

Market Study for Medicinal Mushrooms in Japan



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1 INTRODUCTION

The aim of this report, which has been prepared in the context of “Developing a Value Chain for Special Mushrooms Production” project, is to provide a summarized overview of the characteristics and regulatory framework of the Japanese medicinal mushrooms market and reflect on the possibilities for Finnish companies active in this market segment.

The remainder of the report is divided into four chapters. The second chapter presents the medicinal mushroom market in Japan, its size, trends, distribution channels and consumer preferences. Chapter three summarises regulations and procedures, which apply when exporting medicinal mushrooms products to Japan. Finally, in chapter four, we provide some concluding remarks in relation to the opportunities and challenges for Finnish Chaga producers in the medicinal mushrooms market in Japan.

2 MEDICINAL MUSHROOMS OVERVIEW

The aim of this chapter is to provide an overview of selected medicinal mushrooms in Japan, their market characteristics, distribution channels and sector trends. The report considers Chaga mushroom (*Inonotus Obliquus*), Cordyceps (*Cordyceps sinensis*), Lion’s Mane (*Hericium erinaceus*) and Reishi mushroom (*Ganoderma lucidum*), as these species can be cultivated in Finland, and might present a business opportunity for Finnish companies planning to enter the Japanese medicinal mushrooms market.

2.1 Market Overview

Mushrooms with medicinal effects (medicinal mushrooms) have been widely applied as alternative medicine in Japan for centuries. In particular, in relation to immune system stimulation, brain function improvement, lowering blood sugar level, anti-allergy and anti-fatigue effects and the like. Nevertheless, the medicinal mushroom market is rather a niche market, even though the Japanese health & functional foods market is the third biggest in the world and one of the high growth sectors.

One of the main reasons for this situation is a strong market decrease in 2006, which was caused by doubts expressed on the safety of *A. blazei* products. Since then the Japanese medicinal mushroom market has not been able to recover. This is despite the introduction of new medicinal mushrooms based products (e.g., food supplements) and providing scientifically based evidence on the positive effects of medicinal mushrooms (e.g. ovulation disorder improvements, liver function support, and cognitive function improvements).

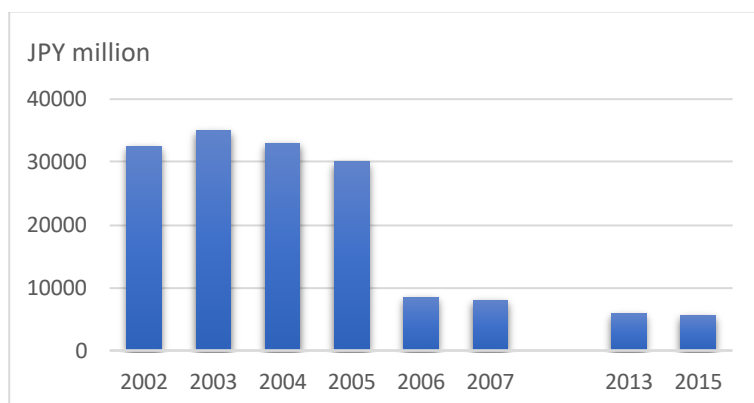


Figure 1: Market size for Agaricus blazei in the period 2002 - 2015 (in JPY million)

Nowadays, medicinal mushrooms are mostly used as food (including so-called health food¹), cosmetics and pharmaceutical products (including Kampo medicine – Japanese traditional herbal medicine). Data for 2018 shows that around 42% of medicinal mushrooms were used for food related products².

Since, medicinal mushrooms are often used in combination with other ingredients in a broad range of products, there is no reliable data on market size. The available data (**Virhe. Kirjanmerkin viittaus itseensä ei kelpaa.**) confirms the rather small size of the medicinal mushroom market. For example, the value of the blueberry market is about seven times larger than that of the Reishi market.

