

Exporting frankincense to Europe

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European demand for frankincense is growing. On the European market, frankincense extracts have great potential in health products aimed at healthy joints. Frankincense oil is also used in aromatherapy to relieve stress and anxiety. However, supplies of this wild-collected ingredient are decreasing. Therefore, sustainability is key.

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1. Product description

Frankincense is an oleogum-resin, which is also called olibanum. The resin is harvested from several *Boswellia* species within the Burseraceae family.

The species most commonly used for health products are *Boswellia sacra* Birdw. (as essential oil) and *Boswellia serrata* Roxb. ex Colebr (as resin or extract). Other species include *Boswellia papyrifera* (Del.) Hochst. and *Boswellia neglecta* S. Moore.

Boswellia trees commonly grow in the gum belt in Africa and the Middle East (Ethiopia, Somalia, Oman and Sudan), Pakistan and India.

Table 1: Origins of frankincense varieties

Botanical name	Origin
<i>Boswellia serrata</i>	India, Pakistan
<i>Boswellia sacra</i> , (synonym <i>B. carterii</i>)	North East Africa (such as Somalia) Middle East (Yemen and Oman)
<i>Boswellia papyrifera</i>	Sudan, Eritrea, Ethiopia

You need to determine the exact source (species) of your frankincense (see Table 1). In Europe only *Boswellia serrata* is allowed in food supplements.

Sustainable collection is key for *Boswellia*, as overharvesting can harm future availability of these wild-collected species. Several *Boswellia* species are already listed as vulnerable on the IUCN Red List. This list from the International Union for the Conservation of Nature evaluates the conservation status of plant and animal species. *Boswellia sacra* (synonym of *B. carterii*) is listed as near-threatened, although this assessment needs to be updated.

B. sacra (synonym is *B. carterii*) is most commonly used in aromatherapy as an essential oil.

For use in herbal medicinal products, frankincense needs to match the [composition as specified in the European Pharmacopoeia](#).

To collect frankincense, collectors scrub the bark of the trees so that the gum-resin seeps out. They come back later to collect the frankincense.

In some areas, collectors only tap resin that exudes naturally. Steam-distillation of the gum-resin yields frankincense essential oil.

Globally, frankincense resin is mostly used in church/temple-based religious ceremonies, with a small share used as incense by consumers directly.

In European health products, frankincense is mainly used for:

- stress and anxiety: as essential oil in aromatherapy products (*B. sacra*)
- joint health: as extract of *B. serrata*, based on the content of boswellic acids

The table below gives an overview of the classification of most commonly used frankincense products on the European market.

Table 2: Classification of frankincense products

	Frankincense resin <i>Boswellia serrata</i>	Frankincense extract <i>Boswellia serrata</i>	Frankincense oil <i>Boswellia sacra</i> (synonym: <i>B. carterii</i>)
Harmonized system code – there is no code for trade in frankincense, but products are included under:	1301.90: Lac; natural gums, resins, gum-resins and oleoresins (for example, balsams) other than gum arabic	3301.30: Resinoids	3301.2941: Essential oils other than those of citrus fruit, mint, clove, niaouli and ylang-ylang; not deterpenated

Chemical Administration Service	8016-36-2: Gum olibanum	8050-07-5: Olibanum and extracts	89957-98-2: <i>Boswellia carterii</i> oil and extract
European Community Number	616-980-3 (olibanum)	232-474-1: Olibanum and extracts	289-620-2: <i>Boswellia carterii</i> oil and extract
European Inventory of Existing Commercial chemical Substances	N/A		232-474-1
United Nations Packaging code (see labelling requirements below)	N/A		1169

Source: [European Chemicals Agency](#)

Tip:

- If you process your frankincense extract further, you may need to use other classification codes. Search for olibanum in the 'Search for Chemicals' [database on the website of the European Chemicals Agency](#) to find these codes.

2. Which market segments should you target?

Food supplements

In Europe, you can find the most opportunities for frankincense resin on the food supplements market. The resin has been used traditionally for its anti-inflammatory properties. [Various studies](#) have been conducted on the efficacy of boswellic acids, found in the resin, for joint health conditions.

