What is the demand for natural ingredients for health products on the European market?

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Increasing consumer preference for natural and alternative treatments makes Europe an interesting market for natural ingredients for health products. The strong European manufacturing industry has recently launched new natural health product innovations, boosted by the COVID-19 pandemic. Increased attention to preventive healthcare also drives the demand for medicinal and aromatic plants, extracts, essential oils, seaweeds and algae, turmeric, and ginger. Western European countries with large consumer markets and a long history of self-medication offer the most opportunities for exporters of natural ingredients for health products.

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1. Sector description

In this report, health products are defined as food supplements and herbal medicinal products. Natural ingredients with the most potential on the European health products market include:

- Medicinal and Aromatic Plants;
- Essential oils;
- Botanical extracts;
- Seaweeds and algae (spirulina and chlorella);
- Turmeric; and
- Ginger.

Table 1: Description of the natural ingredients for health products interesting for the European market

Product	Harmonised System code (used in international trade data)	Description

Medicinal and aromatic plants (MAPs)	HS code 121190	Medicinal and Aromatic Plants (MAPs) are botanical raw materials that are mostly utilised for therapeutic and aromatic purposes as components of health products as well as cosmetic products. This product group includes rosemary and hibiscus (ginseng roots, coca leaf, poppy straw and ephedra are excluded).
Essential oils	HS code 330129	Essential oils are extracted from plants through steam or water distillation. HS code 330129 is defined as 'other essential oils' (citrus fruit and mint oils are excluded). Essential oils traded under HS code 330129 include patchouli, frankincense and ylang-ylang.
Botanical extracts	HS code 130219	Botanical extracts are derived from processing MAPs, herbs or spices by using a solvent. Generally the original components of the plants are not changed, though botanical extracts have a higher concentration of actives or nutrients. HS code 130219 includes aloe vera extract and ginseng extracts (liquorice, hops and opium are excluded).
Seaweeds and other algae fit for human consumption	HS code 121221	Seaweed refers to a number of species of macroscopic, multicellular and marine algae that grow along rocky shorelines around the world. Seaweed varies in colour from red to black. Most edible seaweed is marine seaweed, which is part of many coastal cuisines.
Turmeric	HS code 091030	Turmeric (Curcuma longa) is a species of the Curcuma genus from the Zingiberaceae family. The active substance of turmeric, curcumin, has multiple therapeutic properties as an anti-inflammatory, antioxidant and cancer preventor.

Ginger	HS code 091012 (crushed ginger)	Ginger is the irregularly shaped root (rhizome) of the ginger plant (Zingiber officinale). The plant is cultivated in the tropics. Although also used as a spice in the food market, ginger is also used in food supplements and herbal medicinal products.

2. What makes Europe an interesting market for natural ingredients for health products?

Europe is a significant producer, importer and consumer of health products. It is an important market for food supplements and herbal medicinal products. The market is forecast to grow as consumer interest in natural health options continues. As part of the ever-developing market requirements, sustainable sourcing is increasingly important in the European market.

Strong and growing European demand for health products

Natural ingredients for health products are mainly used in food supplements and herbal medicinal products, or alternative medicine. Though data are limited on the total market size for these segments, available market research predicts a strong and growing attention to alternative medicine and related demand in Europe. This translates into opportunities for exporters of ingredients used in such final products.

In 2022, the European market for food supplements was valued at USD38.1 billion. The market is expected to grow at an annual rate of 7% in 2023-2030, to reach a value of USD65.4 billion. Europe is expected to be the third-largest market for food supplements following Asia-Pacific and North America. The sector association Food Supplements Europe states that 52% of European consumers take supplements to maintain their overall health.

Data on the market for herbal medicinal products are limited. Moreover, available market research often uses different definitions for this sector, which sometimes include herbal food supplements or cosmetic products. Globe Newswire predicts that the European herbal medicine market will reach USD35.8 billion by 2026, becoming the second-largest market for herbal medicine globally following Asia-Pacific.

Europe is the largest market for complementary and alternative medicine (CAM), with an estimated value of USD33 billion (around €33 billion) in 2021. The European complementary and alternative medicine market is expected to grow at an annual rate of almost 21% in 2022-2028, to reach USD125 billion (around €125.6 billion). Studies show that CAM treatments are most popular in Germany and Switzerland. This is partly because some CAM treatments are covered by health insurance. Other reasons for a higher demand for CAM therapies are a long history of using CAM therapies in the region, as well as positive attitudes that favour natural and holistic approaches to health and healing.

Increasing investment in innovation and R&D make Europe an interesting market for suppliers of natural ingredients for health products. The European herbal medicine and CAM industry are investing in new product development, extraction technologies and research on medicinal plants. Innovative health products companies are hosted by countries like Germany (Schaper & Brümmer and Dronania) and Sweden (New Nordic and Apoteum). The number of applications of natural ingredients in health products is expected to increase in the coming years.

Growing European imports of natural ingredients

Total European import volume of many natural ingredients for health products increased over the last 5 years (see Figure 1). Developing countries play a large role in the supply of various ingredients, including:

- Essential oils (52% of total European imports in 2022)
- Medicinal and Aromatic Plants (MAPs) (56%)
- Ground ginger (69%)
- Turmeric (79%)

Although imports of seaweeds decreased by 8% annually in the last 5 years, CBI's target countries played a growing role in this product category. European seaweed imports from those countries grew at an average annual rate of 31%, with countries like Ethiopia experiencing higher competitiveness of seaweed exports to Europe. Developing country suppliers played an expanding role in providing extracts, with European imports growing at an average annual rate of 21%.

