



CBI
Ministry of Foreign Affairs

CBI Product Factsheet:

Natural Ingredients for Energy products in Europe

Introduction

Energy-boosting products have never been as popular as in contemporary society. Opportunities for natural ingredients for energy products are mainly in food supplements. In this competitive segment of super-fruits, minerals, protein and synthetic options, herbal solutions are gradually gaining ground in the European market. Aromatherapy also offers solutions for this indication and is a segment of potential interest.

Indication & product definition

Energy

Energy-related health products have two main purposes:

- To alleviate the lack of energy caused by specific diseases, such as anaemia and chronic fatigue syndrome.
- To enhance the stamina of healthy individuals in order to increase performance and general wellbeing.

When the lack of energy is associated with specific diseases, energy products can alleviate symptoms but cannot cure the condition. The use of energy products also helps individuals cope with contemporary lifestyles, i.e. long working hours, short nights, and a multitude of tasks and moments of peak performance. Not only are these products associated with increasing stamina, but also with contributing to higher levels of concentration. In some cases, increasing energy levels is associated with increased sexual stamina.

Box 1: How to use this Factsheet

- Learn how European consumers use food supplements for energy products.
- Learn about the developing country species that are of greatest interest and most commonplace.
- Learn about requirements you need to meet for established and non-established species.
- Learn more about energy products market segments and receive key insights into how to enter them.

Energy boost and natural health options

Although manipulation of the body's energy levels has two main purposes (to cope with unwanted responses resulting from diseases and to enhance stamina in healthy individuals), the products do not vary significantly.

Natural products supporting the body's energy levels are very common in the European market. In general, these are strongly associated with food supplements rather than herbal medicinal products, as energy boosting is not a medical treatment in itself. In addition, dietary changes are closely linked to an improvement in stamina. Another important product category relates to the regulation of the endocrine system as a means of increasing energy. Products with strong antioxidant activity are also related to boosting energy. Consequently, the plant world offers many potential options for this indication.

Natural Ingredients for energy products

Some of the plants which are most commonly used in enhancing the body's energy levels in food supplements and aromatherapy products in Europe are mentioned below. Please note that this list is neither exhaustive nor conclusive.

Rhodiola (<i>Rhodiola rosea</i>)	Ginkgo (<i>Ginkgo biloba</i>)
(American) Ginseng (<i>Panax notoginseng</i>)	Ginger (<i>Zingiber officinale</i>)
Turmeric (<i>Curcuma longa</i>)	Siberian Ginseng or eleuthero (<i>Eleutherococcus senticosus</i>)
Maca (<i>Lepidium meyenii</i>)	Tea (<i>Camellia sinensis</i>)
Yerba mate (<i>Ilex paraguariensis</i>)	Citronella (<i>Cymbopogon nardus</i>)
Lemongrass (<i>Cymbopogon citratus</i>)	Camu camu (<i>Myrciaria dubia</i>)

Exemplary species for developing country producers

Not all of the species mentioned above are equally relevant to exporters from developing countries. The effectiveness of these botanicals is well supported with data and documentation. However, they also have established and competitive markets in Europe. Ginkgo is mostly used for cognitive enhancement, but it is also relevant as an energy ingredient. Moreover, ginkgo is mostly produced in China, (American) ginseng in North America and eleuthero in Siberia. With this in mind, they are not relevant to producers from other developing countries.

Industry sources indicate that the following species have good potential: maca (*Lepidium meyenii*), tea extract (*Camellia sinensis*), yerba mate (*Ilex paraguariensis*) and rhodiola (*Rhodiola rosea*). These species offer opportunities to developing country exporters in areas with the right growing conditions, as will be explained in the sections below.

In addition, aromatherapy oils offer opportunities that support energy. Types of interest to developing countries include citronella (*Cymbopogon nardus*) and lemongrass (*Cymbopogon citratus*) oil. The table in Annex I provides more information on these aromatherapy oils. These essential oils can be regulated as cosmetic products, unless a specific medicinal claim is made on the label. More than 30 essential oils for medicinal use are included in the European Pharmacopoeia. For more information on aromatherapy, refer to the CBI's Market Intelligence on [Natural Ingredients for Cosmetics](#) regarding several essential oils, and also refer to relevant European and International literature available under [Forum Essenzia](#).

The table below provides information on exemplary species used to increase energy, including available documentation and references, claims, origins and data on traditional use, clinical trials and filed patents¹.