Table 1: Market size for selected medicinal mushrooms 2013 - 2017³

Species	Volume (kg)		Value (in JPY million)
	2013	2017	2015
Chaga	9 900 kg	14 322 kg	N/A
Cordyceps	13 200 kg	19 096 kg	N/A
Lion's Mane	3 577 192 kg	5 566 531 kg	760
Reishi Mushrooms	768 898 kg	969 130 kg	3 680

2.1.1 Chaga mushroom (*Inonotus Obliquus*)

Chaga grows in the Northern part of Japan, but was not traditionally used or popular in Japan. Nevertheless, due to the recent medicinal mushroom boom in US, which has also influenced the perception of Japanese customers, and the fact that in 2017 the Japanese superfood association named Chaga as one of the upcoming

¹ There is no universal definition of “health foods” in Japan. So- called health food means health food (meaning food in general that is not legally defined but is generally sold and used by indicating effects and functions relating to the maintenance or promotion of good health) except for food with health claims.

² Yano Research Institute

³ Experts interview, Secondary sources and Yano Research Institute

trendy superfoods, it is becoming popular and attracting more public attention, in particular through social media.

However, for market products the mushroom is primarily imported from Russia as raw material. Most of the Chaga products sold in Japan are herbal tea products. However, recently new types of products (**Figure 2**) are featured in the media. For example, the Chaga drink (smoothie or health drink) is not yet popular in cafés/drink bars, but it is expected that this will change once the branding of the Chaga has become more established.



Figure 2: New types of Chaga products (images: [Four Sigmatic](#) (left up), [Juicery by Cosme Kitchen](#) (left down), [Sunshine Juice](#) (right down), [lighthouse tonics](#) (right))

Unlike in the EU where Chaga is categorized as a “novel food⁴”, in Japan it is officially acknowledged as a raw material for food. Chaga is listed in the non-medicinal property plants list⁵, which means that the Chaga products are categorized as food unless specific medicinal effects (e.g., effective against cancer) are specifically mentioned.

⁴ Novel foods refer to products which prior to May 1997 have not been used for human consumption to a significant degree within the Community. The novel food authorisation of the European Commission is required for placing a novel food on the market within the European Union. Further information: [Finnish Food Authority](#)

⁵ Food and Drug Classification List. Ministry of Health, Labour and Welfare

The key player in the Japanese Chaga market is Chihaya Co. Ltd, who also holds the trademark for “Chaga®” since 1998. The company develops and cultivates medicinal mushrooms for health foods, wholesale of raw materials and products. Their cultivation and harvesting areas for medicinal mushrooms include Japan, China, Russia, Brazil, Taiwan and Korea. In 1992, the company started importing Chaga from Russia, mainly far east coastal areas and Eastern Siberia. The company produces two Chaga products, but mostly they are processed and distributed domestically as powdered raw-material. Below are the products’ specifications (**Table 2**):

Table 2: Chihaya Co. Ltd. Specifications for Chaga products⁶

Product form	Origin	Specifications
Chaga ®	Russia	Chaga mushroom dried
pieces for decoction	Russia	5 mm square
tea grind (for tea bags)	Russia	2 mm square *sterilized also available
sterilized powder	Russia	80 mesh
sterilized powder (Cell wall disruption methods)	Russia	2000 mesh
extract powder	Russia	40 mesh

Currently there are no major manufactures of Chaga products, but there are many small companies selling Chaga products (Siberian Chaga), mainly online.

Table 3: Examples of Chaga products sold in Japan

PRODUCER	PRICE / QTY	IMAGE
And YOU Ltd.	24,9 EUR 132 g (4g x 26 bags) Country of Origin: Russia	
Health & Herbal Tea Center	24,9 EUR 80 g Country of Origin: Russia Additive-free	
Kissui Co. Ltd.	27 EUR 100g (3mm cut, grinded) Country of Origin: Japan	

⁶ http://www.chihaya.co.jp/material_03.html

Eight Oceans Holdings	Chaga & Honey 180g – 138,5 EUR 50g – 46,2 EUR Country of Origin (Chaga): Russia	
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It is also noted that fake Chaga powders/products (or mixed with some other substances) imported from Russia exist in the market, which certainly damages the reputation of other Chaga products.