For many of these ingredients, the Netherlands and Germany are key trade hubs from where ingredients are distributed to other European countries.

Source: Eurostat (2022), ITC Trademap (2023)

Consumer interest in natural health options expected to grow further

Consumer interest in natural health products has been growing for several years now. Moreover, there has been a rising interest in preventive healthcare, a category in which natural health products and their ingredients play an important role. The demand for natural ingredients for health products received a boost during the COVID-19 pandemic and is expected to continue.

During the pandemic, consumers' growing awareness of their health drove demand for health products. At a global level, over 50% of consumers look for products with botanicals they believe will improve their immune, gut and mental health.

According to the Good Food Institute Europe, the sales value of the European plant-based sector has increased by 22% over the last 3 years, reaching a high of USD5.8 billion in 2022. The sector is expected to continue to grow in the coming years, reaching a value of USD11.6 billion in 2028. According to a global study conducted by Mintel, the 5 most innovative countries in Europe for plant-based foods are the United Kingdom (UK) (24%), Portugal (21.5%), the Netherlands (19.1%), Germany (18.7%) and Austria (16.9%).

Business Insights predicts that demand for plant-based ingredients in food supplements will grow considerably. The global market for plant-based probiotics is predicted to grow at 6.7% annually between 2022 and 2032, reaching USD1.7 billion. In 2022, Europe took the lead in the global market, holding a market share of 25.2%.

Sustainable sourcing important in natural ingredients for health products

The widening adoption of healthier lifestyles boosts sales of natural and clean label health products. Natural and organic health products are perceived as safer and high-quality alternatives. A survey on behalf of Food Supplements Europe shows that 56% of respondents consider organic, natural or non-GMO labelling to be of importance when purchasing supplements.

This coincides with a growing demand for organic products. In 2022, the European organic sector was valued at €82 billion, growing by nearly 12% compared to the previous year. Buyers indicate that there is hardly a market for non-organic certified ingredients when it comes to specific natural ingredients for health products such as moringa and baobab.

The share of organic in the total market of natural ingredients for health products is expected to stay small, although there are no specific statistics available confirming this. Organic certification is more common for food supplements than for herbal medicinal products, which cannot be labelled as organic as a finished product. Opportunities for certification increase if a food supplement is positioned more as a food-type product rather than as a medicinal-type product. Buyers use organic certification as a sign of quality and traceability.

Both consumers and European buyers increasingly demand sustainably sourced ingredients. Consumers have growing concerns for sustainability and ethical production, and want to know where their products originate from. Plus, European buyers are becoming more involved in sustainable management of resources to ensure future availability.

Many health products contain wild-harvested medicinal and aromatic plants that are at risk of overharvesting or are threatened with extinction. Good practices and responsible sourcing following standards, such as FairWild, are essential towards securing future supply of natural ingredients for health products.

European buyers of natural ingredients for health products are also facing a lack of quality and safety control in the country of origin. Adulteration and heavy metal contamination of medicinal plants are major issues that present serious health risks for consumers of health products. Buyers are increasingly demanding that exporters have quality and food safety management systems in place, preferably certified.

Tips:

- Explore the potential of the food supplements market. In Europe, natural ingredients are used in much larger quantities in the supplements sector and the complementary and alternative medicine sector than in generic medicine, which mainly uses synthetic ingredients.
- Inform buyers how your ingredients can help consumers improve their health and wellbeing. Focus on the nutritional or health aspects of your ingredients when supplying active ingredients. Do not make medical claims. More information on EU regulations regarding claims can be found on the European Commission website.
- Read the CBI study on buyer requirements for natural ingredients for health products, which provides an overview of regulations for exporting natural ingredients for health products to Europe, as well as organic certification.
- Read the CBI study on which trends offer opportunities or pose threats in the European natural ingredients for health products markets. The study has useful information about the European health products market as well as information likely to increase your chances of market access.
- Read the CBI studies on moringa and baobab for more information on the European market potential of these products.

3. Which European markets offer most opportunities for natural ingredients for health products?

Western European countries like Germany, France, Italy, the UK, Spain and the Netherlands are the most attractive domestic markets for suppliers of natural ingredients for health products. These countries have different characteristics that make them interesting. For example, the Netherlands is an important entry point for natural ingredients, with a concentration of ingredient importers and distributors. The Netherlands plays an important role in re-exportation within Europe, primarily driven by these importers and distributors, as well as the robust logistical capabilities of the Port of Rotterdam. Figure 2 below shows leading importers per product group included in this study.

Source: Eurostat (2023), ITC Trademap (2023)

These countries have the largest processing sectors and consumer markets. Large health product manufacturers using natural ingredients are also located there. Some of the largest producers of supplements are located in Western European countries (see Table 2 for an overview of characteristics on these main markets).

Table 2: Characteristics of leading European markets for natural ingredients for health products

	Production	Processing	Trade	Herbal medicinal products market	Food supplement market
Germany	Large EU producer of Medicinal and Aromatic Plants (MAPs)	Largest extraction industry	Largest importer, highest share of imports from developing countries	Largest market EU, also interest in aromatherapy	Large market
Italy	Large EU producer of MAPs	Strong extraction industry	Main importer MAPs/extracts	Medium-sized market	Largest EU market: limited herbal
France	Large EU producer of MAPs (use in cosmetics)	Strong extraction industry	Main importer MAPs/extracts	Large EU market, also interest in aromatherapy	Large market
UK	Small EU producer of MAPs		Strong trader in MAPs/extracts	Mid-sized market, relatively large in Ayurveda/TCM	Large market, focus on multi-herb products
The Netherlands	Limited production of MAPs	Limited extraction industry	Important trade hub for natural ingredients, large share of imports from developing countries	Medium-sized market	Medium-sized market

Spain	Large EU producer of MAPs	Strong extraction industry	Important and growing importer of MAPs for processing industry	Medium-sized market	Small but fast-growing market

Source: ProFound, 2023

Germany: At the centre of herbal medicinal products in Europe

Germany has the largest consumer market in Europe, with ever-more health-conscious consumers. In combination with growing consumer interest in plant-based products and a strong extraction industry, the German market offers opportunities for exporters of natural ingredients for health products.