Tips:

- Check final Community herbal monographs as provided by the [European Medicines Agency \(EMA\)](#) to assess product standards and possible claims. If you produce ginger (*Zingiber officinale*) and/or turmeric (*Curcuma longa*), check the Market Intelligence report on Immune system products, where these products have been extensively covered.
- For other plants, check the relevant databases mentioned under product specification to check for indications of use, and to ascertain whether your species is permitted for sale as a food supplement in a given market and the claims you are permitted to make for it.
- If you want to enter the European market with new or established ingredients, please refer to the [CBI Module Buyer Requirements](#) for information and tips. Many other plants are used in energy products worldwide. Some of these can be/are already being used. Clinical evidence on efficacy in supporting energy levels is important for new species in terms of entering the market, but this may be difficult for preventative/supportive products.
- Link up with local universities or laboratories to conduct thorough research and product development.
- Check databases such as [Herbmed](#) to identify research on traditional use, clinical trials (safety and efficacy evaluation of herbal formulations on people) and patents. In Europe, you can contact relevant universities such as the [University of Vienna](#), the [University of Veterinary Medicine Vienna](#) and the [University of Graz](#). Access scientific resources, for example through [Elsevier Science Direct](#) (not for free). Also consider becoming a member of the [Society for Medicinal Plant and Natural Product Research \(GA\)](#) to access their research.

¹ Information on traditional use, clinical trials and filed patents should be used as an indication only. Additional research for your specific species will be required.

Table 1: Selected key species for energy

Definition	Monographs for medicine ²	Permitted usage in supplements ³	Origin	R&D ⁴
<p><i>Lepidium meyenii</i> (maca) Maca is traditionally used in the central Andean region as a nutritive food, for male and female fertility disorders, and to increase mental and physical energy.</p> <p>Maca is mainly grown for its root. Powdered root and root extracts are used in Europe for the production of supplements sold in health shops and organic supermarkets.</p>	<p>No WHO Monograph⁵ available. No references available in Europe.</p> <p>No well-established use or traditional use of maca in herbal medicinal products has been documented.</p>	<p>Belgium, France, Italy and Germany: allow use of root (tuber) provided it does not contain alkaloids. Italy: allows use of root (tuber).</p> <p>Food supplements cannot make a medicinal claim; an exemplary claim (from the Netherlands) for supplements containing maca is: "Extra energy and to support mental well-being".</p>	<p>Andean region; cultivated in Peruvian and Bolivian Highlands, and in Brazil (small-scale).</p>	<p>Very little research has been done on maca: Herbmed registered 3 articles on traditional use, 3 clinical trials and 1 patent.</p> 
<p><i>Camellia sinensis</i> (tea) Demand for tea extract is high. Green tea extracts offer existing producers of (green) tea the potential to diversify their operations and add value to lower-grade tea leaves.</p> <p>In general, there is growing consumer interest in green tea as a way to maintain health and support energy. This interest and green tea's high levels of antioxidants support the product's use, especially in food supplements.</p>	<p>No WHO Monograph available European Pharmacopoeia Monograph # 2668 (<i>Camelliae sinensis non fermentata folia</i>) Community Herbal Monograph</p> <p>No well-established use of tea in herbal medicinal products has been documented.</p> <p>As a traditional herbal medicinal product, claims may include: "relief of fatigue and sensation of weakness".</p>	<p>Belgium and France allow use of the leaf subject to a stated maximum level of Epigallocatechin gallate (antioxidant). Italy: allows use of the leaf, e.g. for antioxidant function Germany: allows use of leaves, buds, stems and flowers.</p> <p>Food supplements cannot make a medicinal claim; an exemplary claim (from the Netherlands) for supplements containing green tea is: "to support your energy level and burning carbohydrates".</p>	<p>Large-scale cultivation in South/ South East Asia, China, East Africa.</p>	<p>Much research has been done on tea: Herbmed registered 29 articles on traditional use, 168 clinical trials and 3 registered patents in 2013.</p> 
<p><i>Ilex paraguariensis</i> (yerba mate) In addition to several health benefits, such as detoxification, mood improvement, etc., yerba mate is known to act as a tonic.</p> <p>Yerba mate is most commonly imbibed as an infusion in Argentina, southern Brazil, Paraguay and Uruguay.</p> <p>In Europe, yerba mate can be found in some specialist health shops and sometimes in large supermarkets. Its use as a supplement has great</p>	<p>No WHO Monograph available. No ESCOP monographs. European Pharmacopoeia monographs: # 2678 Mate leaf Final Community Herbal Monograph</p> <p>No well-established use of yerba mate in herbal medicinal products has been documented.</p> <p>As a traditional herbal medicinal product, claims may include: "relief of fatigue and sensation of weakness" "increase in the amount of urine".</p>	<p>Belgium, France and Italy: allow use of the leaf only. Germany: allows use of the leaf only, provided its use is indicated for mental and physical fatigue, with a restricted dosage of 3 g/day.</p> <p>Food supplements cannot make a medicinal claim; exemplary claims (from the UK) made for supplements containing yerba mate are: "Stimulating and tonic properties contribute to resistance against mental and physical fatigue" "... can help you to feel more energetic".</p>	<p>South America: Argentina, Bolivia, Brazil, Uruguay, Paraguay.</p>	<p>Herbmed has not registered research on yerba mate.</p> 

