

# Exporting Cloves to Europe

The market for cloves is relatively small, and has been stable over the past five years. Madagascar and Sri Lanka are the biggest suppliers on the European market, although supplies from developing countries have decreased on average. Suppliers that operate according to food safety principles have an important competitive advantage in the European market.

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## 1 . Product description

Cloves are the unopened flower buds of the evergreen tree *Eugenia caryophyllus* in the family Myrtaceae. The tree is native to the Moluccas, which are part of Indonesia. Nowadays, however, cloves are also grown in many other tropical countries. Cloves must be dried before they are stored and sold for market. Cloves are used in cooking (desserts, bakery products, meat, fish, red cabbage, mulled wine) and in the food, pharmaceutical and cosmetics industries. They are also used to produce clove oil, the main constituent of which is eugenol. Eugenol is used, among other things, to perfume soaps, as a dental anaesthetic and as an additive in dental filling material. The main focus of this study is on the clove bud. The stems and clove fruit are not widely consumed in Europe.

The statistical data in this document are based on Combined Nomenclature (CN) codes. The CN uses Harmonised System (HS) codes to classify products.

HS Code	Description
09071000	Cloves, whole fruit, cloves and stems, neither crushed nor ground
09072000	Cloves, whole fruit, cloves and stems, crushed or ground

## 2 . Product specification

### Quality

Product quality is a key issue for buyers in Europe and also includes food safety issues. The [European Spice Association](#) (ESA) has published the [Quality Minima Document](#), which is vital for the national spice associations affiliated with the ESA and therefore for most key players in Europe. It specifies the legal European requirements as well as the terms of delivery between buyer and seller that are not defined in legislation. It contains the chemical and physical parameters that determine the minimum quality requirements for cloves:

<b>Ash (max.)</b>	<b>Acid insol. ash (max.)</b>	<b>Moisture (max.)</b>	<b>Volatile oil (min.)</b>
7.0%	0.5%	12%	12 ml/100gr

High-quality cloves should be oil-rich, whole, unbroken and without stalks, and must not contain any woody, brittle cloves. They should be reddish-brown to brown in colour and the head should be light brown and closed. Cloves are graded in accordance with the relevant national standard of the country of production. In addition, [ISO standard 2254-2004](#) provides some general guidelines on the grading, handling and packing of whole and ground cloves.

### Labelling

Incorrect labelling is a major source of frustration for European buyers. You must therefore take care to label your product properly. See our study on [value-added spices and herbs in Europe](#) for information on consumer packaging requirements. The labelling of bulk products should include the following information:

- The name of the product
- Details of the manufacturer (name and address)
- Batch number
- Date of manufacture
- Product grade
- Producing country
- Harvest date (month-year)
- Net weight
- Any information that exporting and importing countries may require: bar, producer and/or packager code, any extra information that can be used to trace the product back to its origin.

### Packaging:

Whole cloves must be packed in new, clean, sound and dry bags made of jute, cloth laminated with polyethylene or polypropylene, or high-density polyethylene bags or pouches. It is essential that the cloves are completely dry before they are stored. Clove powder can be packed in new, clean, sound and dry containers made of glass, tin or aluminium, or in pouches made of laminated, metallised, multi-layered food-grade plastic material. The containers should be free from insect infestation, fungal contamination, undesirable or bad smells and substances that may damage the contents.

### 3 . Buyer requirements

What legal requirements must cloves comply with?

Please be aware that your product will have to comply with European legislation the moment it enters Europe. This compliance is a must. You should therefore only consider exporting to Europe when you can meet all the relevant requirements.

Food safety: Traceability, hygiene and control

Food safety is a key issue in European food legislation. The [General Food Law](#) is the legislative framework regulation for food safety in the European Union. To guarantee food safety and to allow appropriate action in cases of unsafe food, food products must be traceable throughout the entire supply chain and risks of contamination must be limited. One important aspect for controlling food safety hazards is the definition of critical control points on the basis of the hazard analysis and critical control points ([HACCP](#)) approach by implementing food management principles. Another important requirement is that your delivery system must allow official controls of your food products. Products that are not considered safe will be denied access to Europe. Some spices and herbs are subject to increased controls but cloves are currently not on the relevant list (see the following Tip).