The German food supplement market was worth an estimated €2.96 billion in 2022, having grown at an average annual rate of 6.5% since 2018. Germany has the second-largest food supplements market in Europe, after Italy. Pharmacies are an important distribution channel for food supplements in Germany, but the online sales channel is growing rapidly. In 2022, the mail-order business contributed to about 33% of the revenue generated from food supplements, amounting to €984 million. Between 2021 and 2022, there was a 10% increase in sales through online channels.

According to a study conducted by the German Nutrition Society, the number of people taking food supplements in Germany rose from 32% in 2020 to 42% in 2023. This trend is expected to continue in the coming years as German consumers become more aware of the natural benefits of these products. Of the food supplements consumed, herbs and herbal products make up approximately 20% of the overall consumption, and herbal supplements such as algae 10%. Minerals and vitamins are particularly popular among German consumers, which made up slightly less than half of the country's food supplements market in 2022.

Germany has a long tradition of using herbal medicinal products, involving a large part of the German pharmaceutical market, especially in self-medication products. In 2021, German sales of over-the-counter herbal and homeopathic medicines reached almost €2 billion. This represents 29% of the total German over-the-counter medicine market.

The cultivation of MAPs has a long tradition in Germany, especially in the eastern states. Several German MAP producers are able to compete on the market, particularly with ingredients for herbal medicinal products, owing to the high quality and excellent documentation they provide.

There is a strong domestic demand in Germany for both raw materials and further processed ingredients for industrial use aimed at supplying national and international markets with health products. In terms of trade, Germany is one of the largest importers of various natural ingredients for health products (see Figure 2). The country is also a key importer of raw materials, such as medicinal and aromatic plants, which are used in its extensive processing industry.

France focuses on herbal health products

France is an attractive market for exporters of natural ingredients for health products. This is a large and growing consumer market where consumers value plant-based food supplements. Traditionally, French consumers have relied on prescription medicines and food supplements for their health needs. As a result, France is one of the largest European markets for food supplements.

In 2022, the French food supplement market was worth €2.6 billion, an increase of 3% compared to the previous year. The market is expected to grow in the coming years, reaching a value of €3.2 billion by 2027. The expansion in the market is expected to come through online distribution channels. According to Synadiet, the national trade union for food supplement professionals in France, online sales grew by 16% between 2020 and 2021. This was mainly a result of the COVID-19 pandemic. Though modest, online sales kept increasing by 1% between 2021 and 2022.

A 2022 Synadiet survey shows that 80% of the French population perceives food supplements in a positive light. The most popular reasons for taking food supplements were to improve overall health and wellbeing (44%) and to prevent future health problems (42%). The naturalness of supplements is the primary driver for consumers to buy a supplement.

The French herbal medicinal products market is dominated by traditional Western herbal medicinal products, especially homeopathic remedies. The focus of these products lies mainly on preventive health. France is one of the main markets for herbal medicinal products in Europe, surpassed only by Germany. However, up-to-date market information is limited.

France has a substantial production of MAPs, mostly for the essential oil and cosmetics industries, and it is the largest EU importer of essential oils (see Figure 2). The production of MAPs relies on a growing number of French producers; between 2018 and 2023 the number of producers grew by 25%. This growth is driven by strong demand from domestic companies and significant valorisation of MAPs. According to Synadiet, even with a growing number of producers and the expanded cultivation area, demand remains higher than agricultural supply. France has a large extraction sector, supplying the herbal medicinal product, food supplement and cosmetics sectors.

French manufacturers produce high-quality consumer products at a competitive price, supported by documentation and market communication. The emphasis on quality ensures consumer satisfaction and trust in the products. Customer advice plays an important role in pharmacies and parapharmacies (retail stores that specialise in selling non-prescription or over-the-counter healthcare products) in France. French health product manufacturers include Laboratoires Boiron, Arkopharma and Phytea.

Italy: Number one food supplement market in Europe

For exporters in developing countries, Italy is an attractive market. The country is the largest importer of botanical extracts in Europe, with a thriving natural health products manufacturing industry. In addition, Italian consumers have a long history of using locally produced botanicals for herbal medicinal products and traditional medicine.

Italy is the leading food supplement market in Europe. In 2023, this market was worth €3.98 billion. In 2023-2028, the market is expected to grow at an annual rate of 5.54%, reaching a value of €5.22 billion. Pharmacies are the main distribution channel, selling around 80% of food supplements.

The Italian Association of Health Products and Manufacturers stated that the COVID-19 pandemic drove Italian consumers to take better care of their health. According to Ipsos market research, Italian consumers use food supplements to feel fitter (87%), and because they feel the need to take care of their body (84%). This trend continued even after the pandemic. A study by the IRI reported that 80% of Italians took dietary and nutritional supplements in 2023. According to a report by the Italian Federation of Herbal Medicine Industries, the Italian herbal product market amounted to €2.9 billion in 2022, which represents an increase of 16.2% from 2019. This is a share of around 11% of the country's total pharmaceutical market. However, this figure includes both herbal medicinal products and supplements. Products with natural active ingredients are increasingly used by Italian consumers, especially for mild health issues. Popular ingredients include passionflower, lemon balm, propolis, fermented red rice yeast, arnica, aloe and calendula.