2.1.2 Cordyceps (*Cordyceps sinensis*)

There are over 400 species of Cordyceps, of which “*Ophiocordyceps sinensis*” is most appreciated and valuable. This precious and rare mushroom is almost extinct due to overcollection and environmental degradation. Therefore, it is not surprising that the price for the highest quality of *Ophiocordyceps sinensis* (for Japanese Kampo medicine use) is about 61.000 – 77.000 EUR per kg. Due to high demand and low availability, also mushrooms of lower quality are frequently sold.

Another problem related to this mushroom is that the naturally harvested fruiting bodies usually contain high amounts of arsenic and other heavy metals so they are potentially toxic. Therefore, in some countries (e.g., China) sales have been strictly regulated since 2016⁷.

Given the above reasons, when buying natural Cordyceps the Japanese buyers put high importance to the authentication and quality control.

In Japan, most of the Cordyceps available on the market are cultivated. The cultivation was introduced already in 2005, and Hokuto and BG Science succeeded with mass-producing cultivations, and they have registered patents for their cultivation technology.

In Japan, due to the high prices, the Cordyceps market has not grown significantly in recent years. However, it is expected that the share in this medicinal mushroom market will increase due to further cultivation technology development and product developments.

Some of the main Cordyceps producers and products are presented in

⁷ [Identification of Ophiocordyceps sinensis and Its Artificially Cultured Ophiocordyceps Mycelia by Ultra-Performance Liquid Chromatography/Orbitrap Fusion Mass Spectrometry and Chemometrics](#)

Table 4 and
Table 5.

Table 4: Main Cordyceps producers in Japan

COMPANY NAME	COMPANY INFORMATION
Chihaya Co. Ltd.	Medicinal mushroom specialized manufacturer. They use two types of Cordyceps “ <i>Cordyceps sinensis</i> ” and “ <i>Cordyceps militaris</i> ”, which are rich in active ingredients cordycepin. Raw materials from Japan, imported from China and Korea.
BG Science, Ltd.	Succeeded in artificial mass cultivation of cordyceps in Japan (Patented).
Monolith Japan	Specialized in Japanese Cordyceps. They sell extract, powder that are produced by their own company technology.

Table 5: Examples of Cordyceps products sold in Japan

PRODUCER	PRICE / QTY	IMAGE
Ogaland	6,6 EUR 300mg x 90 tablets	
DMJ Egao Life	22,2 EUR 300mg x 62 tablets (incl. royal jelly)	
Kenkou Tsuhan Natural Life	32,1 EUR 100g	
TTN	125 EUR 20 ml x 10 bottles (3000mg Cordyceps extract per bottle)	

2.1.3 Lion's Mane (*Hericium erinaceus*)

Lion's Mane mushroom contains significant amounts of essential amino acids, vitamins, minerals, β -glucans, etc. and is rich in nutritional elements, which that are not found in other mushrooms. For example, it has

been considered as a “high-class” ingredient in China for centuries. In Japan, the mushroom was initially also used as health food ingredient, but recently it is also used as an edible mushroom.

Lion’s Mane mushroom grows naturally in Japan, but it is very rare. Therefore, most of the mushrooms available in the market come from cultivations in Japan or are imported from China. When it comes to the cultivation, Lion’s Mane has a very short cultivation period (30-60 days), and the harvesting can be performed up to 6 times per year.

In Japan, multifunctional effects of this mushroom have been studied in many companies and research laboratories. The most studied effect is its preventive effect against dementia. San Medica Co. Ltd. has confirmed that "*Amylovan*" extracted from Lion’s Mane has the effect of improving memory ability and learning ability, leading to improvements in mild dementia.

The market size in fiscal year⁸ (FY) 2017 was around 5,9 million EUR. In terms of enterprises, mainly pharmaceutical manufacturers and mushroom producers are involved. The main sales channels are consultative pharmacies and drugstores, followed by mail order sales.