#### Tips:

- European buyers will often ask buyers to implement a food safety management system based on HACCP principles (see ***Food safety management and traceability*** below).
- Check for increased levels of controls regarding your product. The list of spices and herbs and their supplying countries is updated regularly. Check the [EUR-Lex](#) website for the most recent list (see latest document under *Amended by*).
- Read more about [health control](#) on the EU Trade Helpdesk.

Contamination of spices and herbs

Contaminants are substances that can be present as a result of the various stages of the growth, processing, packaging, transport or storage of the product.

#### Tips:

- It is important to have a clear understanding of the best practices in the cultivation, drying, processing and storage of your product to prevent contamination, and you should discuss these factors with your suppliers. Valuable sources are the guidelines on [Good Agricultural Practices for Spices](#) from the International Organisation of Spice Trade Associations.
- Consult the [website](#) of the Transport Information Service for information on safe storage and transport of spices and herbs.

#### Pesticides

The European Union has set maximum residue levels (MRLs) for pesticides in and on food products. Products containing more pesticides than allowed will be withdrawn from the European market. Although eugenol (an essential oil of clove) acts as an antibacterial agent against possible pests, insecticides and fungicides are still sometimes used in the cultivation of cloves. Pesticides above permitted levels are an important issue for European buyers, as products exceeding European limits are not allowed to be sold on the European market.

#### Tips:

- The [MRL database](#) of the European Commission lists all harmonised MRLs. You can use your product or the pesticide employed as search terms, and the database will show the relevant MRLs.
- In addition, you should promote integrated pest management (IPM) amongst the farmers you work with to reduce pesticide levels in your product.
- Read more about [MRLs](#) on the EU Trade Helpdesk.

#### Microbiological

European legislation does not lay down specific microbiological requirements for cloves as it does for other [products](#). However, Article 11 of the [General Food Law](#) states that food products placed on the European market must be safe. It follows that cloves are banned from the market if salmonella or other forms of microbiological contamination are found on them. Although eugenol (an essential oil of clove) acts as an antibacterial agent, microbiological contamination is still a risk. Steam sterilisation is the preferred method for combating microbiological contamination in Europe, especially for cloves destined for the retail market. It is important to be able to provide this service, since buyers prefer cloves that have been steam sterilised.

#### Tips:

- Refer to the website of the [Plantvillage](#) to understand more about the different pest diseases affecting cloves and the ways you can help farmers combat them.
- Microbiological contamination can occur at all stages of production including growth, harvesting, processing, storage, packaging and sale. The maintenance of good manufacturing and hygiene practices, together with application of HACCP principles, is therefore of great importance during growth, harvesting and processing.
- Steam sterilising yourself can be costly but it can earn you a premium. Working together with reliable local service providers may be an option.
- Read more about [contaminants on the EU Trade Helpdesk](#).

### Food additives and adulteration

Many of the spices and herbs rejected by custom authorities or buyers have undeclared, unauthorised or excessive amounts of extraneous materials. There is specific legislation for [food additives \(such as colours, flavours and thickeners\)](#) that lists which E-numbers and substances are allowed to be used. Spices and spice blends may not contain added colours.

Cloves, whether whole or crushed/ground, are often intentionally adulterated with materials such as exhausted cloves, mother cloves, brown cloves or stems. Adulteration is a widespread problem in many countries of origin such as India, where [30–40%](#) of all food sold is intentionally adulterated. An important reason for adulteration – which is a serious malpractice – is economic gain. Unintentional adulteration, due for example to fertiliser spillover or insects, may also be encountered. Food adulteration is an important issue for European buyers. According to a panel of industry experts consulted for this study, this type of food fraud is quite common in spices and herbs, including cloves. The European Union and national European governments are becoming stricter in the enforcement of food fraud legislation. The Dutch government [increased the fines](#) on operators wilfully tampering with food from €4,500 to a maximum of €810,000 in April 2015.

### Tips:

- If you use additives make sure the way you use them is legal and agreed with your buyers. Also make sure to mention them in the list of ingredients.
- You will have to build up a track record, provide transparency and references if you want to sell processed cloves to European buyers. It is impossible for buyers to test spices and herbs for every possible extraneous material. They will therefore tend to refrain from buying processed cloves outside Europe or will buy only from suppliers they trust. The burden of evidence is on suppliers.
- Refer to the [Adulteration Awareness](#) document of the European Spice Association for further information on food adulteration.