Italy is a large European producer of medicinal and aromatic plants. The country relies less on imports from non-European countries than other main European countries in natural ingredients for health products. Still, the Italian market offers opportunities for raw materials that are grown in tropical climates.

UK: Increasingly imports natural ingredients directly from developing countries

The UK is a growing market with a strong demand for plant-based products that support general health. Additional opportunities lie in the dependence on imports of natural ingredients, as there is limited local production.

According to Mintel, the UK food supplements market was worth £494 million (around €578.8 million) in 2021. The report estimated that the market would reach £639 million by 2027, with an average annual growth of 4%.

The COVID-19 pandemic boosted the consumption of food supplements significantly. The Health Food Manufacturers' Association states that 20 million people in the UK consumed supplements on a daily basis in 2020. This was an increase of 19% compared to the previous year. The survey concluded that 71% of UK consumers take supplements and a third started taking food supplements during the pandemic. Key drivers for taking food supplements include general health and wellness (60.7% of UK consumers) and optimising health (20.4%).

British consumers increasingly look for natural and clean products, a trend that is reflected in other sectors, such as the food and beverages and cosmetics industry. Sales of herbal supplements increased by 68.6% at the start of the COVID-19 pandemic. According to Kantar, herbal supplements accounted for 19.6% of total supplement sales in 2020. However, in the first quarter of 2023 sales of herbal supplements increased by only 3.4%. Although this is still positive growth, it is much lower than that seen at the start of the pandemic.

The UK has a strong herbal medicinal products sector, with a relatively strong position held by traditional Chinese medicine (TCM) and Ayurvedic medicine, when compared to other European countries. This offers opportunities for ingredients commonly used in these traditional medicine systems. Aromatherapy is also popular in the UK. It is used for relaxation or preventative care rather than as a form of medication. Brands with a wide portfolio of aromatherapy products (essential oils) on the UK market include Oshadhi and doTERRA.

With limited local production, the UK relies on imports of natural ingredients (see Figure 2). The UK is expected to remain an important European market for natural ingredients for health products in the coming years. Brexit (UK's exit from the European Union) disrupted international supply chains. However, this seems to be having a positive effect on trade of natural ingredients for health products from developing countries. While total UK imports decreased for botanical extracts and MAPs in 2018-2022, direct imports from developing countries increased in the same time period. Similar developments can be seen for ginger and turmeric, where the UK is increasingly sourcing these ingredients directly from developing countries.

The UK's extraction industry is well developed, but considerably smaller than the industry in France, Italy and Germany. The industry mostly consists of small extraction companies. The UK also includes processors that import extracts from developing countries to complement their own product range. These imported extracts are sometimes reprocessed, but they can also be sold directly to manufacturers.

Spain: Gaining importance with growing supplements consumption and strong processing industry

Spain is a large processor of extracts and imports large quantities of MAPs (see Figure 2). Although the food supplement and herbal medicinal product markets are relatively small compared to other countries, their continuous growth and increasingly strong focus on preventative health treatments offer opportunities to exporters of natural ingredients for health products.

According to market researcher DBK, in 2020 the Spanish food supplements market was worth €400 million, up by 4% compared to 2019. Around 75% of Spanish consumers take nutritional supplements, approaching the consumption levels of European countries with a longer tradition of food supplement consumption. According to the Spanish Academy of Nutrition, consumers take supplements to improve their general health, to improve the functioning of the immune system and to have more energy. Around 29% of Spanish consumers take plant extracts, such as fibre, pollen and royal jelly.

Spain is an important European producer and processor of MAPs serving local and international demand. Although there are several large players, the sector is fragmented and includes many SMEs focused on processing domestic MAPs. Spain's extraction and natural health product industry is growing, with new companies entering the food supplements market. This leads to a diversified product portfolio and offers opportunities for developing country suppliers of natural ingredients for health products in Spain: Nutrifoods is a raw material distributor for food supplements, and Nutris is a formulator of food supplements.

The Netherlands: European trade hub for natural ingredients

Although the Dutch market for herbal medicinal products and food supplements is smaller than other leading markets, the Netherlands is a key trade hub for different types of natural ingredients (see Figure 2). This offers an opportunity to exporters from developing countries. The Netherlands depends on imports because there is limited local production.

The food supplements market in the Netherlands is growing and is expected to keep growing. The Dutch food supplement association NPN stated that the market reached a value of €693 million in 2020, an increase of 3.4% from 2019. Around two-thirds of Dutch consumers take supplements.

Dutch consumers mainly use supplements for preventative healthcare reasons. Around 42% of Dutch consumers take supplements to improve their overall health and 33% to improve their immune system.

The Netherlands is an important entry point for various natural ingredients from developing countries. The country's imports of botanical extracts and ginger in 2022 originated almost exclusively in developing countries (between 86% and 91%). The Netherlands also mainly imports turmeric from developing countries. Moreover, Dutch imports of seaweeds has been growing at a much higher rate than the EU average in the last 5 years.

The important role of the Netherlands as an entry point of ingredients into Europe is due to the country's re-exports to other European countries as well as to the strong ingredient-processing industry and the presence of importers/distributors that cover multiple countries. The Netherlands aggregates technology and know-how in the processing and formulation of ingredients, making it an interesting destination to suppliers from developing countries. An example of a trading company with presence in the Netherlands is Caldic. This company is active in the food, pharmaceutical, personal care and industrial formulations market.