² Only European Pharmacopoeia monographs (legally binding), Community Monographs (non-binding) and entries (binding) are valid in the EU. WHO monographs provide information on the uses to which herbs are put in medicine systems outside of Europe, including information on growing conditions, purity tests, chemical constituents and an overview of a botanical's specific action. ESCOP monographs provide a basis for EMA dossiers on herbal medicinal products. They are a reference standard (not legally binding).

³ Indication only. This information is unavailable in many countries, but it is expected to be comparable

⁴ Based on [Herbmed](#) information on traditional use (use based on specific historical/cultural practices, including organised systems of medicine such as Traditional Chinese Medicine), clinical trials (safety and efficacy evaluation of herbal formulations on people) and patents.

potential, although it is not yet widespread.				
<p>Rhodiola rosea (rhodiola) Rhodiola is becoming more popular as an energy booster and as a means of increasing stamina. In addition, it is used to enhance mental fatigue.</p> <p>The product is most commonly used as a food supplement in tablet or capsule form.</p>	<p>No WHO Monograph available. No ESCOP Monograph available. European Pharmacopoeia monographs: # 2893 Rhodiola root and rhizome Final Community Herbal Monograph</p> <p>No well-established use of rhodiola in herbal medicinal products has been documented.</p> <p>As a traditional herbal medicinal product, claims may include use for "temporary relief of symptoms of stress, such as fatigue and sensation of weakness".</p>	<p>Belgium: allows use of all plant parts. Italy: allows use of root. Not included in German and French lists.</p> <p>Food supplements cannot make a medicinal claim; exemplary claims (from France) made for supplements containing rhodiola are: "useful in eliminating fatigue and enhancing general work performance". From Germany: "helps to stay mentally agile, balanced and efficient".</p>	<p>Colder, mountainous regions; mountains in Central Asia (e.g. Mongolia), Europe (Russia) and the Arctic.</p>	<p>Herbmed registered 3 articles on traditional use, 14 clinical trials and 9 patents on rhodiola.</p> 

Source: Herbmed 2012, [ESCOP](#), [EDQM](#), [EMA](#), national food regulators

What is the demand for energy products in Europe?

- The market for energy-boosting products saw strong growth of 12% in 2012. The market grew to over €21 billion worldwide, with 88% consisting of energy drinks. The remainder consists of food supplements and energy foods. Most of these products have caffeine as an active ingredient. Others consist mostly of mixtures of vitamins and herbal extracts. Due to consumer awareness of negative side-effects of caffeine, sports and energy drinks are expected to continue to grow in the future, although less substantially than in previous years.
- Globally, food supplements that boost energy are estimated to grow faster than total supplements from 2015 to 2020. A report by Future Market Insights indicated that energy-boosting supplements are expected to grow by 13.3% annually, compared to annual growth of 5.3% for total supplements ([Future Market Insights, 2015](#)).
- The consumption of energy drinks in Europe provides an indication of the popularity of energy-boosting products in Europe. Research has shown that this varies between countries and age groups. In Europe, the largest markets for energy drinks in 2012 were the UK (575 million litres), Germany (325 million litres) and Spain (318 million litres).
- The global market for energy and sports drinks is expected to reach US\$ 52 billion in 2016 (around €46.4 billion), an increase of 37% since 2010 ([Markets and Markets, 2011](#)).
- A European study in 2013 concluded that around 30% of adults consume energy drinks. Consumption was lowest in Cyprus (14%) and highest in Austria (50%), the home of *Red Bull*. Consumption of energy drinks is highest among the 15-18 age group (68%); consumption ranged from 42% in Greece to 82% in the Czech Republic.

