a significant impact on the country's export industry.
- Indonesian supplies of coconut oil to the Netherlands have decreased significantly since 2011 too, partly due to declining coconut production in the country (<u>Indonesia Oilseeds and Products Annual Report, 2015</u>). Indonesian exports to the Netherlands, displaying an average annual decrease of -28% in volume and -28% in value, amounted to around 17 thousand tonnes / € 17 million in 2015.

- Papua New Guinea's supplies to the Dutch market experienced a sharp decline between 2011 and 2015, amounting 7.0 thousand tonnes / € 7.8 million in 2015.
- Although Sri Lanka has a small market share in Dutch total imports (0.3% in volume), it had a 3-fold annual growth in volume between 2011 and 2015. In 2015, Sri Lanka exported 672 tonnes of coconut oil to the Netherlands, compared to only 3 tonnes in 2011.

Tips: As the supply of coconut oil is dominated by the Philippines, Indonesia and Papua New Guinea, make sure to monitor the developments in these markets. The websites of the coconut authorities from the <u>Philippines</u> and the <u>Asian and Pacific Coconut Community</u> could be interesting points of departure.

A good source for analysing Dutch trade dynamics yourself is the <u>Eurostat</u> <u>Statistics Database</u>.

Exports

Figure 3: Exports of coconut oil from the Netherlands; largest countries importing coconut oil from the Netherlands (in terms of 2015 volume), 2011-2015 x 1,000 tonnes.



Source: Eurostat, 2016

- In addition to being the largest importer, the Netherlands is the largest (re-) exporter of coconut oil in Europe (83% of total exports). In 2015, total Dutch (re-)exports of coconut oil amounted to 175 thousand tonnes / € 199 million, having increased in volume (+6.0% annually) and decreased slightly in value (-0.5%) since 2011.
- Of the 175 thousand tonnes of coconut oil re-exported from the Netherlands in 2015, 45 thousand tonnes were directed to Germany, 32 thousand tonnes to Belgium (and Luxembourg) and 22 thousand tonnes to France. Other major destinations include Italy, the United Kingdom and Poland.
- In 2015, Germany, Belgium (and Luxembourg) and France accounted for 26%, 18% and 13% of total Dutch exports respectively. These countries are also large trade hubs and end markets for coconut oil.

Tips: As the Netherlands mainly supplies coconut oil to surrounding European countries, consider it as a possible entry point to reach surrounding markets, such as Germany, Belgium, France and the United Kingdom.

Find out more about these countries and their market dynamics through the statistics provided by <u>FAOSTAT</u> and <u>Fediol</u> (Federation of the European Vegetable Oil and Protein meal Industry). For more information on food trends in those countries you can visit the website of the European Association of the Food & Beverage industry: <u>FoodDrink Europe</u>.

Consumption





Source: Fediol, 2016

- In addition to being the largest trader in Europe, the Netherlands is also an important end user of coconut oil. The leading Dutch industries using coconut oil include confectionery and the bakery sector.
- Total European consumption of coconut oil amounted to 820 thousand tonnes in 2014. In the same year, the Netherlands accounted for 20% of total European consumption, reaching 160 thousand tonnes.
- Dutch apparent consumption of coconut oil decreased significantly at an annual average rate of -11% between 2010 and 2014. After a decline of -15% between 2010 and 2011 due to rising price levels, consumption increased at an annual average of 17% between 2011 and 2013. However, between 2013 and 2014 the consumption dropped again at an annual average of -12%.
- The decline in consumption of coconut oil is linked to the decreased availability of dried copra, increase in coconut oil prices and substitution with other oils, as described in the imports section.

Tips: Find out more about consumption and production in Europe through the statistics provided by <u>FAOSTAT</u> and <u>Fediol</u> (Federation of the European Vegetable Oil and Protein meal Industry).