Tips:

- Determine which market offers the best opportunities for your company and products. You can get market information from sector associations, online product portfolios of distributors and retailers, or by visiting trade fairs.
- Do your own market research. Review CBI market studies on the natural ingredients for health products sector and individual products or product groups. Or use online trade databases such as ITC Trademap or Access2Markets to download trade data for your product categories.
- Check out the CBI tips for finding buyers in the natural ingredients for health products sector, as this provides practical guidance on finding European buyers on the European market.
- Target health product companies in Western Europe. These countries are the largest consumers and producers of herbal medicinal products and food supplements. Consumers in these countries are also open to various types of complementary and alternative medicine.

4. Which products from developing countries have most potential on the European market?

European demand for natural ingredients for health products has been increasing for years and was boosted by the COVID-19 pandemic. Brands are increasingly innovating within the sector, both in final products and ingredients that support consumer health. A growing consumer demand for natural health products and botanicals creates opportunities for natural ingredients for food supplements and herbal medicinal products.

Medicinal and Aromatic plants (MAPs), essential oils, botanical extracts, seaweeds and algae products, turmeric, and ginger are popular natural ingredients on the European market with an important or growing role for developing country suppliers. The food supplement sector is trend-sensitive, which could present a risk that popularity of specific natural ingredients may not last. The herbal medicinal sector has more strict quality requirements, but buyers in this sector are more likely to stay with the same supplier.

Medicinal and aromatic plants

The range of MAPs used for healthcare is very large. Their potential use is even larger but is limited in practice by legislation. Worldwide, between 50,000 and 70,000 plants are used in traditional medicinal systems, and around 2,000 plants are used in significant volumes in the EU. Moreover, MAPs are also used in other markets, such as cosmetic products.

In 2022, EU imports of MAPs amounted to 236 thousand tonnes, over 54% of which originated in developing countries. This indicates that developing countries are an increasingly important source of medicinal and aromatic plants imported by Europe. Total European import volume of medicinal and aromatic plants increased by an average annual rate of 2.76% in 2018-2022, while the respective import value of MAPs increased by 10.1% annually.

Source: Eurostat (2023), ITC Trademap (2023)

Germany is the largest importer of medicinal and aromatic plants in Europe, followed by Spain and France. Together, these 3 countries accounted for over half of MAP import volume in 2022. These countries, as well as Italy, have considerable processing industries, for the health product market as well as for other industries such as cosmetics. German traders also play a role in distributing MAPs worldwide. The same holds for natural health ingredients and extraction companies in Germany, Italy and France, which supply healthcare companies across the globe.

The main developing country suppliers of MAPs to Europe are India, Egypt, Morocco and China. In 2022, these countries accounted for 52% of the region's MAPs imports from outside the EU. China and India are sophisticated producers of a wide range of botanicals. Morocco and Egypt supply various Mediterranean MAPs and herbs, such as German chamomile (Matricaria chamomilla), thyme (Thymus vulgaris) and rosemary (Rosmarinus officinalis).

European demand is focused on most commonly used MAPs, specifically those used in Western herbal medicinal products. There is, however, some demand for less common species with interesting active properties, with technical documentation and a documented history of use. This demand mostly stems from the food supplements market. For example, spices used in food are re-evaluated for their health properties (see the sections on turmeric and ginger below).

Quality and microbial safety of MAPs is important to European buyers. At the same time, consumers are interested in organic certified health products that support a healthy lifestyle, driving demand for organic MAPs. For example, research by the International Horticulture Congress shows that prices have been increasing for organic MAPs, especially for plants that are certified by a European or French quality sign, or by a protected geographical indication.

European MAP suppliers, especially in Western European countries, have a strong position in organic and well-documented MAPs, and many suppliers enjoy close relationships with buyers. Sustainable wild collection remains important in Europe, especially in Eastern European countries, which are a significant competitive threat to many developing countries producers of temperate (and Mediterranean) species. Most tropical and subtropical plant species are not produced in Europe for climatic reasons. This offers opportunities for developing country exporters that handle those species.

Several issues historically affect the MAPs sector. One outstanding issue is the overharvesting of MAPs, which puts pressure on wild plant populations. This can lead to an increase in threatened plant species worldwide. In addition, accurate identification of species and variation is often a problem. Largely unregulated and non-transparent supply chains limit the growth of the MAPs sector.

Tips:

Show sustainable wild collection by conducting a resource assessment. For more information, consult the CITES International standard for sustainable wild collection of medicinal and aromatic plants. Based on the assessment's outcomes, implement a resource management system. Document your processes to make sure your efforts can be translated to your price.

Read the European Union herbal monographs for more information on properties and applications of medicinal and aromatic plants.

Read the CBI study on Exporting Immune-Boosting Botanicals to the European market for more information on MAPs and their potential.

For more information on European herb production, check the website of the European Herb Growers Association. Here you can also download the association's Good Agricultural and Collection Practices, aimed to improve quality and safety of MAPs.

Essential oils

Europe is the leading market for essential oils globally. According to Grand View Research, the European market for essential oils is expected to reach a valuation of USD6.2 billion by 2028, with an annual growth rate of 5.6% from 2022 to 2028. Food, beverages and cosmetics industries make up the largest share of essential oils demand, but growing consumer interest in and awareness of aromatherapy are expected to drive demand for essential oils in the coming years as well. In Europe, essential oils for aromatherapy are often regulated as cosmetic products.

Although North America dominates the global aromatherapy market, Europe is expected to grow faster in the coming years. The European aromatherapy market is forecasted to grow at an annual rate of 9.6% from 2022 to 2029. Eucalyptus, tea tree, jasmine and ylang-ylang are popular oils used in aromatherapy.