- See our study on [buyer requirements for natural food additives](#) and the [website of the European Commission](#) for more information on requirements for food additives.

## Irradiation

Irradiation of spices and aromatic herbs, including cloves, is permitted. This is a safe way of killing pathogenic organisms, and affects the taste of spices and herbs less than steam sterilisation. The maximum overall average absorbed radiation dose is 10 kGy. This method is not widely used in Europe, however, since consumers generally prefer unirradiated products.

### Tips:

- While irradiation has less effect on the taste of spices and herbs than steam sterilisation, this method is not widely used in Europe because consumers here generally prefer unirradiated products. There are fewer consumer objections to irradiation in other countries such as the United States. Ethylene oxide fumigation for combating microbiological contamination is prohibited in Europe. It is, however, permitted in the United States.
- Read more about [irradiation](#) on the website of the European Commission.

## What additional requirements do buyers often have?

### Food safety management and traceability

As food safety is a top priority in all European food sectors, you can expect many players to request extra guarantees from you in the form of certification. Many European buyers (e.g. traders, food processors or retailers) require the implementation of a food safety management system, preferably based on HACCP principles. The most important food safety management systems in Europe are [BRC](#), [IFS](#), [FSSC22000](#) and [SQF](#), all of which are recognised by the [Global Food Safety Initiative \(GFSI\)](#) and hence by major retailers.

### Tips:

- European market entry requirements are more likely than not to include implementation of a food safety management system. This makes it important to familiarise yourself with such systems.
- Different buyers may prefer a particular management system. Check which one is preferred (for example, United Kingdom retailers often

require BRC, while IFS is more commonly required on the mainland of Europe).

- Further information on Food Safety Management Systems is available in the [Standards Map](#).

### Corporate social responsibility

European buyers (especially those in Western and Northern European countries) are increasingly aware of their corporate responsibilities regarding the social and environmental impact of their business. This also affects you as a supplier. Important issues in the cloves supply chain are the correct use of pesticides, soil degradation, the impact on biodiversity and fair payment for farmers. Different European companies have different definitions of CSR, and different priorities and ambition levels in this field. Hence, there is no single way to address CSR issues. The right approach can range from signing a code of conduct to ensure compliance with the most important requirements to mapping out and addressing all the CSR issues in your entire supply chain.

### Tip:

- Exporters interested in supplying the European market should at least address the most important CSR issues. Many buyers already use this as a selection criterion for new suppliers. Prioritise CSR issues by considering your impact on different social and environmental factors, what you can feasibly do to improve your impact and what is appreciated by European buyers. List relevant CSR issues, [ISO 26000](#) provides guidance.

## 4 . What are the requirements for niche markets?

### Sustainable product certification

There is a growing market for certified products with well-known consumer logos. Organic products focus on land use and inputs. [Fairtrade](#) focuses specifically on improving the living conditions of smallholders in developing countries by paying them a premium. The [Rainforest Alliance](#) (RA), a mainstream sustainability scheme with a focus on both social and environmental issues, has recently developed a standard for several spices and herbs, including cloves. Processors and exporters can play an important role in the certification process by coordinating the activities of smallholders. If they handle certified sustainable spices and herbs they will have to be certified themselves to ensure a reliable chain of custody. There are specific certifications for traders, such as Fairtrade's [Trade Standard](#) or RA's [Chain of Custody standard](#).

### Tips:



- The [International Trade Centre](#) and [Organic Bio](#) provide information on companies in Europe or in your own country that supply organic spices and herbs. Refer to the Fairtrade [producer database](#) for details of certified suppliers. The Fairtrade [price list](#) gives an indication of the price you should pay farmers for Fairtrade or Fairtrade/Organic spices and herbs.
- Refer to the ITC [Sustainable Spice Initiative Equivalency Tool](#) for an explanation and comparison of sustainability standards.

### Supplier assessment

As an alternative to product certification, European buyers conduct a supplier assessment. They use supplier assessment questionnaires that contain questions on both quality and CSR, for example on child labour. Such supplier assessments are used widely.

Suppliers can also assess their own compliance with a sustainability code of their buyer; for example, with Unilever's [Sustainable Agricultural Code](#) (SAC) or the [Olam Livelihood Charter](#).

### Tip:

- Refer to Unilever's [Implementation Guides](#) for further information.