Energy

- Energy deficiency is symptomatic of a number of pathogens, including chronic fatigue syndrome, anaemia, etc., as well as specific conditions such as malnutrition. For this reason, it is difficult to provide exact statistics regarding this indication. In addition, energy-boosting products are commonly taken by healthy individuals who want to improve their daily stamina and performance.
- Estimates on the prevalence of chronic fatigue syndrome (CFS) in Europe vary considerably (between 0.73 and 4.1 million individuals in the EU). However, rates of CFS-type illnesses are generally much higher and range from between 2% (Sweden) to 3.6% (the Netherlands).

Tips:

- Take consumption of energy drinks into account when drawing up your export strategy. This consumption could influence the penetration of alternative energy products within these different target markets. Please refer to the [EFSA publication](#) for more information on research on consumer groups for energy drinks.
- Please refer to [CBI Trade Statistics for Natural Ingredients for Health Products](#) for statistics on European markets for herbal medicinal products and food supplements.
- For more information on sector associations in various European countries, please refer to the sources and promising countries (France, Germany, Italy and the UK) on the [CBI Natural Ingredients for Health Products website](#).

What trends offer opportunities on the European market for energy products?

Need in society: there is a greater need for energy-boosting products in today's faster-paced society. Consumers are interested in these products for various reasons, e.g. to increase energy for work or sports. Herbal food supplements that help boost energy levels and fitness are expected to benefit most from the trend towards preventive health care, according to market research by Global Industry Analysts Inc. Examples of such ingredients include guarana, ginseng and maca.

Tip:

- Do not make health claims for food supplement ingredients if such claims have not been authorised by the European Commission. Regarding botanicals, no health claims have yet been assessed, but this is expected to happen in the future. You need to take this into account in your own documentation and marketing (materials). For an overview of health claims, check the [EU Register on nutrition and health claims](#).

Ageing population: an ageing population is increasing the demand for natural health options to support an active lifestyle. It is estimated that 30% of the European population will be made up of people aged 65 or above, compared with 17% in 2013. This consumer group uses herbal health products more extensively than the younger population and is more likely to use botanical supplements, whereas the younger population is more inclined to use (caffeinated) energy drinks.

Placebo effect: placebo effects play an important role in perceptions of energy levels. Studies have shown that vitamin intake increases the perception of energy; the same is likely for other supplements. This is especially relevant to aromatherapy, where people use remedies because they feel they are effective, without there being substantiated proof. Marketing stories are important for these products.

Tip:

- Create marketing stories for ingredients or aromatherapy oils that boost energy. Develop a thematic story around the country of origin and the refreshing properties of your product. These stories need to be clearly communicated to end-users.

Caffeine-free energy: botanical products are emerging as alternatives to conventional caffeine-based energy supplements and drinks. Ingredients such as green tea extracts are positioned as powerful and natural sources of energy. Apart from botanical products, supplements based on various fruits (e.g. guarana or camu camu) are also being used more often. Following their success, manufacturers are looking for new botanical ingredients for energy products that convey a natural image.

Consumers believe that frequent use of these ingredients has fewer negative effects than coffee or caffeinated energy drinks. What is more, naturally-occurring caffeine in botanicals does not have the negative associations for consumers that synthetically produced caffeine does. Moreover, new labelling requirements for high caffeine content in energy drinks would deter around 40% of consumers in France, Germany, Italy, Poland and Spain from buying these energy drinks.

Tip:

- Do not make medicinal claims for your product in your product documentation or marketing materials for the food supplements market. Claims in food supplements can relate only to function (e.g. relating to growth, development and functions of the body, psychological and behavioural functions, slimming or weight-control) and risk reduction. For example, you may not claim that your product prevents a specific illness, but you may stress that a certain species can help maintain good health. Also ensure you have the research results to back up your claim with any potential buyer.

Multiple ingredients: there is a trend towards multiple ingredients in food supplements that target a specific condition. Combinations of ingredients for energy stimulants go beyond simple caffeine-based products. Examples are supplements with combinations of botanicals, super-fruits and vitamins.

Tip:

- Stress the potential of combining botanicals with vitamins or fruits to create food supplements that boost energy. An example is a supplement containing vitamin B, guarana (fruit) and eleutherococcus (botanical).