Between 2018 and 2022, EU import volume and value of essential oils (HS code 330129) grew by around 7% annually. This figure excludes mint and citrus oils, which are more commonly used in the food and beverage industries. In 2022, imports reached over 20 thousand tonnes. Developing country suppliers play an important role in supplies of essential oils. In the last 5 years, almost 50% of essential oils imported into Europe originated in developing countries. Important suppliers include China, Indonesia, India and Madagascar. In 2022, these 4 countries accounted for over 64% of all EU imports outside of the EU (in volume).

Source: Eurostat (2023), ITC Trademap (2023)

France, Germany, Italy, Spain, the Netherlands and the UK are the main European importers of essential oils. France is the largest importer of essential oils, which are also used in its considerable cosmetic and fragrances industries. These Western European countries have a strong manufacturing industry and growing demand for relaxation therapies, and play an important role in imports and re-exports of essential oils.

Plants for essential oil production, like rose and clary sage, are grown in Europe. Germany is the largest European producer of essential oils, followed by France. Other producers include Italy, Spain and Bulgaria. Suppliers in developing countries should focus on niche essential oils which cannot be grown in Europe, like frankincense and ylang-ylang.

Wider awareness of mental health issues and the growing preference for natural alternative treatments to pharmaceutical drugs are expected to increase demand for aromatherapy products in Europe. Essential oils have a wide range of properties such as stress-relieving, anti-bacterial, soothing, refreshing and invigorating.

Essential oils for aromatherapy have a long tradition in countries like China, India and Egypt. They are used for respiratory, digestive, immunological and antioxidant purposes, and to reduce stress. Aromatherapy is likewise used as a complementary treatment for psychiatric disorders and chronic diseases. However, there is limited scientific evidence for these therapeutical benefits.

Adulteration and safety concerns are common issues for the essential oils market. Essential oils are diluted with cheaper or synthetic products. Moreover, sustainable sourcing is key in essential oil production. European buyers value transparent and traceable supply chains, especially for wild-collected raw materials for essential oils.

Tips:

- Read the CBI studies on exporting essential oils to Europe for information on essential oils on the European health product market.
- Read the CBI study on buyer requirements for natural ingredients for cosmetic products for more information on requirements for essential oils in Europe.
- Visit the website of the European Federation of Associations of Essential Oils to find out more on European legislation for essential oils. The website also provides an overview of member associations and member companies in Europe.
- Look up companies that sell aromatherapy products in Europe to read their marketing stories and health claims. Visit websites from companies like Puressentiel (France) and Primavera Life (Germany).
- Make your supply chain transparent for European buyers. Use appropriate tracking and tracing or other audit and certification systems to show where your ingredients come from.

Botanical extracts

MAPs are increasingly processed into extracts in the countries of origin or regional processing centres before they are exported to Europe. As more healthcare companies are bypassing European processors that do not offer them added value, direct demand for extracts is increasing.

The European plant extract market is forecasted to grow annually by 8.9% in 2022-2023, and expected to reach USD5.9 billion by 2028. However, the health industry is not the only one for these products, as extracts are used in the food, beverage and cosmetic industries at considerable levels too.

Source: Eurostat (2023), ITC Trademap (2023)

In 2022, European imports of botanical extracts amounted to over 171 thousand tonnes. This was an annual increase of 29% since 2018.

In the last 5 years, supplies from developing countries grew at a much higher rate than the EU average. In 2018-2022, imports from developing countries increased by 77% annually, in 2022 they increased their suppliers to Europe sixfold when compared to 2018. A large share of these supplies originated from large and sophisticated extract producers like China and India. Showing significant growth numbers, smaller developing country suppliers entering the market include:

- Ghana (+860% increase in 2018-2022)
- Nigeria (+790%)
- Cameroon (+45%)

Italy, the Netherlands, France and Spain remain the leading importers of extracts in Europe. Together they accounted for 87% of total extract imports in 2022.

Europe has a strong extraction industry, which is concentrated in countries with a strong tradition of herbal medicinal products like Germany, France, Italy, Switzerland, Spain and Poland. The German MAP extraction industry in particular is very large and processes and trades the largest share of MAPs in the EU.

Traditionally, the threat of new entrants is lower for extracts than for producers of raw plant materials, due to the high market entry requirements for processed ingredients. The number of suppliers able to provide suitable quality extracts is still much lower than the number of raw material producers.

The European natural health products industry is very competitive. Combined with a demand for high-quality products and natural ingredients, it encourages innovation and research and development. For example, recent studies show the suitability of plant extracts for several future medical treatments. Velvet bean extracts could be used to treat Parkinson's disease and hawthorn extracts could treat cardiovascular diseases.

Manufacturers are cashing in on growing consumer awareness of the importance of preventive healthcare by marketing new products. Innovative supplement manufacturers also look for new extracts. These new ingredients will allow them to create a distinct profile for their products in the market. Ingredient innovation can stem from both new ingredients and a surge in the use of traditional ingredients. For instance, there is RECOVERA, a branded ingredient by German plant extracts manufacturer Finzelberg – a prickly pear extract that combines cladode and fruit skins of Opuntia ficus-indica.

Tips:

Conduct research on the efficacy of your extracts by building research partnerships. Use scientific research and data to support any claims you make, as this gives you credibility.

Review examples of technical documentation for extracts that you use. For example, see this Safety Data Sheet for ginseng extract and this Certificate of Analysis for Echinacea herb extract.

Be aware in which segment your extracts end up, as there are big differences in related legislation.

Seaweeds and algae products

The popularity of edible algae is increasing in Europe. The versatility of edible seaweed, their high content of vitamins and minerals, their antiviral, antimicrobial and antifungal properties, plus their high protein content make them an attractive ingredient for health products.