Key players are small in scale, and almost no companies have sales of more than JPY 100 million (approx. 769 kEUR) of Lion’s Mane related products. The main producers and examples of Lion’s Mane related products are listed below (Table 6 and

⁸ The fiscal year in Japan corresponds to the period from 1st April of a given year to 31st March of the next year.

Table 7).

Table 6: Main Lion's Mane producers in Japan

COMPANY NAME	COMPANY INFORMATION
Hokuto Kinoko Company	<p>The company has developed new species for Lion's mane. They sell health products* for neurological functions. They also sell fresh Lion's mane mushrooms as gourmet mushroom.</p> <p>*Product production process video available at: https://youtu.be/jwCZyHHKytY</p>
Marimo Seiyaku	They have developed Lion's mane health products. Instead of End user sales in the domestic market, the company is focusing on oversea market sales as well as supplying raw materials.
Watabe Yakuhin	Using innovative processing technology, the company has developed the nano powder, which enables the body to absorb it better.
San Medica	<p>They supply raw materials of AMYCENON, which is an extract of <i>Herichium erinaceus</i>.</p> <p>They also manufacture PB / OEM products in addition to their own products. Their product "AMYCENON" guarantees the same amount of two active ingredients "hericenones" and "amylovan", which differentiate them from other competitors.</p>

Table 7: Examples of Lion's Mane products sold in Japan

PRODUCER	PRICE / QTY	IMAGE
Kubo Sangyo	2,3 EUR 3g x 10 tea bugs	
Hokuto	39,4 EUR 250mg x 4 tablets x 90 bags	
Kenkou-Yasoutya Center	24,9 EUR 100g (100% powder)	
San Medica (D-Fraction)	78,9 EUR 88,8g (370mg x 240 tablets)	

2.1.4 Reishi (*Ganoderma lucidum*)

Reishi is traditionally known in Japan and has a high reputation as a herbal medicine. Nowadays, it is officially acknowledged as a raw material for food in Japan, and is listed on the non-medicinal property plants list, unless specific medicinal effects are mentioned on the product.

The mushroom is produced in the Northern, Central and Western Japan and Kyushu regions. However, due to a lack of producers, it has become increasingly challenging to secure stable production. Therefore, raw materials from China, Taiwan and Korea are imported.

The size of the Japanese Reishi Mushroom market was around 28.5 million EUR in FY2017, and given, the traditional importance and the traditionally high reputation of Reishi as a herbal medicine, it forms a stable market that has been supported by repeating customers, mainly elderly people.

Another important reasons for the stability of the market is that many business operators have been engaged in the Reishi business for many years, and have established a strong relationship of trust with their customers. In addition, various health benefits of Reishi have been further confirmed, and knowledge on the use for daily health management and prevention of diseases has progressed, and this has led to the acquisition of new customers. In particular, this includes middle aged and elderly women, who apply Reishi products in relation to "blood flow improvements", "female hormone regulation", and "beauty and wellbeing".

Furthermore, recently new Reishi products have been introduced, such as supplements, beverages (tea), etc. The end products of Reishi Mushroom are mainly a combination of various products, and depending on their application, they come in different forms such as granules, capsules, tablets, and beverages. Producers have been trying to differentiate the product with the use of various types of Reishi strains, selected production areas, various cultivation and extraction methods, providing new information on functional research of active compounds (e.g., triterpenoids), as well as proposals for their combination with other mushrooms.

The main producers, industry associations, and major products are listed below (Table 8 and

Table 9).

Table 8: Main Reishi producers in Japan

COMPANY NAME	COMPANY INFORMATION
Nissan Chemical Corporation	Pesticides are not used on any of the Reishi used and they are cultivated with organic fertilizer. 3/4 of Reishi products sales are overseas, exporting to China (Taiwan), Canada, Vietnam and Australia.
Chihaya Co. Ltd	Patent holding of spore cell disintegration method by freeze grinding
Powerful Health Foods	The company carries out the whole process from cultivation to processing in Japan
Taruho-sangyo	The company imports Reishi from China, process (bulk, grind, powder, extract powder) and supplies raw materials to domestic manufacturers.