Allowed use for food supplements in Europe:

- Belgium, France and Italy allow the use of *Boswellia serrata* gum resin.
- Germany allows the use of *Boswellia serrata* gum, with a maximum level recommended for food.
- Restricted and/or limited for use in food in Austria.

Some countries do not have their own positive list, but follow the lists mentioned above. There are some inter-state agreements. For example, Spain automatically recognises [botanicals that are authorised in Italy](#) and industry sources indicate that the United Kingdom accepts references to the BELFRIT list made by companies.

Producers of food supplements cannot make medicinal claims. Examples of claims used in Europe for supplements containing Boswellia are:

- "To move smoothly..."
- "Promotes mobility of joints."

Tips:

- Do not make medicinal claims if you are targeting buyers working in the food supplements industry. Since

there are differences in claim opportunities between countries in Europe, always check with national bodies/consultants to offer the best advice to your potential buyers and partners.

- Make sure that you collect frankincense from *Boswellia serrata*. This is the only allowed species in European food supplements.

Herbal medicinal products

On the European market, frankincense is also allowed for use in herbal medicinal products. If you want to target this market segment, you need to comply with the legal requirements for the industry (see the section buyer requirements below).

Monographs list standards for the production of ingredients for herbal medicinal products, and what claims can be made for these ingredients. They also include scientific information on uses and effects. There are different monographs for frankincense:

- [WHO monograph](#) (as Gummi Boswellii / *Boswellia serrata*). Medicinal uses include management of arthritis and rheumatism, bronchial asthma, Crohn's disease, ulcerative colitis, and traditional uses such as abdominal pain, asthma, coughs and fever. Other activities of the product include anti-inflammatory activities.
- [ESCOP monograph 2nd Edition Supplement](#) (as *Olibanum indicum*)
- [European Pharmacopoeia Monograph # 2310](#) Indian frankincense (as *Olibanum indicum*)

Tips:

- See the monographs listed above for more information on production standards, use and effects of frankincense.
- Carefully consider if you can meet the high legislative and buyer requirements for herbal medicinal products. Also consider if you can compete with current suppliers. You can only find buyers if your offer is sufficiently better than the offer of existing suppliers (in terms of price, delivery and services).

Aromatherapy

In Europe there are opportunities to use frankincense oil in aromatherapy. In aromatherapy, frankincense oil is mainly used to relieve stress and anxiety and in joint health issues (see Table 3).

Table 3: Aromatherapy uses of frankincense

Botanical name	Indication area	Effects/applications
<i>Boswellia sacra</i> (syn. <i>B. carterii</i>), <i>B. serrata</i>	Joint Health	Relieve pain associated with rheumatism and muscular aches
<i>Boswellia sacra</i> (syn. <i>B. carterii</i>)	Stress & Anxiety	Mood uplifting and freshening Calming, helps to relieve anxiety

Aromatherapy relies on the chemical composition of essential oils, which differs per botanical and geographical origins. Therefore, product identity, traceability and origin are of vital importance.

Tip:

- If you want to target the European aromatherapy market, establish the specific product identity for your frankincense essential oil (species, subspecies, varieties and chemotypes).

3. What makes Europe an interesting market for frankincense?

International demand for frankincense is growing, according to European buyers.

Frankincense trees do not grow in Europe. Therefore, the region relies on imports for its frankincense supplies.

Specific data on European trade in frankincense is unavailable. There is no Harmonised System code for trade in frankincense, but products are included under trade in natural resins, essential oils or extracts.

Boswellia sacra is one of the most important varieties of frankincense used commercially. Industry sources indicate that the global market for the oil of *B. sacra* amounts to 30-40 tonnes. Around a third of that is used in aromatherapy.

Tips:

- Meet frankincense buyers at trade fairs, such as [Health Ingredients Europe](#), or at matchmaking platforms such as [Go4WorldBusiness](#).
- See our [tips for finding buyers](#) for more information.