Market trends

Monitoring PAH levels

 The increasing focus on food safety across Europe has brought stronger focus to contaminant levels of coconut oil among Dutch importers and the <u>Product Board MVO</u>. One of the main contaminants often present in this specific oil is polycyclic aromatic hydrocarbons (PAH), which come from the smoke drying process of copra, the raw material for oil extraction.

- PAH is considered to be an extremely toxic carcinogenic substance and its levels are highly controlled by the food industry.
- As such, PAH levels are included in the 'Black List' (List I) in the European Commission's Directive on pollution caused by certain dangerous substances discharged into the environment. In addition, as of September 1 2012, new limits for the sum of four PAHs are introduced for vegetable oils in Europe, according to <u>Regulation (EU) No 835/2011</u>. For coconut oil, specifically, a limit of 20 ppb applies, whereas this limit is 10 ppb for other oils.

Tips: Study the website of the <u>European Food Safety Authority</u> to get acquainted with risks and limitations concerning food safety issues in European region.

Find more information about PAH levels for coconut oil on the website of <u>Product</u> <u>Board MVO</u> and follow new industry developments by consulting the news section of this website.

Establish an effective system to monitor and control for PAH levels in your coconut oil.

Price differentials and the substitution game between coconut and palm kernel oils

- Coconut oil prices reached historical records in the beginning of 2011, having doubled since the beginning of 2010. In addition to increasing demand from the United States and Europe and high commodity prices, coconut oil availability faced a depression in 2011, when the Philippines (the largest global producer) was hit by a number of typhoons. At the same time, a beetle infestation and droughts reduced coconut production in Thailand.
- When coconut production in the largest producing countries picked up again throughout 2011 and in the beginning of 2012, coconut oil prices followed a downward pattern. By the beginning of 2014, the small price difference between coconut oil and palm kernel oil led to a growing substitution by Dutch importers which favoured coconut oil suppliers.
- However, a recent decline in palm kernel oil prices led buyers to move in the opposite direction. As discussed in the "Price" section, palm kernel oil is currently preferred over coconut oil, since coconut oil is becoming even more expensive and the mainstream food industry tends to shift to the cheaper alternative.

For more information on prices, refer to the 'Price developments' section of this Fact Sheet.

Tips: Refer to <u>our study addressing competition within the vegetable oil sector</u> to understand substitution dynamics in the vegetable oil sector.

Keep an eye on price developments for coconut oil and its substituting products in order to anticipate industry developments.

The <u>World Bank – Pink Sheet</u> is a good online tool to follow international prices for coconut oil.

What legal requirements must my product comply with?

Maximum level for erucic acid in oils and fats: European Union legislation fixes a maximum level of erucic acid in oils and fats intended for human consumption.

Tips: Check out the maximum levels for <u>erucic acid in the European Union</u> <u>Export Helpdesk</u>.

Extraction solvents for food: There are European rules for the marketing and application of extraction solvents used in the production of foodstuffs and food ingredients.

Tips: Find out which <u>Extraction solvents for food</u> you can use and the conditions for use.

Contaminants in food: The European Union has laid down maximum levels of contaminants in food, including ingredients such as vegetable oils.

Tips: Read more about <u>contaminants in the European Union Export Helpdesk</u> and check the European Commission's factsheet on food contaminants <u>Managing food contaminants: how the EU ensures that our food is safe</u>.

Maximum Residue Levels (MRLs) of pesticides in food: European Union legislation has been laid down to regulate the presence of pesticide residues (MRLs) in food products.

Tips: If the agricultural raw material (coconut) for your oil has been treated with pesticides, verify that residues remain within limits. For more information, read about <u>MRLs</u> in the EU Export Helpdesk.

Additives, enzymes and flavourings in food: The European Union has set a list of permitted flavourings and requirements for their use in foodstuffs intended for human consumption, which includes vegetable oils. This is particularly relevant to food manufacturers. However, insight into this legislation can help you to understand their requirements.