Table 9: Examples of Reishi products sold in Japan

PRODUCER	PRICE / QTY	IMAGE
POLA	54 EUR 60 tablets (for 30 days) Patented. Herbal tablets incl. 7 different herbs.	
DHC	11 EUR 150 tablets (for 30 days)	
Yachigusado	115 EUR 150 capules *Deer Horn Shape <i>Ganoderma Lucidum</i>	
Morikawa Kenkodo	69,2 EUR 90 tablets *Deer Horn Shape <i>Ganoderma Lucidum</i> & <i>A. Blazei</i>	

In recent years, there has also been a growing demand for Japanese Reishi in other countries, like Taiwan, Hong Kong, Canada and the United States, and this includes new countries like Vietnam. This is mainly because Japan's cultivation and processing technologies, and quality control are highly appreciated and are considered superior in comparison to some other producing countries.

2.2 Distribution Channels

Among the various sales channels, non-store sales (mail order, door-to-door sales, online and TV shopping) are the most important for health food and beverages products sold in all kinds of formats, with a market share of over 70%.

The significant share of non-store based channels is best explained by the fact that the needs for functional products and dietary supplements (including medicinal mushroom-based products) vary on the individual's situation. Customers can also benefit from special discounts, which are offered for repeated purchases.

Nevertheless, over the past years drug stores have consistently increased their sales and are expected to further grow, because of new sales strategies, such as the “one- stop-shopping” concept, where consumers can conveniently buy various beauty- and health- related products at one shop.

Supermarkets and convenience stores have smaller spaces available. Thus they mainly focus on best-selling products. Convenience stores in particular concentrate their efforts on “fast movers” and quickly remove the “slow-movers” from the shelves.



Figure 3: Example of drug store (left) and convenience store (right)

When it comes to imported products, they are mostly purchased at department stores, specialty food stores and online. However, specialty shops have also their own online shops and/or a store on an online retailer platform.



Figure 4: Example of Speciality shop (left) and department store (right)

2.3 Japanese Consumers’ Preferences and Trends

Most importantly, Japanese people give special attention to **hygiene** in all aspects of their daily lives. In this respect, they are highly concerned about food safety and traceability. The commonly used words on food packages are “anzen (security)” and “anshin (safety)” that reflect these characteristics. In terms of food safety, particularly radiation and pesticide levels are a heightened concern among Japanese people.

Japanese consumers prefer **domestic products** over imported ones, because they believe that domestic products excel in safety and quality. When it comes to choosing between imported products, the good reputation and image of a country will have a significant influence on consumer's choice.

Japanese consumers place high importance on the presentation and packaging of the product, in terms of **quality** and **information** (especially information on health effects). Producers that fail to recognize this will not succeed. Quality of packaging is a crucial factor, and it must be of a very high level with attractive designs. The provided information shall be in Japanese, abundant and easy to view. Average-level packaging will not be accepted in Japan. Imported products are often sold at a higher price than similar domestic products, and they are seen as being of a higher value. However, this needs to also be reflected by the quality of the packaging.

Besides the quality and information, the **size of the packaging** is also important. In Japan, people generally prefer small (individual) packages, which maintain the freshness of the product (note Japan is very humid), and make it easy to carry/use (for cooking and convenience). Furthermore, Japan is characterized by an increase in single households due to population aging and an increased share of unmarried people. The current single household rate is 35% and is estimated to reach 40% by 2040⁹. This also indicates that the packaging size needs to be adjusted.

According to a study¹⁰, about 80% of Japanese consumers do online research before making a purchase. Japanese consumers are greatly **influenced by public opinion** and tend to make decisions based on the **reviews of others**. Japanese people have been raised to think of themselves as part of a group. Therefore, it is very important for Japanese consumers to follow the trend and experience it with others. Consumers are significantly influenced by magazines and blogs written by famous people. The trends (that lead to huge business opportunities) are often made by the media.

It is also important to consider the so called "**1/3 rule**" in relation to the product's shelf life. As explained above, Japanese consumers are very sensitive in relation to food safety, which means that they are only willing to buy products that are not close to their expiry date (less than 1/3 of their shelf life) or otherwise expect significant discounts. Therefore, importers do not accept the product, which has already passed 1/3 of its shelf duration period.