Changing perception of health

European consumers are more aware of the importance of a healthy lifestyle, and their understanding of what it means to be healthy is changing. Instead of focusing only on the absence of illness, consumers use health products to prevent diseases and feel good. This trend is driving demand for:

- *Natural health care products and ingredients*: There is an increasingly strong view that natural ingredients are safer than synthetic alternatives.
- *Food supplements*: Consumers add supplements to their diets to feel healthier and prevent illnesses. Future Market Insights expects the [European food supplement market to increase 7.4% annually](#) from 2015 to 2025. In 2025, the market would then be over US\$ 60 billion. Particularly strong growth is foreseen in Eastern Europe.

Tips:

- See our study on [trends for natural ingredients for health products](#) for more trends and tips.
- Conduct your own further market research on trends for frankincense and the changing perception of health. Check online magazines such as [Nutra Ingredients](#), [Nutraceuticals World](#) and [Vitafoods Insights](#).

Growing need for health products for joints

Europe's ageing, overweight and inactive population has a higher risk of health conditions involving joints. This offers opportunities for frankincense extract (*Boswellia serrata*) based on their content of boswellic acids. Around [22% of Europe's population](#) is reported to be under long-term treatment for troubles with muscles, bones and joints, such as rheumatoid and arthritis. Countries with a relatively high incidence include Austria (38%), Hungary (36%), Slovakia (36%) and Spain (35%). The lowest incidence was reported in Cyprus (17%), Finland (16%) and France (11%).

As the condition of joints and healthy ageing are key concerns for the ageing population of Europe, there is a [growing interest in food supplements to maintain joint health](#). Consumers are looking for new ingredients and Frankincense would be a good opportunity in terms of efficacy and history of use.

In addition, younger consumers also show a [growing demand for bone and joint supplements](#), to address physical demands of their lifestyles.

Tips:

- Communicate how the long-term use of frankincense will not have a negative impact on health. Substantiate the product safety with scientific research.

- Look for literature sources on the anti-inflammatory properties of frankincense and their health benefits in joint conditions. Use these references in your product documentation and marketing materials.
- For more information on Europe's ageing population, see our [study on trends for natural ingredients for health products](#).

Growing popularity of aromatherapy to reduce stress

There is an increased need for health products to relieve symptoms related to stress. Several studies have found that stress and anxiety are increasing in Europe:

- According to Workplace Options, cases of people [experiencing stress increased by 27% between 2012 and 2014](#), while cases of anxiety increased by over 84% in the same period.
- A consumer survey in the United Kingdom showed that [85% of adults experience stress regularly](#).
- Around 25% of the European population risks health problems due to [workrelated stress](#).

Consumers are also increasingly using aromatherapy products to relieve stress. They see aromatherapy products as safer compared to conventional medicine and they have a growing trust in their effectiveness.

Frankincense oil (*Boswellia sacra*) has an opportunity in aromatherapy as it is traditionally used to relieve stress and anxiety.

The market for aromatherapy is especially large in France, Germany, Austria and Switzerland. In these countries aromatherapy is commonly practised as medicine. There is also a good market for aromatherapy in the United Kingdom and the Netherlands.

Tips:

- Look for references on the use of frankincense in aromatherapy for stress and anxiety conditions. Use these references in your product documentation and marketing materials.
- Focus your exports on the UK, France, Germany, Switzerland and Austria, as these are important markets for aromatherapy products.
- In countries where aromatherapy is marketed and administered as a medicinal product (e.g. France, Germany), you may need to comply with legislation for herbal medicinal products. See our study on [buyer requirements for natural ingredients for health products](#) for more information.

Expected supply shortages

International demand for frankincense is growing. However, as a wild-collected product, supplies are limited. In various countries, supplies are even expected to decline in the future, for example in Ethiopia and Somalia.

Ethiopia is a leading exporter of frankincense. However, overharvesting, low regeneration and high mortality rates in the trees producing frankincense are likely to halve production over the next 15 years. Trees are also being cut down for use as firewood. In addition, young trees are not surviving due to fire, grazing and beetle attacks.

In Somalia, economic pressure from strong international demand for frankincense leads to [overharvesting of frankincense](#). Trees are being tapped year-round. As a result, trees cannot recover and repair themselves, and so become susceptible to pests. There is no enforcement of sustainable harvesting practices.