Tips: Familiarize yourself with the concerns of the end-users of your products by checking European Union legislation on <u>Additives, enzymes and flavourings in food.</u>

Hygiene of foodstuffs: Food business operators shall put in place, implement and maintain a permanent procedure, or procedures, based on the Hazard Analysis and Critical Control Points (HACCP) principles. This also applies to the import of food Europe and export from Europe.

Tips: Ensure compliance with European Union legislation on <u>Hygiene of</u> <u>foodstuffs (HACCP)</u>.

Labelling: In case you are supplying consumer labelled products (in for example bottles and containers) you will have to take into account labelling requirements laid down in <u>European Union Regulation 1169/2011</u>.

Tips: Read more about food labelling in the European Union Export Helpdesk.

What additional requirements do buyers often have?

Food safety management: Buyers commonly require their suppliers that they have a quality/food safety management system in place. These systems require companies to demonstrate their ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.

Tips: Suppliers can apply a basic HACCP system. However, if they aim to supply food manufacturers more directly, it is necessary to have a certified food safety management system recognised by the Global Food Safety Initiative, such as ISO 22000, British Retail Consortium (BRC) or International Featured Standards

(IFS) Food. Visit the website of the $\underline{\mbox{Global Food Safety Initiative}}$ for more information.

What are the requirements for niche markets?

Regulation (EC) 834/2007 on organic agriculture: The European Union has established requirements on the production and labelling requirements with which an organic product of agricultural origin **must** comply in order to be marketed in Europe as "organic".

Tips: In general, the market for organic coconut oil is still a niche segment. If you do choose to obtain a certificate for organic production, refer to the <u>European Union Regulation</u> for organic production and make sure your organic certification is harmonised with the <u>European legislation</u>.

For information on organic certification in Europe, visit the website of <u>Organic</u> <u>Farming</u> in the European Union.

Fair Trade: Fairtrade Labelling Organisations International (FLO) is the leading standard-setting and certification organisation for Fairtrade. Products which carry the Fairtrade label indicate that producers are paid a Fairtrade Minimum Price. FLO has a minimum price for coconuts (raw material for coconut oil). Other fair trade standards available in the European market are Fair Trade Ecocert and IMO's Fair for Life.

Tips: Before jumping into Fairtrade certification, make sure to assess (in consultation with your potential buyer) if this label has sufficient demand in your target market and whether it will be cost beneficial for your product.

Although <u>FLO</u> certification is the leading fair trade certification scheme in Europe, you can also check out other schemes such as IMO's <u>Fair for Life</u> and <u>Ecocert Fair Trade</u>.

Market channels and segments

Market channels



Figure 5: Trade channels for coconut oil in the Netherlands

The trade channels for groundnut oil do not deviate from the general structure for vegetable oils as described in <u>our study on channels and segment for</u> <u>vegetable oils</u>.

In general, the following margins can be expected:

- Brokers: ranging from approximately 0.5 to 2%, or fixed price per tonne
- Importers: will depend on whether the oil is simply being forwarded (5-
- 10%), or whether the importer has to re-sell specific quantities (10-20%).
 Refiners charge a fixed amount per tonne of oil refined, approx. € 200-300/tonne.
- The margins charged by other industry players such as food manufacturers, bottlers and retailers will highly depend on the nature of the final product. Figure 5 provides an overview of the main segments for coconut oil.
- Note that this factsheet only addresses conventional coconut oil (commodity). The speciality segment is dealt with in the CBI factsheets on virgin coconut oil (VCO).

Tips: If you are able to produce large volumes for large multinationals, make sure you have adequate quality control systems.

If you are dealing with smaller volumes or specialised coconut oil, traders are the most suitable entry point into the Dutch market.

If you are a starting exporter, brokers can be your entry point into the Netherlands as they are trusted by the European edible oil sector, which can make up the lack of reputation of a starting developing country exporter.