⁹ Source: National Institute of Population and Social Security Research, Japan

¹⁰ Source: NTTCom Online Marketing Solutions Corporation: Survey on "Impact of reviews in purchasing behavior"

2.4 Mushroom Sector Trends

The Japanese believe that food and medicine are of equal importance in preventing and treating diseases, as they are supposed to come from the same source; are based on the same basic theories and have the same uses.

Medicinal mushrooms have been used in traditional medicine for centuries in Japan. Therefore, people are generally knowledgeable about their health effects. The medicinal mushroom market, however, dropped in 2006 due to the *A. Blazei* scandal. Since then the medicinal mushroom market has remained small.

However, there is strong potential for growth in the medicinal mushroom market. Although Japan's health food trends are generally unique, this new "superfood" market trend in Japan is greatly influenced by global developments. For example, it is expected that current US medicinal mushroom trends will reach Japan in a few years.

Following the global superfood boom, consumers in Japan also increasingly appreciate nutrition coming from naturally-derived foods. In particular, so called superfoods, food or nutritional supplements with high nutritional value, have become more and more popular. Examples are chia seeds, acai, cacao, spirulina, and turmeric. According to the Japanese superfood association, the domestic superfood market size (2018) was 308 million EUR and the market size is steadily expanding. In this sense, the use of "medicinal mushroom" is expected to have a significant growth in the future.

The above is also supported by the way ingredients and substances are used for health and beauty purposes, which have diversified, and are changing from the intake of a conventional supplement (e.g., as pills or capsules) to adding them to other foods or drinks (e.g., powders to be added to coffees or smoothies). For example, improving health by simply changing daily regular coffee to a coffee containing a specific supplement is becoming popular. In this context, new mushroom-based products, like medicinal mushroom powders, which can be easily carried and are easy to mix with smoothies or soups (or even pre-blended) could succeed in the market.

2.5 Healthy Beverages trends

In relation to medicinal mushrooms, the healthy beverage sector could be of interest. In Japan, healthy beverages are becoming one of the driving forces of the health and functional food sector. Diet-conscious consumers are switching from sugar-based soft drinks to low calorie mineral waters, fruit and vegetable juices, and teas.

Tea is traditionally consumed in Japan, and with the current health and well-being trends they have retained a strong market position. In particular, demand for plant-based or fruit-based tea is rising as consumers look for products that offer more health benefits than black tea. These are mainly promoted for their naturalness (e.g., plant-based, no preservatives), low calorie content (e.g., no sugar), and richness in antioxidants.



Figure 5: Examples of tea products



Coffee-based drinks are also seeing increasing success. Coffee is a natural source of polyphenols and is supposed to have a positive effect in relation to type-2 diabetes and Alzheimer diseases. Accordingly, coffee-based beverages are increasingly being marketed and promoted for their health benefits.

Figure 6: Example of coffee based drinks

3 REGULATORY ENVIROMENT

A product imported to Japan can only be legally offered for sale if it complies with all labeling, packaging and other requirements. In addition to general rules that apply to all imported food products, other product-specific regulations exist and must be taken into account.

The following section aims to provide an overview of these import procedures and regulations. However, it should be noted that the regulations and standards are subject to change. Therefore, when exporting to Japan, it is recommended to work closely with a local importer to ensure that all the processes and product characteristics accomplish the most recent regulations.

3.1 Import Process Overview

For importing medicinal mushroom products, it is first necessary to confirm whether the product is regarded as a food or pharmaceutical product (or quasi-drug¹¹) in Japan. If it is regarded as food, it is regulated by the Food Sanitation Law. When deemed to be a pharmaceutical product (or quasi-drug), it is subject to the Pharmaceutical and Medical Device Act.

The judgment whether a product is treated as food or medicine (quasi-drug), is primarily based on “*the list of raw materials exclusively used as pharmaceuticals*”¹². However, even if product ingredients are regarded as foods, they can be still defined as a pharmaceutical product (or quasi-drug) based on the product’s characteristics, like, indications of efficacy, usage form and capacity.