Traceability and sustainability: traceability and sustainability can be important for the marketing story with regard to aromatherapy oils, such as the exemplary species in this factsheet. Given that botanicals are produced far away from European consumers, consumers want assurances of the sustainability and quality of botanicals.

Tips:

- For more information on tips and standards for traceability and sustainability, please refer to the [CBI Module Buyer Requirements](#).
- Please refer to [CBI Trends](#) for more market trends.

What requirements should natural ingredients for energy products comply with to be allowed on the European market?

This factsheet considers the food supplements industry only. As herbal medicinal products are not relevant in energy health products, requirements for this segment are not included. The distinct legislative frameworks and route to market of herbal medicinal products and food supplements are explained in detail in the [Module Buyer Requirements](#).

What requirements do I need to comply with to export natural ingredients?

- You need to comply with the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**. CITES regulates the trade in (for example) wild-collected endangered plants and provides guidance on the species for which trade is prohibited or restricted.
- Your ingredient might require you to establish **Access and Benefit Sharing (ABS)** agreements. These 'mutually agreed terms' detail the terms and conditions of access and use of genetic resources and/or traditional knowledge and supply of raw materials.
- You need to ensure **sustainable sourcing** of your ingredients. This is important to buyers, as they are facing supply shortages for an ever-increasing number of cultivated, but especially wild-collected species. You do not always have to certify sustainable sourcing; have a look at these value-addition opportunities in the section [Competition](#).

Tips:

- Conduct a resource assessment and implement a resource management system.
- If you are an exporter of wild-collected botanicals or their derivatives, take into account the provisions of [CITES](#) in order to guarantee the EU entry of your products. Check [Annex A and B of Regulation \(EC\) No 338/97](#) to ascertain whether import and export permits are required for your product. You can also contact the [local CITES authority](#).
- Read more about [CITES](#) in the EU Export Helpdesk.
- Put a procedure in place to check whether ABS applies. Contact the competent authorities in your country as a starting point. [UEBT](#) and [FairWild](#) provide thorough information on the practical implications of ABS, as established by the [Convention on Biological Diversity](#).

What requirements do I need to comply with to enter the EU market for food supplements?

EU Legislation specific to food supplements: In addition to general requirements for food, as established under General Food law, food supplements are subject to specific legislation. This legislation lays down compositional and labelling requirements, but still leaves composition beyond minerals and vitamins (e.g. essential fatty acids, fibre, and various plants and herbal extracts) at the discretion of national authorities.

Tips:

- Familiarise yourself with the legislation on food supplements, which is listed on the [website of the European Commission](#).
- Make sure that your ingredients comply with [general requirements for food](#) and food labelling. Buyers usually demand compliance with guidelines for herbs according to [Codex Alimentarius](#). Standards have not been established for extracts.
- Check the positive lists of European countries to determine whether your ingredient is already allowed in those markets or whether there are species that you could potentially produce in your country. You can find such lists at:
- [German Federal Ministry of Food and Agriculture](#)
- [Italian Ministry of Health](#) (BELFRIT list for Belgium, France and Italy).

Food safety: Ingredients for food supplements need to comply with requirements for food safety. You can read more about food safety and Novel Food requirements on the websites of the [EU Export Helpdesk](#) and the [European Commission](#).

Tips:

- [Novel Food Regulation](#): Consumer safety of ingredients that were not consumed within the EU before 15 May 1997 needs to be assured to comply with this regulation. Consult experts and internet research for insights into whether there is historical use in Europe. The (non-exhaustive) [Novel Food Catalogue](#) lists plants subject to the Novel Food Regulation and provides their current status.
- [Maximum Residue Levels \(MRLs\)](#): strict control of pesticide use must be a focal point in your production system. These controls are increasingly strict, as improving laboratories can detect more residues.
- Criteria and maximum levels of [contaminants in food](#) and [microbiological contamination of food](#): Apply GACP/GAP and GMP to minimise and document contamination.
- [Hygiene of food \(HACCP\)](#): legally binding for food processors (including ingredients) and recommended for farmers (primary production).
- Find out which [extraction solvents for food](#) you can use and under which conditions.
- [Irradiation of food](#) is only permitted in specific cases for spices and herbs, including supplements.
- [Traceability is based on the](#) "one step back-one step forward" principle; you need to trace food that is used for consumption through the value chain.
- Be ready to demonstrate traceability by documenting your value chain. If you want to have your product certified (e.g. FairWild, Fairtrade or organic), traceability will be important as well.
- Moreover, have a look at common causes for border rejection and product withdrawals on the [Rapid Alert System for Food and Feed \(RASFF\)](#). Examples include contaminants and unauthorised food ingredients.
- Check and adhere to the food safety legislation in your country.