Seaweeds are high in nutrients (especially in iodine), although composition differs per species. Seaweeds contain several vitamins and minerals, as well as dietary fibre. Moreover, seaweeds have high levels of antioxidant activities. Based on these properties, European health products mainly include seaweeds for weight management, general health and wellbeing, after-sports, and additional indications such as immune support, detox and digestive health. Seaweeds for health are commonly sold as capsules/tablets containing seaweed powder or extracts or pure seaweed powder.

The global algae products market was estimated at USD5.41 billion in 2023 and is predicted to grow 5.4% annually between 2023 and 2028. Although the demand for algae-based products fell after 2019 due to supply chain disruptions resulting from the COVID-19 pandemic, the market is expected to grow in the coming years, driven by increasing demand for algae-based health products and the development of new technologies for the production and harvesting of algae. Although the European market for seaweeds for health is small compared to Asian markets, this market is expected to grow. For example, the European algae protein market is anticipated to grow by 6.5% annually between 2022 and 2028. In 2031, the market is predicted to reach USD1.6 billion. Spirulina and chlorella are among the most popular microalgae used in food supplements.

Demand for spirulina is driven by rising consumer awareness of its health benefits and growing demand for healthier products. The global spirulina market was valued at USD583.3 million in 2022 and is projected to reach USD1.04 billion by 2027, with a predicted annual growth rate of 8.2% for 2022-2027. Approximately 70% of the world's spirulina is produced in China, India and Taiwan. Other significant producers include the United States, Thailand, Pakistan, South Africa and Myanmar.

Chlorella is the second-most important microalga. The global chlorella market is expected to reach USD444.6 million by 2033, growing at an annual rate of 7.9% from 2023 to 2033. Market growth is attributed to growing consumer interest towards protein-rich diets and the development of innovative chlorella products.

However, demanding production methods associated with chlorella place major constraints on the supply. This is because these processes require carbonated water and artificial light, which are relatively expensive and lead to higher prices, so further research is required to improve production methods. Low consumer awareness of the health benefits of chlorella also limits market growth.

Source: Eurostat (2023), ITC Trademap (2023)

Figure 6 shows that the volume of imports of seaweeds and other algae fit for human consumption to Europe decreased between 2018 and 2020. This was mainly the result of a significant drop of UK seaweed imports from Spain. When looking at supplies from CBI's target countries specifically, EU imports increased significantly in the last 5 years, at an average annual rate of 31% (see table below). This indicates that these countries are playing an increasingly important role in Europe's imports of seaweeds.

Table 3: Volume of imports of seaweeds and other algae fit for human consumption to the EU, including the UK, in tonnes, 2018-2022

	2018	2019	2020	2021	2022
CBI Country supplies to EU (in tonnes)	7.3	4.5	51.2	35.7	213.5

Source: Eurostat (2023)

Italy, Germany and the Netherlands are the largest importers of seaweed from developing countries.

Both for cultivated and wild-collected ingredients, sustainability is a major issue to European consumers and companies. Buyers are becoming much more involved in the sustainable management of the natural resources they use. Consumers increasingly demand sustainable products and want to know where their products are coming from. They are increasingly aware of the effect their purchasing behaviour has on social and environmental conditions in production countries.

Seaweeds are very well positioned to meet the sustainability trend, as they require no land, fertilisers or freshwater. Moreover, several seaweed species have a high growth rate. Seaweeds are also better at absorbing CO^2 than trees, and improve water quality by extracting nutrients like nitrogen. Seaweed production can also provide an alternative livelihood to coastal communities. With most fisheries depleted, seaweed cultivation can present new employment opportunities.

The sustainability aspect of seaweed production is expected to gain importance in the future. As European consumers look for environmentally friendly products, seaweed's low environmental footprint will become more attractive to European buyers and consumers.

Figure 7: Spirulina tablets and powder

Source: Canva (2022)

Tips:

- Target Western European importers with your seaweeds, especially leading importers of seaweeds from developing countries like Italy, Germany and the Netherlands.
- For more information on research into the health benefits of seaweeds and to access scientific resources, visit for example, Elsevier Science Direct (paid platform), Google Scholar or Examine.com.
- If your seaweed 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 sourcing and sustainability practices. For example, the Aquaculture Stewardship Council has a sustainable seaweed standard.
- Check out the CBI studies on Exporting seaweeds to Europe, which provide further information on entering the European market and the market potential.

Turmeric

Growing consumer awareness of turmeric and rising demand for immunity-supporting food supplements offer opportunities for exporters of turmeric in developing countries. Turmeric is an increasingly popular botanical for food supplements and is authorised in herbal medicinal products.

Turmeric roots contain different active components. The most researched component is curcumin. Turmeric root powder and its extracts are marketed for their anti-inflammatory and antioxidant properties. In European health products, turmeric is mainly used for immune support, digestive health and joint health. Other applications include liver support, cognition, mental wellbeing and heart health. In herbal medicine, turmeric powder and extracts are authorised for relief of mild digestive problems.

The global curcumin market reached USD70.3 million (€65.7 million) in 2022. Europe is forecasted to be the fastest-growing region in the world, with an annual predicted growth of 13% for 2023-2032, according to a report from Global Market Insights.

Source: Eurostat (2023), ITC Trademap (2023)

Figure 8 shows that the European turmeric import volume increased between 2018 and 2020, and began to decrease again after 2020. Despite this, developing countries play a particularly large role in turmeric supplies. This is mainly coming from India, globally the largest supplier of turmeric. Total turmeric imports amounted to 26 thousand tonnes in 2022, at over €57 million. The Netherlands is the largest turmeric market in Europe, followed by Germany, which is an important trade and production hub for turmeric.