Regardless of whether a product is considered as a food or pharmaceutical (or quasi-drug), import procedures must be performed by "importers" in Japan.

In Japan, only three mushroom species are officially acknowledged as ingredients and components used solely as pharmaceutical drugs: Turkey Tail (*Trametes versicolor*), Hen of the Woods (*Polyporus umbellatus*) and Poria (*Wolfiporia extensa*/ *Poria cocos*), whereas, other mushrooms are classified as ingredients for foods, and are not deemed to be drugs unless claiming medicinal effectiveness. In the remainder of this report, we exclusively focus on the import process for food and beverage products.

Imported food and beverage products are regulated primarily by the Food Sanitation Law and the Customs Act. Other regulations such as the Plant Protection Act may apply to some products, which might require imported products to undergo a plant quarantine, depending on their type of processing or conservation method.

3.2 Import Procedure under Food Sanitation Law

To ensure the safety of imported foods and related products, the Food Sanitation Law obliges importers to submit an import notification¹³. The Food Sanitation Law states that “*Those who wish to import foods, food additives, apparatuses, or container/packages for sale or for use in business, shall notify the Minister of Health, Labour, and Welfare on each occasion as prescribed by the Ministerial Ordinance,*” the imported foods and related products must not be used for sale without import notification.

¹¹ Quasi-drugs are defined as products that have minimal to moderate pharmacologic activity but are restricted in use to specific indications. Quasi-drugs in Japan include categories of products that are often defined as drugs, cosmetics or Over-the-Counter (OTC) products in other countries. Products in this class include energy drinks containing taurine, vitamin preparations, hair tonics, bath preparations, skin whitening products, acne products, anti-dandruff shampoos, fluorinated toothpaste, hair dyes and many others.

¹² The Japan Food Chemical Research Foundation

¹³ Ministry of Health, Labour and Welfare Imported Foods Inspection Services

"[Notification Form for Importation of Foods, etc.](#)" is submitted to a Quarantine Station of the Ministry of Health, Labour and Welfare, where food sanitation inspectors carry out document examination and inspection to check, whether the foods and products comply with the Food Sanitation Law.

Given that the rest of the procedure is product-specific, we only provide an overview of the whole procedure in **Figure 7**.