The frankincense trees in Somalia are also adversely affected by climate change. Industry sources indicate that the yield of the resin is declining as a result. This could also be an issue for frankincense trees in neighbouring regions.

Research has indicated that *Boswellia papyrifera* is a threatened species in Eritrea. Other *Boswellia* species are listed as vulnerable on the [IUCN Red List](#).

According to European buyers, the supplies of *Boswellia serrata* from India are coming under threat as well.

Tips:

- Protect areas where frankincense trees grow from ground fires and grazing for 5-10 years. This will allow saplings to become established. Research has shown that these measures also make trees less susceptible to beetle attacks.
- Keep a close eye on information about harvests and prices of frankincense from Ethiopia to anticipate supply shortages. You can ask your buyers for this information.
- Check studies on the expected decline of frankincense trees, such as this 2012 [research on the expected decline](#) in the supply of frankincense from Ethiopia or [findings from the Environment Society of Oman](#).

Strong demand for fair-trade and sustainably produced frankincense

Sustainability is key for frankincense. Demand keeps on growing and supplies decrease (see trend on expected supply shortages). At the same time, fair and ethical production of frankincense is important as well. This is both a result of consumer demands and of a need on the production side to ensure long-term supplies. Collectors live in remote areas in unstable regions, with a harsh environment in which to collect the resin.

Ethical and especially organic production of essential oils is particularly important when consumers use them as aromatherapy. Consumers see organically certified oils as being of higher quality than conventionally produced oils. Moreover, many European consumers of essential oils for health purposes are also interested in ethically produced ingredients.

Tips:

- Check if there is sufficient interest in an organic version of your frankincense oil. Talk to your (potential) buyers to see if they are interested in certified frankincense oil. Look for companies that trade in organic frankincense online or at trade fairs.
- If your frankincense is not certified, promote the sustainable and ethical aspects of your production process. Buyers might ask you to support your claims with certification or documentation on your (Corporate Social Responsibility) practices.
- See our study on [buyer requirements for natural ingredients for health products](#) for more information on certification standards.

4. With which requirements should frankincense comply to be allowed on the European market?

You can only export your frankincense to Europe if you comply with [buyer requirements for natural ingredients for health products](#)

Moreover, your frankincense needs to be sustainably sourced. This is especially important for frankincense because the resin is wild-collected. You also need to communicate to your European buyers that your frankincense is sustainably sourced.

You may need to establish [Access and Benefit Sharing \(ABS\)](#) agreements for your ingredient, if you use the genetic resource for Research and Development (R&D), for example if you research the genes or its biochemical composition.

Which specific requirements you need to comply with depends on whether your frankincense is used in herbal medicinal products or in food supplements.

Requirements specifically for herbal medicinal products

You can only export your frankincense to the European herbal medicinal products market if you comply with the legal [requirements for natural ingredients for health products](#). For herbal medicinal products specifically, these include:

- Relevant [European legislation](#) (Directive 2004/24/EC); simplified regime for traditional herbal medicinal

products;

- Detailed quality, documentation, labelling, packaging, certification and traceability standards as established in [the rules governing medicinal products in the European Union](#);
- [Marketing authorisation](#) of medicinal products to be sold in the European market;
- [Good Agricultural and Collection Practices \(GACP\)](#) for raw plant materials;
- Good Manufacturing Practices (GMP) for [extracts](#) used in herbal medicinal products or [active substances used as starting materials](#).

Requirements specifically for food supplements

You can only export your frankincense to the European food supplements market if you comply with the legal [requirements for natural ingredients for health products](#). For food supplements, these include:

- [European legislation for food supplements](#) (composition and labelling requirements);
- [General Food Law](#);
- Food Safety (see below).

Food safety requirements cover:

- [Maximum residue levels \(MRLs\)](#)
- [Contaminants in food](#) and [microbiological contamination of food](#)
- [Food hygiene](#) (Hazard Analysis Critical Control Point)
- [Extraction solvents](#)
- [Food irradiation](#)
- [Traceability](#).

Additional requirements

Many buyers have additional quality requirements. These can go beyond legislation and standards (for example relating to active ingredient content, moisture content, contaminants and residues). These are established in buyer specifications.