Market segments

This factsheet mostly deals with coconut oil as a commodity oil. Coconut oil is used in the food industry and other technical applications. Within the food industry, it can be segmented into:

- Food processing industry: Ingredient to manufacture semi-finished or final food products
- Bottling industry: Bottled as a final product

Figure 6 describes the main uses of coconut oil in the Netherlands within these two segments.

Coconut oil can be further segmented into commodity and speciality oil. The main differences between commodity and speciality coconut oil are described in Figure 6, and further elaborated (at a more general level for vegetable oils) in our study on channels and segment for vegetable oils.

As illustrated in figure 6, specialty coconut oil relates to virgin coconut oil, produced from the flesh of the coconut, and not from its dried kernel (copra). Virgin coconut oil is unrefined and often available as a certified oil, such as organic and/or fair trade. For further information on coconut oil as speciality oil, refer to <u>our study on the European market for virgin coconut oil</u>.



Figure 6: Segmentation of coconut oil in the Netherlands

Tips

Comply with sustainability standards required by your specific segment and stay up-to-date on developments in this respect. For information on the various sustainability standards visit the <u>ITC</u> website on the voluntary standards that are available for exporters. The most relevant standards can also be found in the 'Niche requirements' section of this document.

Price

Price developments





Source: World Bank Pink Sheet, 2016

• Prices of coconut oil followed a major drop through 2012 and 2013.

- At the end of 2014, coconut oil soared on the European vegetable oils market due to concerns over copra supplies following the damage to coconut trees and infrastructure caused by Typhoon Haiyan in the Philippines.
- Throughout 2015, prices remained relatively stable between US\$ 1,200 and US\$ 1,400 / tonne.
- During the first quarter of 2016 market prices for coconut oil have increased up to US\$ 1,500 / tonne. This increase is a result of the increasing popularity of coconut products such as coconut water, made from young, green and fresh coconuts. This affects the availability of dried coconut (copra) to make coconut oil.
- Lower prices for palm kernel oil put further pressure on coconut oil as food manufacturers tend to shift to the cheaper alternative. Market prices of coconut oil in April 2016 averaged US\$ 1,590 / tonne, while the price of palm kernel oil in the same month averaged US\$ 1,307 / tonne.

Tips: Develop sustainable, trust-based, relationships with new buyers in order to profit from the current international scenario for coconut oil in the long run.

Keep an eye on crop levels in various suppliers of coconuts worldwide in order to anticipate price and other international market developments. The website of <u>FAOSTAT</u> is a useful statistical source for this purpose.

Accompany international prices for coconut oil in order to benchmark your product and develop a pricing strategy. The <u>World Bank – Pink Sheet</u> is a good online tool to follow prices.

Useful sources

- The EU Vegetable Oil and Protein meal Industry <u>http://www.fediol.eu/</u>
- The Food and Agriculture Organisation of the United Nations has a variety of agricultural databases – <u>http://faostat3.fao.org/home/E</u>
- For information on the latest market developments in the Oils and seeds sector, visit The Public Ledger – <u>http://publicledger.agra-net.com/oils/</u>
- Information and contacts on Dutch intermediaries can be found on the Dutch Intermediaries Association - <u>http://www.vnhi.nl/</u>
- The Dutch Foreign Trade Agency is a division of the Ministry of Economic Affairs where many insightful information on the Dutch market can be found
 <u>http://www.hollandtrade.com/index.asp</u>

More information CBI market information: Promising EU export products. EU Exports Helpdesk - <u>http://exporthelp.europa.eu</u> - go to 'statistics'. Eurostat - <u>http://epp.eurostat.ec.europa.eu/newxtweb</u> - statistical database of the EU. Several queries are possible. For trade, choose 'EU27 Trade Since 1995 By CN8'. International Trade Statistics - <u>http://www.trademap.org</u> - you have to register

> This survey was compiled for CBI by ProFound – Advisers In Development in collaboration with CBI sector expert Joost Pierrot

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