What additional requirements do buyers often have?

Buyer specifications and requirements: Many buyers have additional quality requirements which can go beyond legislation and standards (active ingredient content, moisture content, contaminants, residues, etc.). These are established in buyer specifications. To show that you meet their specifications, they also require well-structured company and product information, including detailed technical data sheets.

Tips:

- Make sure you meet international product standards and buyer specifications.
- Include plant identification through a national and/or a company herbarium in your product specifications, this is important as a reference.
- Prevent (un-)intended adulteration and contamination by other foreign materials by keeping facilities and equipment clean, and by ensuring full documentation and traceability.
- If you produce extracts, you need to meet buyer requirements in terms of extraction methods, solvent use, preservatives, etc. Validate and document extraction conditions: processing aids, temperature, pressure/vacuum, flow rate, etc.
- If you use preservatives, make sure you have the HR capacity to tailor their use to buyer specifications and for their proper documentation. You also need specialist staff to monitor process quality and microbiology.
- Make sure your documentation and labelling comply with respective legislation and buyer requirements. Information on possible dangerous characteristics of chemical substances must be provided on Material Safety Data Sheets. Furthermore, it is likely that your buyer requires test reports.
- Implementing and documenting Standard Operating Procedures can provide a lot of trust on the part of buyers that you will keep up quality standards.

What are the standards and requirements for niche markets?**Social and environmental sustainability:**

- If you want to market **organic ingredients** in the EU, you need to comply with EU requirements on the production and labelling of organic products of agricultural origin.
- Verifying and/or certifying **sustainable production** represents a niche market, but can add value to your product. For more information on such value addition, please refer to value-addition opportunities in the section [Competition](#). Better-known sustainability standards include:
- The [UNCTAD BioTrade Initiative BioTrade Principles and Criteria](#) or [FairWild Principles and Criteria](#)
- Social: Fair Trade certification, such as [FLO Fairtrade](#) or [FairForLife](#).
- Some EU buyers may expect you to comply with their supplier **codes of conduct** regarding **social responsibility**, which are often based on ILO labour standards or on UN Global Compact reporting.

Tips:

- Discuss with (potential) buyers whether they would be interested in certified sustainable natural ingredients of the above standards.
- If you choose to obtain a certificate for organic production, find out more about [Organic production and labelling](#).
- Dedicate the processing plant to the exclusive production of organic ingredients. If this is not possible, ensure thorough cleansing of machinery and equipment at all times.
- Consult the [Standards Map database](#) for different sustainability and organic standards.
- For more information on responsible business practices, refer to the [UN Global Compact](#) and ISO 26000 as guidance, and use the [SEDEX](#) online database, where members can share information on ethical and responsible practices. You can also use SEDEX to prepare for possible audits/questions from your buyers.

Quality and food safety management: In addition to the mandatory HACCP standard, EU food industries increasingly demand compliance with more comprehensive food safety standards (food safety management systems), as well as quality safety management as specified in [ISO 9001:2008](#) (required for health ingredients). This mostly concerns large retailers and (private label) manufacturers, most notably for food supplements. Examples include the [International Food Standard \(IFS\)](#), [ISO 22000](#) (food safety) and [ISO 31.000](#) (risk management).

Tips:

- Consider carefully whether to comply with the above standards and certifications. Verify whether your buyer truly demands compliance, whether compliance will facilitate market access or offer you a better price, or whether compliance will benefit your company's supply security or internal processes. In the case of food safety standards, it is also important to ascertain whether you can gain your buyer's trust in another way.
- Stay up to date with information on food safety standards by checking news items published on the [Codex Alimentarius](#) and [HACCEUROPA websites](#).

What competition do I face on the European market for energy products?

Synthetic alternatives

Treatments for specific pathogens affecting a patient's energy levels are beyond the herbal sphere; these treatments are based on either *chemical or synthesised compounds*. In some cases, raw materials can be plant-based.