To show that you meet the specifications of buyers, you need to develop well-structured company and product information, including detailed technical data sheets. See our [tips for doing business](#) for more information.

Requirements for niche markets

Standards and requirements for social and environmental sustainability include:

- [Organic production](#)
- Verification and/or certification of sustainable production, including [FairWild](#), [FLO Fairtrade](#), [FairForLife](#), [UNCTAD BioTrade Initiative](#), [Union for Ethical BioTrade](#)
- Supplier codes of conduct
- [ISO 26000](#) on social responsibility.

European food industries increasingly demand compliance with quality and food safety management. Examples include:

- [ISO 9001:2015](#) (required for health ingredients)
- [International Food Standard](#)
- [ISO 22000](#) (food safety management)
- [ISO 31000](#) (risk management).

Quality requirements for frankincense

Consistent quality is a major concern for European buyers of frankincense. Good-quality frankincense needs to have a specific composition. You also need to do proper sorting and grading and prevent contamination in your post-harvest processing.

Composition

For European buyers to consider your frankincense oil of good quality it needs to have a certain composition and chemical profile. Differences in the oil's composition are the result of variations in composition of the resin. These are influenced by specific tree variety, environmental conditions and time of harvesting.

The main chemical compounds of frankincense oil (*Boswellia carterii*) are:

- α -pinene
- risedronic acid
- linalool
- octyl acetate
- bornyl acetate
- incensole
- incensyl acetate.

Tips:

- Work together with a local university to test your frankincense oil. They can help determine its chemical profile, which needs to be included in your product documentation.
- Standardise and minimise significant variations in your product's quality. Monitor harvesting practices and blend essential oils from different harvests. For example blend early and late harvests, or blend essential oils from different areas.
- Always match activities such as standardising to the requirements of your buyer. Whether they want a standardised essential oil depends on the intended use of the product.
- Use extraction methods (temperature, pressure, time) that match your buyer's preferences and specifications.

Post-harvest processes

Frankincense resin is graded according to size, colour and state of cleanliness. This is to ensure stable quality, which is demanded by European buyers.

For essential oil production, good-quality resins should have a gum-like rather than crystalline consistency. This indicates a higher oil content which would increase your yield.

[Different grading systems exist](#), depending on the *Boswellia* species. For example, frankincense resins from Somalia are offered in seven grades of *Boswellia frereana* and three grades of *B. sacra*. Table 4 gives examples of a grading system for *Boswellia papyrifera* from Ethiopia.

For these resins, buyers value the larger, paler lumps more highly than small, dark-coloured resins, powder and siftings.

Table 4: Grading system for frankincense (*Boswellia papyrifera*) in Tigray, Ethiopia

Grade	Description
1A	Size: >6mm; white
1B	Size: >6mm; creamy white
2	Size: >4mm < 6mm; white
3	Size: >2mm <4mm; mostly white

4 – special	Any size; brown
4 – normal	Any size; black
5	Powder and bark

Source: CIFOR, 2011

Tips:

- Dry frankincense in the shade before processing the resin into an essential oil. This helps avoid the resin sticking together.
- Train collectors to cut properly. This helps prevent contamination by sand and bark.
- Keep your facilities, storage rooms and equipment clean. Clean the resin if necessary.
- Store frankincense resin at a moderate temperature. This helps prevent the loss of volatile oil.
- Follow strict grading and sorting standards to minimise quality discrepancies between batches.
- Prevent adulteration (for example with α -pinene to enhance odour) to preserve your reputation. Importers regularly analyse products for adulteration.
- Use incentives when you train your collectors to ensure that they follow your specifications on collection and post-harvest processes.
- Check [Good Practices for Gums](#) from the Association for International Promotion of Gums for more information.

Labelling requirements

You need to comply with the following demands for the labelling of your frankincense:

- Set up a registration system for individual batches of your frankincense oil, whether they are blends or not. Mark them accordingly to ensure traceability.
- Label your products in English, unless your buyer wants you to use a different language.