## 5 . Trade and Macroeconomic Statistics

The global spice market is projected to grow by around 5% per year until 2019. Growth will be slower in developed regions such as Europe, however, since their industrial sector is already mature (Source: [Markets and Markets](#), 2015). The market for cloves is expected to grow in the coming years, albeit more slowly than in recent years. An important driver will be the growing appreciation of Asian and other food containing cloves.

### Imports

Countries other than European or developing countries are negligible and excluded from this graph. In 2017, these only accounted for 0.8% of total European imports.

Europe is completely dependent on developing countries for its supply of cloves. The region imported 2,300 tonnes from developing countries in 2017, representing a value of €15.5 million. Imports by European re-exporters amounted to 1,500 tonnes. These exports consist of both whole cloves and processed cloves.



Europe imports its cloves demand less and less directly from developing countries. The volume of direct imports fell by an average of 2% annually from 2013 to 2017, while imports from European countries increased by 4% annually over the same period.

The value of European imports from developing countries also fell, by 6% annually in the last five years. This reflects a decrease in the average import price of cloves coming directly from developing countries from €7.65 per kilo in 2013 to €6.71 in 2017. The main cause for this price increase was an [insufficiency in global supplies](#). Especially India and Indonesia, large buyers of cloves, have insufficient supplies.

#### Tip:

- Keep up to date on the global supply situation and prices. [Zobian Market Reports](#), [PBA brokerage](#) and [IEG Vu](#) (paid service), [the International Trade Centre](#) and the [Indian Spice Board](#) regularly publish useful crop and price reports.

Although overall clove imports were stable from 2013 to 2017, there has been a change in the main importers. In 2015 Germany took over from the Netherlands as the main importer of cloves. Both countries can be interesting for your exports as they have the highest share of imports from developing countries, together with the United Kingdom:

- the Netherlands (82% of 2017 imports originated in developing countries)
- Germany (80%)
- The United Kingdom (74%)

Smaller importers also increased imports from developing countries from 2013 to 2017, such as:

- Switzerland (+90% annually)
- Latvia (+45%)
- Spain (+20%).

#### Tip:

- Make a statistical analysis to get an insight into the differences between leading European importers. Create a free account for statistical databases such as [Eurostat](#) and [ITC Trademap](#). Complement your statistical analysis with an analysis of your own position to ensure a strategic fit with your buyer concerning such matters as scale, level of organisation, product (mainstream or niche) and ability to comply with extra-legal food safety and sustainability requirements.

## Suppliers

In 2017, the most important suppliers of cloves from developing countries to Europe were:

- Madagascar (21.4% of total imported volume in 2017)
- Sri Lanka (12.2%)
- Indonesia (11.2%)
- Comoros (8.4%)
- Brazil (2.6%)
- India (2.2%).

Most of these countries decreased their exports to Europe between 2013 and 2017. Import declines varied from 1% annually for cloves from Madagascar to 21% for cloves from Comoros. Clove imports from Sri Lanka and India increased in the same period by 22% and 14% annually.

European imports of cloves from developing countries mainly consist of whole cloves (93% in 2017). Opportunities for suppliers from developing countries to supply processed (crushed/ground) cloves are limited. Cloves are often sold and consumed in whole form. The food processing industry does buy processed cloves in significant amounts but relies largely on local processors or those from inside Europe for processing. This is reflected by the fact that 26% of intra-European trade in this sector consists of processed cloves.

Intra-European imports of processed cloves are growing at a faster rate (+11%) than those from developing countries (+1%).

In 2017, 33% of Europe's imports of processed cloves from developing countries originated in Vietnam. Vietnam is a major processor of other spices and herbs too. Large players such as [Olam](#) are expanding their processing facilities in Vietnam to handle imported spices as well as local produce.

### Tips:

- Crushing and grinding may be considered as the last value-adding step after treatment to ensure excellent cleanliness, quality and sterilisation. These methods of adding value allow you to charge a premium, and they are easy to implement. Measures aimed at achieving economy of scale are also important.
- It is more costly to remove contamination from ground cloves than from the whole product. Your buyer will transfer costs to you if your products do not comply with requirements.
- See our studies on [value-added spices and herbs](#) and [oleoresins](#) for more information.

### Exports

European exports of cloves in 2017 amounted to 1,800 tonnes, with a value of €17.5 million. The volume of exports grew by an average of 3.8% per annum between 2013 and 2017, while their value increased by 3.7%.