- Caffeinated energy drinks are probably the most popular and direct competitor for botanical energy products. Apart from caffeine, these products contain ingredients such as glucuronolactone and taurine (made synthetically), and sometimes vitamins and minerals. At times, energy drinks, including naturally flavoured mineral water, also contain herbal substances.
- Nonetheless, increasing concerns about caffeine intake and the search for herbal alternatives are benefiting the market for plant-based energy product ingredients. On the legislative front, the market may also be influenced by stricter labelling regulations for caffeinated drinks, which are to be applied as of December 2014 (read more at [Food Standards Agency](#)).
- Vitamins and minerals make up an important portion of energy-boosting products. Many of the vitamin products on the market are synthetic, but products based on plant-derived vitamins, or products made up of high-vitamin plant materials (fruits, but also botanicals), are also available on the market. It is important to note that synthetic vitamins are cheaper to make and usually more stable. This means that they can have a shelf-life of months or years, they can be added to foods in higher dosages, and they allow manufacturers to create smaller tablets.
- Protein-based products also represent strong competition. In addition to supporting lean muscle mass, these products have the ability to provide sustained energy with a low amount of carbohydrates and fats. The global protein supplement market saw very strong growth in 2012, with sales increasing by 9% annually to around €1.33 billion.

Tips:

- If your product is high in vitamins, stress in your documentation that it is a more natural option to take vitamins contained within plant materials.
- Using the argument "allows energy drinks without caffeine" may be an argument of interest in your marketing materials when approaching potential buyers.
- Please refer to [CBI Competition](#) and CBI Top 10 Tips for doing business for more information.

Existing natural alternatives

Although market prospects are good for energy-related botanical health products, especially with regard to food supplements, some challenges are hampering their progression. Rigorous competition is prevalent among the wide range of energy products available on the market (e.g. super-fruits such as guarana fruit and goji berries, and other products such as royal jelly - for restoring strength and energy). Most of these ingredients, including the botanicals discussed in this factsheet, are positioned for other health benefits as well (e.g. boosting concentration and improving sexual health), which confuses the competitive environment.

Tip:

- Help manufacturers build their marketing story by documenting and visualising your company and product's unique value proposition. This will also contribute enormously towards your own marketing effort. Final manufacturers can use this information to market the end-product in Europe.

Value-adding opportunities when competing in the market

Adding value can be a way to create a distinct profile for yourself in the market and to make your product more attractive to buyers. You can add value with further processing (e.g. from raw material to extract to final product):

- Opportunities to **add value to raw materials** are often not fully exploited; proper post-harvest processing (sorting, grading) and proper documentation can lead to you obtaining a higher price.
- Developing country producers are moving **beyond raw material** towards the export of extracts. Processing raw materials into essential oils is guided by the existence of standards, and buyer demands are well understood. In contrast, it is more difficult to come to a common understanding on quality in the case of many herbal extracts. With that in mind, many EU buyers prefer to import raw materials, even if their suppliers would prefer to export extracts (to other markets).
- **Finished energy products** on the EU market are beyond the scope of most companies in developing countries, when taking into consideration product development, market authorisation and marketing costs.

Tips:

- Align quality adjustments and improvements to your product with buyers' requirements (specifications) and their willingness to pay for them. Quality improvements can be costly, and you need to ensure that the potential exists for getting an adequate return on investment.
- Determine your option to market simple finished products such as herbal teas.
- Set aside a sufficient marketing budget, which is of vital importance in the energy sector, as it is highly competitive. Without a strong promotion effort in the market, final (branded) product manufacturers have few opportunities on the EU market. As an example, look at the promotion strategies for [Red Bull](#), the main energy drink brand in Europe.

You can also add value by certifying your company according to social and environmental sustainability principles:

- In **food supplements** the value of certification depends on the positioning of the producer and product. Opportunities for certification increase if the product is positioned more as a food-type product (e.g. maca), rather than a medicinal-type product. In addition, producers with a company image focused on sustainability (ethical/environmental) place more value on certification of the ingredients in their food supplements.

Tip:

- Verify your buyers' interest 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.

What do the trade channels and interesting market segments look like in Europe for energy products?

Market segments

Energy products are marketed as **food supplements** in Europe. Vast numbers of food supplements aimed at increasing energy are being marketed in Europe. Alongside very competitive product categories (caffeinated energy drinks and fruit-based antioxidants), consumers are increasingly interested in herbal solutions, particularly when it comes to replacing caffeinated products. R&D and product development have the greatest economic viability for new ingredients, whereas margins are low for established ones.