Your labels must include:

- Product name/INCI name
- Batch code
- Place of origin
- Name and address of exporter
- Date of manufacture
- Best before date
- Net weight
- Recommended storage conditions

If you supply organic frankincense, your label needs to include the name/code of the inspection body and certification number.

You also need to give your buyer the following documentation:

- Technical data sheet (TDS), check this example for [frankincense oil](#)
- CAS number (if available)
- Certificates of analysis, see this [example of frankincense oil](#)
- Safety data sheet (SDS), check this example of [organic frankincense oil](#)
- GMO certificate (if requested)
- Certificate of origin
- Product information sheet

Frankincense essential oil is classified as hazardous. This means that you need to include hazard symbols if you export the product as oil. See the examples below. These show that it is flammable and harmful (Xn).

Figure 1: Hazard symbols for frankincense essential oils

You also need to include risk phrases in your Safety Data Sheet. These phrases show what the main risks and hazards are and how you should prevent them. For frankincense oil you need to include phrases with at least the following numbers: R10, R22 and R65.

Tips:

- See the European Union [Directive 2001/59/EC](#) for more information about phrases used to describe risk and safety matters.
- Check the [database of the European Chemicals Agency](#) for more information on the hazard classification of frankincense oil.
- See our manuals on preparing a Technical Data Sheet for [natural ingredients for cosmetics](#) and [natural food additives](#) for additional information. This manual includes information about preparing a Safety Data Sheet.

Packaging requirements

Packaging requirements may differ per buyer. However, there are some general requirements you have to take into account. See the tips below.

Tips:

- Always ask your buyer for their specific packaging requirements.
- Use UN-approved packaging to transport your frankincense oil. For more information, check [the website of UNECE on the transport of dangerous goods](#).
- Re-use or recycle packaging materials. For example, use containers of recyclable material (such as metal).
- Use containers of a material that does not react with components of the extract (such as lacquered or lined steel, aluminium or others as specified by your buyer).
- Clean and dry the containers before filling them with frankincense oil.
- Fill the headspace in the container with a gas that does not react with constituents of the extracts (e.g. nitrogen or carbon dioxide) to reduce the oxygen content.
- Store containers in a dry, cool place to prevent quality deterioration.
- Physically separate organic-certified frankincense from frankincense that is not certified.

5. What competition do you face on the European market for frankincense?

Market entry barriers

European buyers only want to do business with you if you can provide a steady, sustainable supply of frankincense. Because access to resins in the country of origin can be difficult, this is a major barrier to enter the market.

Access to resins can be difficult because you may need concession rights to collect frankincense. It can be difficult to organise collectors. Moreover, the harsh environment of the remote production sites in unstable regions for wild-collected frankincense discourages many collectors.

For the resin

The probable drop in future supplies of frankincense may create opportunities for new exporters. Once you have secured sufficient supplies of the raw material, barriers to entering the European resin market are relatively low.

You can collect, sort, grade and clean resins manually. And you need little technology and capital. Your collectors only need basic skills to meet requirements of buyers.

Resins can become scarce and expensive if they are over-harvested. Together with low regeneration and high mortality rates in trees, over-harvesting poses a threat to the supply of frankincense resin, in particular from Ethiopia.

If you apply sustainable resource management to the collection process, you can ensure sustainable supplies. You do not always need to certify your frankincense. Resource mapping and formulation of a resource management plan may be sufficient if well documented.

For value-added products

Barriers to market entry are much higher if you want to export frankincense essential oil (a value-added product of *Boswellia sacra*). This oil is produced by steam distillation. You need more advanced technology, skilled personnel to work with this technology and you need to manage quality.

Aside from being a threat to your own market entry, these barriers can also be an opportunity if you can comply with market requirements for frankincense oil. High entry barriers also keep out other new entrants.

Since frankincense is wild-harvested, supplies of the oil can vary significantly in quality and quantity. European buyers want stable supplies of oil of consistent quality.