In 2017, 90% of all European exports ended up in other European countries. The main European exporters are:

- the Netherlands (36% of total export volume in 2017)
- Germany (24%)
- Spain (10%).

European exporters add significant value to imported products. There are thus opportunities in this field for exporters from developing countries with experience of supplying European countries. They may decide to focus on increasing their direct sales to buyers who have so far relied on other European suppliers. This might be a useful way of increasing such exporters' profit margins.

#### Tip:

- Explore opportunities for direct exports to supply the countries already supplied by other European countries. Buyers who do not deal directly with suppliers in countries of origin may have reservations regarding quality, food safety and supply security. You should therefore investigate buyer requirements in your target market and deal with buyers' potential reservations in advance. Get references from your other European buyers. You should also be aware that you may be asked to provide the same service levels as European buyers (short supply times, small orders, steam sterilisation, further processing, etc.)

## Production

### Table 1: Clove harvest calendar of main producers

Global clove production amounted to 180,500 tonnes in 2016. Total European imports of 3,800 tonnes in the same year represent only a small part of this volume.

#### Tip:

- Keep up to date on production trends worldwide. [Zobian Market Reports](#), [PBA brokerage](#) and [IEG Vu](#) (paid service), [the International Trade Centre](#) and the [Indian Spice Board](#) regularly publish useful crop and price reports.

Indonesia accounts for the largest share of global production (77% in 2016). It is not only the biggest producer but also the biggest consumer of cloves, much of the volume being used in the manufacture of *kretek* Indonesian clove cigarettes. The second largest producer, Madagascar (12% in 2016), is more export oriented.

Clove production increased by 6% per annum between 2013 and 2016. Production in Indonesia increased most significantly (+6.2% per year) after 2013 and has since plateaued at the new high level. Efforts from various international sponsors have boosted clove production in Tanzania, in particular in Zanzibar. ITC's [pilot project](#) to market branded clove from Zanzibar is an example of such efforts and seems to have had considerable success. European imports from Tanzania (that is, from Zanzibar) increased from 14 tonnes in 2013 to 210 tonnes in 2014. However, these imports fell to 45 tonnes in 2015.

### Tip:

- Working together with other actors in the sector and with national or international organisations can help revitalise clove production in your region. One option for producers from developing countries is to work with European spice houses that are big enough and have the resources needed for investment. You can find such spice houses in the membership lists of the various European national spice associations. The [European Spice Association](#) (ESA) lists the contact details for these associations.

Extreme weather conditions (prolonged drought, hurricanes and extreme rainfall) are becoming more common. This can have a strong impact on future harvests of a sensitive crop like cloves. An El Niño was expected in 2015/16, but its impact on production of cloves has been moderate. This weather event is linked to periodic surface warming of the sea across the central and east-central Equatorial Pacific, which has had an impact on clove production in such countries as Indonesia in the past.

### Tip:

- Keep up to date on El Niño forecasts and updates with the aid of the [El Niño Portal](#).

## Consumption

Consumption = Imports – Exports

The consumption of cloves in European countries in 2017 amounted to 2000 tonnes. Throughout Europe, consumption was stable from 2013 to 2017. The leading importers accounted for 64.5% of consumption in 2017.

For most leading European importers, consumption increased from 2013 to 2017. This growth was particularly strong for Spain (+46% annually) and Italy (+30%).

Per capita consumption is high in Western Europe due to the wide use of cloves in sweet food and the interest in international (in particular Asian) food. Moreover, many food processors that produce both for the domestic market and for other European markets are based in Western Europe.

#### Tip:

- Check the [economic forecasts](#) for European Member States issued by the European Commission to see which countries will enjoy a favourable economic climate in the coming years.

## 6 . Market Trends

**Internationalisation of eating habits:** cloves are widely used in some Asian (Indonesian and Chinese) cuisines. For example, the Indonesian community in the Netherlands is a relatively big consumer. Another example is the large Indian community in the United Kingdom that uses cloves for curry dishes. Asian cuisines are already popular in large parts of Europe and are gradually becoming more popular in Eastern European countries. This increased interest in ethnic foods is likely to increase the long-term demand for cloves.

#### Tip:

- Refer to our study on [trends in the spice and herb market](#) for further information on trends in the spice and herb market.