Given that it is an established indication area, most supplement manufacturers offer energy products. There are also companies where energy products are the main indication area. As a vibrant indication area in terms of product development, companies are adding new ingredients which are unfamiliar as supplements in Europe. In general, the UK and France are most vibrant in terms of product introductions in contrast with Germany or Italy.

Market channels

Regarding established species for food supplements, trade relations focus on maximising supply security and reducing costs. By contrast, new ingredients call more strongly for collaboration.

Tips:

- Look at local practice: what do local people use as natural tonics? Build up files on traditional use, and support this with clinical tests. Such information can be used to approach European traders, ingredient processors and manufacturers.
- Consider whether you would be able to become a preferred supplier for larger players (larger volumes, very high expectations in terms of service delivery).
- Look for a partner in Europe to help build the marketing story and the business. Find a company which is interested and sees potential for the (new) ingredient.
- For tips on finding buyers, have a look at the CBI Module Finding Buyers. Use your knowledge of product development activity and potential for marketing your product more specifically to the right buyer.
- Please refer to [CBI Market Channels and Segments](#), where the various players at the various levels of the value chain are discussed in more depth. You are also provided with an overview of the key market characteristics and trends for food supplements.

Useful sources

Visiting and, above all, participating in trade fairs are highly recommended as among the most efficient methods of testing market receptiveness, obtaining market information and finding prospective business partners. The most relevant trade fairs in Europe for exporters of natural health ingredients are:

- [SANA](#) in Bologna, Italy
- [Hi/Ni](#) (Health ingredients/Natural ingredients): Travelling trade fair
- [Fi/Ni](#): Food ingredients/Natural ingredients travelling trade fair
- [Biofach](#) in Nuremberg, Germany (for organic producers)
- [Vitafoods](#) in Geneva, Switzerland
- [CPHI](#) is more focused on the pharmaceutical market, but larger natural extract companies also exhibit at this fair in a dedicated natural extracts zone.
- [Anuga](#) in Cologne, Germany, is a food and beverages fair but now also has a dedicated "Wellfood" department, including food supplements, functional food and medicine.

Trade press/news

- [Nutra Ingredients](#): News on supplements and nutrition in Europe.
- [Foodnavigator](#): Science and nutrition research, product news, newsletter, health and nutritional ingredients.
- [Nutraceuticals World](#): News, buyers' guide on various herbs and botanicals, knowledge centre and market, peer-reviewed and supplier research.
- [Nutraceuticals Now](#) ([summer issue 2015](#)): technical review on functional products and ingredients which are defined as disease preventing and/or health promoting in addition to nutritional value.

More information

CBI market information: Promising EU export markets.

EU Expanding Exports Helpdesk - <http://exporthelp.europa.eu>.

Eurostat - <http://epp.eurostat.ec.europa.eu/newxtweb> - statistical database of the EU. Several queries are possible. For trade, choose 'EU27 Trade Since 1995 By CN8'.

International Trade Statistics - <http://www.trademap.org> - you have to register



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Annex I Essential oils used in aromatherapy products for energy

Industry sources indicate that citronella and lemongrass essential oil offer particular opportunities to developing country exporters. In addition to this, peppermint and lavender oil also play a role in this indication.

Common name	Botanical name	Origin	Therapeutic properties
Citronella essential oil	<i>Cymbopogon nardus</i>	Sri Lanka and Java India and tropical Asia	Helps to clear the mind Stimulant properties Activating qualities on physical and mental levels
Lemongrass essential oil	<i>Cymbopogon citratus</i>	India, Nepal, Indonesia, South-east Asia, Australia Can be grown in warmer temperate regions	Revitalises the body and relieves symptoms of jetlag Refreshing
Citrus essential oils (e.g. orange, lemon, lime)	<i>Citrus sinensis</i> <i>Citrus x limon</i> <i>Citrus aurantifolia</i>	Spain, South America (Brazil), South Africa, China, India, USA	Improve concentration Refreshing Lighten mood
Mint essential oil	<i>Mentha piperita</i>	India, USA, China	Used to stimulate the mind, increase mental agility and to increase focus Refreshing
Cypress essential oil	<i>Cupressus sempervinens</i>	Mediterranean countries, Middle East	Refreshing
Oregano essential oil	<i>Origanum vulgare</i>	Mediterranean countries, Middle East	Stimulant Refreshing
Rosemary essential oil	<i>Rosmarinus officinalis</i>	Mediterranean countries, Middle East	Stimulate the brain Improve memory and mental clarity