Tips:

- Stabilise your supply of frankincense for essential oil production. One way of doing this is to cooperate closely with collectors. This demonstrates your commitment to a long-term trade relationship.
- Organise collectors into cooperatives or producer groups to improve production volumes and qualities. Larger groups of collectors allow for efficient value addition activities such as sorting, grading, cleaning and also increase their supplier power.
- Gain control over harvesting. For example, train collectors in the use of sustainable resource management methods.
- Look into the possibilities of [FairWild](#) certification to show your European buyers your collection process is sustainable. Always discuss this option with your buyers first. Determine if they find this certification important.
- Determine the optimum level of resin harvesting. Take the annual resin yield and resin quality into account. Include rest periods when resin is not harvested. This allows trees to recover. Read [this publication](#) by the Centre for International Forestry Research for further information on the sustainable production and marketing of frankincense resin.
- Only consider additional processing when you already have access to the market for unprocessed resins. See if you have the financial and human resources to invest in the new technology which is needed. If you have the resources, start with a smallscale pilot to develop the product and research its qualities.
- Cooperate with other resin essential oil producers to share the costs of investment in distillation equipment. Once you have mastered the steam distillation of frankincense, you can use the same technology to distil essential oils from other resins or plants.

6. What are substitute products for frankincense?

Substitute products for frankincense depends on how the resin or oil is used on the European market. These products can be a threat for your frankincense.

Substitute products for frankincense used to promote the health of joints

Most alternatives to herbal food supplements are natural, non-botanical supplements. Major products are supplements that contain glucosamine and chondroitin. For examples, check the [website of Holland & Barrett](#) (United Kingdom retailer). Since these markets are reaching maturity, companies are interested in alternative

ingredients that have more potential for growth.

Other natural alternatives include:

- Botanical products, such as seaweed and pine bark extracts;
- Non-botanical products, such as extracts of eggshell membranes.

In joint health, efficacy and safety are key. This needs to be backed up with scientific research and clinical trials. European consumers want products with measurable benefits. Frankincense can stand out from other products because [various studies have shown](#) that its extracts have the potential to reduce inflammation and relieve the symptoms of arthritis of the knee.

Substitute products for frankincense used for stress and anxiety

As an aromatherapy product, frankincense oil has most potential to target less severe stress and anxiety conditions. Examples are: relieving minor stress, offering sleep aids or increasing relaxation. On the European market for such conditions herbal products, including aromatherapy, have a strong position, particularly for long-term use. Other aromatherapy oils for this use could be sources for product competition, these include:

- lavender
- neroli
- petitgrain
- (rose) geranium
- ylang-ylang.

Most species used for stress and anxiety have established markets, and they can be used interchangeably in different combinations, often with vitamins and/or minerals. These are highly competitive markets where margins are comparatively low.

What makes frankincense special compared to other products that relieve stress is its long traditional use as incense and in aromatherapy. The Bible describes it as one of the three gifts offered to Jesus. Frankincense also has a luxurious image.

Tips:

- See our [tips for doing business with European buyers](#) of natural ingredients for health products.
- Demonstrate in your communication and promotional materials your insights into developments within the competitive environment.
- Build a marketing story for your frankincense.
- Do a literature study on the potential of frankincense and boswellic acids in joint health and use this in your promotion materials and product documentation.
- If you want to target the aromatherapy market, build a marketing story for your frankincense. Emphasise the long standing traditional use of the oil and how it can be used to relieve stress and anxiety.

Company competition

Your main competition will come from other frankincense producers. The largest production is from Ethiopia, Somalia, Sudan, Saudi Arabia and India. Industry sources indicate that *Boswellia sacra* also grows in Oman and Yemen.

India is the only source for *Boswellia serrata*, which is used in food supplements and herbal medicinal products. Exports of Indian frankincense fluctuate heavily. In 2014/2015, India [exported 87 tonnes of the resin](#), valued at US\$ 176,000. Around 65% of the country's exports that year were destined for Trinidad, Mexico, Malaysia and the United States. India is also a large producer of frankincense extracts.

Oman has set a maximum for exports of frankincense resin to stimulate the production and export of essential oils.

Somalia only exports frankincense resin as the country does not have distilleries to extract oil.

Sudan exported over 3,700 tonnes of frankincense resin between 2000 and 2007.

India is a growing importer of these products, to extract boswellic acids.

If you want to compete with other suppliers of frankincense, you need to find a unique selling point.