Europe's organic market share of turmeric is still small, but demand is growing. This is largely driven by consumer demand for organic health products, but organic certification can also help you stand out from competition by demonstrating the traceability of your turmeric. Peru is the main supplier of organic turmeric to Europe. The Netherlands, Spain, Germany, the UK, France and Italy are important importers of organic turmeric. In the future, Southeast Asian countries with tropical climates could compete for organic turmeric depending on quality, price, food safety and seasonal availability.

With its potential in immune support, turmeric has also benefited from the growing consumer demand for immune-boosting health products. Turmeric is one of the most sought-after ingredients for health and wellness. European brands respond to this consumer demand by bringing immune-supporting health products to the market, such as wellness shots that support healthy digestive and immune systems.

Ingredient companies and final product manufacturers are capitalising on its popularity and develop turmeric-derived ingredients with higher levels of effectiveness. For example, ingredient suppliers are producing turmeric that is more bioavailable than standard turmeric extracts.

Figure 9: Turmeric

Source: Canva

Tips:

- Determine the concentration of curcumin in your turmeric, because this is linked to the turmeric's health benefits. European buyers seek turmeric with higher levels of curcumin content. Work together with a local university or a research institute to test your product.
- Consider targeting smaller, fast-growing importers of turmeric, such as importers in Eastern Europe. Although they currently import lower quantities, these can still be sufficient if you are a small exporter.
- For more statistics on Curcuma longa, check online sources such as ITC Trademap or the Indian Spices Board. Although the Indian Spices Board focuses on spice production, it also lists useful sources for turmeric exporters, such as turmeric exports from India and turmeric cultivation practices. Be aware that trade data do not distinguish between use for food or health products.
- If you target the pharmaceutical industry, ensure you can meet the high regulatory and buyer requirements for herbal medicinal products. Read the CBI study on Entering the European market for turmeric for more information on requirements.

Consider acquiring certifications that prove that your turmeric for health products meets environmental and social standards. Doing so will help you find opportunities in the European market, as demand for certified turmeric is increasing. You could for instance consider obtaining certification such as ISO 14001:2015 Environmental management systems, as it shows that you uphold environmental responsibilities.

Ginger

Europe is an interesting market for exporters of dried ginger. Demand has grown significantly over the last 4 years and this trend is expected to continue. Though ginger is mainly used in the food industry as a spice and food ingredient, it has good potential for use in health products too. Globally, the pharmaceutical market is the second-largest segment for ginger products.

Ginger (*Zingiber officinale*) is found in various supplements, for example in the form of tablets or herbal teas. Ground ginger and ginger root extract are the most used in health products. Trade data in ginger root extracts are included in figures on botanical extracts trade.

Herbal monographs are available for dried, ground ginger, which permit claims made for herbal medicinal products for digestive health, and to prevent nausea and vomiting in motion sickness. A relatively new application is for its antioxidant, antimicrobial and antibiotic properties in food supplements that support the immune system. In traditional Chinese and Ayurvedic medicine it was used to help treat common-cold and flu-like symptoms.

In addition, ginger is also increasingly used in aromatherapy, for which there is a growing demand. In this segment, ginger oil is used for its stimulating and warming effects, to enhance concentration, and reduce feelings of stress, anxiety and fatigue. Ginger oil is imported in the essential oils product group not elsewhere specified (see the section on Essential oils above).

Source: Eurostat (2023), ITC Trademap (2023)

Developing countries play an important role in the supply of ginger. In 2022, developing countries supplied 69% of the world's crushed or ground ginger. EU imports of ground ginger grew at an annual rate of 9% in 2018-2022. Although most ginger imported into Europe originates in China, Peru and Brazil, imports from CBI countries are growing at a much faster rate than the European average, annually around 13% over the last 5 years.

The most interesting markets are the top 2 markets in Europe: Germany and the UK. These countries import huge volumes of ginger from developing countries, which makes them good focus markets. In addition, the Netherlands and Spain could be interesting as they import large shares of ground ginger directly from developing countries.

The perceived health benefits of ginger are described, amongst others, in blogs, vlogs and health magazines. These publications often mention that ginger consumption helps with digestive problems, the flu and stress. Due to its growing popularity, ginger is increasingly used as a food supplement or as an herbal tea.

As an ingredient in digestive health and immune support, ginger has the potential to benefit from the growing consumer demand for health products that help maintain healthy immunity systems and digestion. Both market segments were in strong demand before the COVID-19 pandemic, which gave these segments an additional boost. Europe's digestive health product market is predicted to grow by 7.3% annually between 2022 and 2028. The European market for immune health supplements is estimated to reach USD41.55 billion by 2028, growing at an annual rate of 6.9% between 2022 and 2028.

These 2 health benefits are also increasingly linked. In 2021, 68% of global consumers said they recognise the link between the digestive system and their immune health. Brands are making use of this by offering products that target multiple health indications. This translates into opportunities for ginger, as it is used for both applications.

Tips:

- Determine your feasibility to meet requirements for food supplements or even herbal medicinal markets for your ginger. Ginger can be used in a wide variety of products, all with different legal and buyer requirements.
- Check out the publication by the Open Trade Gate Sweden on the 2022 European rules regarding organic production and certification to familiarise yourself with the requirements for supplying organic-certified products to Europe.
- Target leading Western European countries importing ginger from developing countries. The most interesting are the Netherlands, the UK and Germany, while Italy and Spain could also be interesting.
- Read the CBI study on Exporting dried ginger to Europe for more information on its potential as a spice.

ProFound – Advisers In Development carried out this study on behalf of CBI.