**Steam sterilisation** is an effective way of combating microbiological contamination and is increasingly required by European buyers. It can earn a significant premium for suppliers who are able to supply cloves steam sterilised at source. Investment in steam sterilisation equipment can be very costly (up to €1 million), however. An important downside of steam sterilisation is that it reduces the volatile oil content, which is responsible for the flavour. European buyers would switch to other methods if they were equally safe, accepted by consumers and not too expensive. At the moment there are no alternatives that meet these requirements but [GreenFoodDec](#) is conducting research in this field.

#### Tips:

- Small producers from developing countries with limited access to capital will probably be unable to steam sterilise their own product. Look for local sterilisation companies that can provide this service for you.
- Steam sterilisation is only effective if food safety is taken into account during drying, storage, processing (such as sieving, mixing,

grinding/crushing), packaging and transport. Steps should be taken to avoid contamination after sterilisation.

- Ascertain whether your buyers (or potential buyers) want the product to be steam sterilised before providing this service.
- Refer to [GreenFoodDec](#) to keep up to date on the development of alternatives to steam sterilisation.

***Sustainability is on the rise:*** sustainable sourcing is an important trend in Europe, especially in the United Kingdom, the Netherlands and Germany. Important issues in the supply chain are pesticide use, soil degradation, loss of biodiversity and fair payment for smallholders. As a supplier you will be increasingly faced with sustainability requirements from your buyer. Although sustainable cloves is still a niche market, demand for products certified for compliance with sustainability standards is increasing. Organic and Fairtrade certified cloves have been on the market for some time. [Euroma](#) was the first to introduce Rainforest Alliance certified cloves from Madagascar, in 2014. A large challenge for the market for certified sustainable cloves is the fact that it has to be sold at a higher price to cover some or all of the certification costs. This has resulted in an ongoing debate in the sector concerning the best way forward in the implementation of sustainability in the mainstream market. The option of third-party certification is still under debate. As mentioned above, self-verification could become more common in the future in the mainstream market.

### Tips:

- Governmental and non-governmental organisations in developed countries often have programmes and subsidies available for investments in sustainability. You should therefore look for possible partners to promote sustainability with the aid of these funds. Further information is available on such websites as the [Sustainable Spice Initiative](#), the [Netherlands Enterprise Agency](#), the [German Ministry for Economic Cooperation and Development](#) and [Cordaid](#).
- As small farmers often do not have the capacity needed to process, store and export their product, exporters can play a vital role in this process. Working with NGOs and national or international governmental organisations is also a good way of attracting capital.
- See our study on [exporting Sustainable Spices and Herbs to Europe](#) for further information on long-term expectations concerning the market for certified sustainable products.

## 7. Price

**Indicative price breakdown of cloves, sold in spices and herbs section of supermarkets**



Source: ProFound

*Please be aware that this price breakdown is only a general indication. It is influenced by many different factors including the country of origin, the current and expected future harvest situation, the quality of the raw material, demand level and price trends.*

Retail prices of cloves depend on variables such as quality, brand and outlet, but may be as much as €93 per kilo for whole cloves sold in small containers. Ground cloves are often cheaper than whole cloves. The fact that lower-quality cloves can be used for ground cloves is an important reason for this price difference.

### Tip:

- Keep up to date on cloves prices. [Zobian Market Reports](#), [PBA brokerage](#), [IEG Vu](#) (paid service), [Indian Spice Board](#) and the [International Trade Centre](#) regularly publish useful crop and price reports.

Please be aware that the value of the Euro fell significantly in relation to the dollar in 2015. In 2016, [this value picked up again](#). International prices are often given in US dollars. The changing value of the Euro thus affects European importers who have long-term contracts with their suppliers. Whether fluctuating exchange rates are beneficial for exporters from developing countries depends on the value of their own currency relative to that of the US dollar.

### Tip:

- Keep up to date on exchange rates with the aid of such websites as [Oanda](#).

## 8 . Useful sources

- European Spice Association – <http://www.esa-spices.org> – provides information on the national spice associations that belong to it
- Food Ingredients Europe – <http://www.foodingredientsglobal.com> – important international trade fair for the food ingredient and health sector in Europe
- SIAL – <http://www.sialparis.com> – large international food fair held in France every year



- Biofach – <http://www.biofach.de> – largest European organic food trade fair held in Germany