You can create a unique selling point with further processing. This creates a distinct market profile, makes you more attractive to buyers and adds value to your product offering. Options include:

- Ensure proper post-harvest processing (sorting and grading) and proper documentation to exploit opportunities to add value to raw materials.
- Move beyond raw material to produce frankincense oils or extracts which match buyer requirements. Because this is more difficult for extracts, European buyers often prefer to import raw materials and do the extraction themselves.
- Show traceability and sustainable future access to raw materials.

Tips:

- Help manufacturers build their story by documenting and visualising your product's and company's unique value proposition. For example, sustainable wild collection, supporting communities and traditional uses. Final manufacturers can use this to market the end product in Europe.
- Ensure that you can get an adequate return on your investments for quality improvements. Carry out improvements on quality according to your buyer's requirements (specifications) and what they are willing to pay for.

To stand out on the European market you can also certify your company according to social and environmental sustainability principles. This can also add value:

- Producers with a company image focused on ethical or environmental sustainability place more value on certification of the ingredients.
- Food supplements: opportunities for certification increase if the product is positioned as a food-type product, rather than as a medicinal-type product.
- Herbal medicinal products: these cannot use certifications on their labels, but sustainable certification will add value if you target manufacturers with a philosophy that calls for such certification, such as organic.

Tips:

- Verify if your European buyer is interested in certified ingredients.
- Organic certification also acts as a quality control system and can help to improve your quality image.
- Fair Trade and FairWild certification can help indicate to your buyer that the production of ingredients is generating rural income and does not harm local communities (this could jeopardise the buyer's image).
- Certification demonstrating sustainable sourcing (e.g. FairWild) can help show potential buyers that you could be a reliable future partner.

7. Which channels can you use to put frankincense on the European market for health products?

Market channels

Figure 2: Market channels for frankincense for health

Importers and distributors are your most important entry point into the European frankincense market (see figure 2). These can trade in up to 500 species, together with other (synthetic) ingredients. They focus on global sourcing, analysis and quality control, rectification, blending, product documentation and sales to processors and end-product manufacturers.

If you are a small exporter and new to the European market, you can also work with an agent to represent you in the market.

Frankincense resin is cleaned and graded in the country of origin.

In the country of origin, resins can be distilled into an essential oil for the aromatherapy market, or into an extract for the food supplement market.

Resin oils imported from outside Europe mostly enter the region through specialised importers concentrated in Hamburg, Germany (e.g. [Roeper](#)) and Marseilles, France (e.g. [Mane](#) and [Biolandes](#)). Essential oils often do not need further processing in Europe and can be used directly in aromatherapy.

The resin can also be processed in Europe. Further processing of the extract or producing extracts with a standardised content of boswellic acids normally takes place in Europe.

Tips:

- Benefit from the experience and knowledge of specialised European importers and agents instead of approaching manufacturers directly.
- To help you enter the market, consider working with an agent or representative with a good reputation.
- See our study on [tips for finding buyers](#) for more information.
- Visit or participate in trade fairs to test if the market is open to your product, get market information and find potential buyers. The most relevant trade fairs in Europe are [SANA](#), [Health Ingredients Europe](#), [Biofach](#) (for organic products) and [Vitafoods](#).

8. What are the end-market prices for frankincense?

Global prices of frankincense resin average around € 2-3/kg. Frankincense oil is priced at €200-250 per kg.

Figure 3: Indicative price breakdown for frankincense oil, mark-ups in %

Although prices of the oil are higher, so are production costs. The profit also depends on the yields you achieve. For frankincense, yields of 3-10% are common.

In the future, frankincense prices are expected to increase due to limited supply. Unsustainable harvesting may severely decrease the global supply of frankincense. Some industry sources even indicate that the number of trees might decline by 90% in the next 50 years.

Tips:

- Improve prices of your frankincense resin by cleaning and grading.
- Adapt your prices to the different resin grades you can produce. These grades also result in different qualities of the essential oil.
- Ensure that your price reflects the quality levels and delivery conditions.

- Monitor harvests in major production countries to anticipate price developments for your frankincense resin and essential oil. You can request such information from importers.

Please review our [market information disclaimer](#).