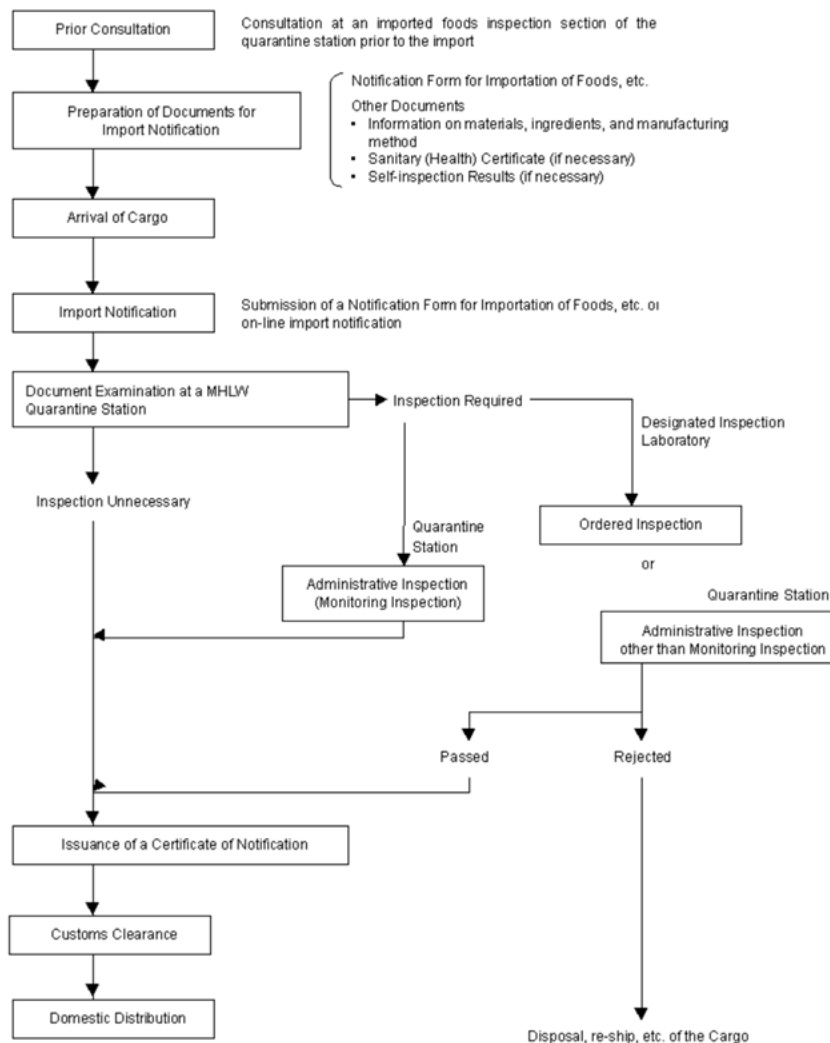


Figure 7: Procedures of Import Notification of Foods and Related Products¹⁴

3.3 Sanitary Analysis

¹⁴ Source: Ministry of Health, Labour and Welfare Imported Foods Inspection Services

Exporters should note that depending on the product, they must always obtain certificates of analysis in the exporting country to determine chemical contents, in line with the Food Sanitation Law.

For medicinal mushroom products the following documents must be submitted in addition to “Certificate of origin”:

- Certificate of radioactivity
- Heavy metal analysis
- Microbial test

In 2006, Japan introduced the positive list system for agricultural chemicals remaining in foods-the system to prohibit the distribution of foods that contain agricultural chemicals above a certain level if maximum residue limits (MRLs) have not been established. The agricultural chemicals include pesticides, feed additives and veterinary drugs.

It should be also noted that Japan recognizes certificates of analysis granted by specific analysis centers located overseas. In Finland, the following laboratories are accredited:

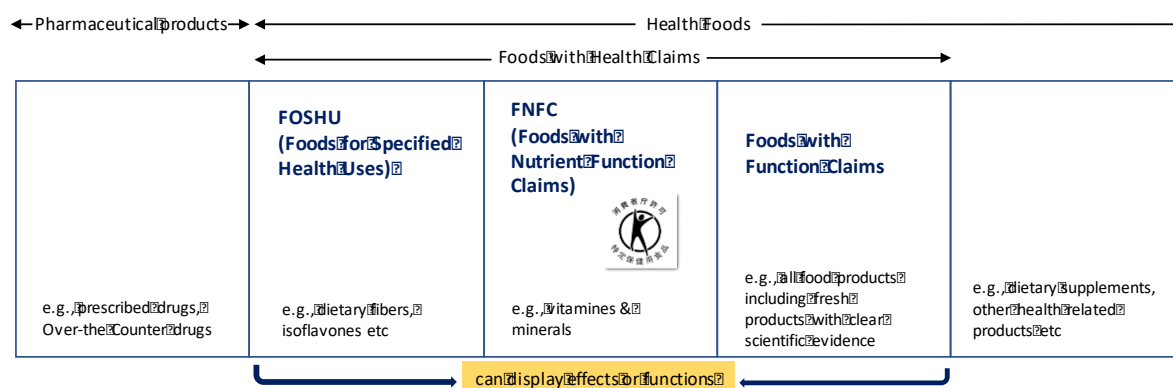
<https://www.mhlw.go.jp/topics/yunyu/5/dl/h5.pdf>

3.4 Food labelling

When selling in Japan, Food labelling must be in Japanese. Details of the food labelling instructions can be found at the Consumer Affairs Agency site: https://www.caa.go.jp/en/policy/food_labeling/.

Labelling indicating pharmaceutical effects, efficacy, or functions is not permitted for general food (incl. so-called health food).

In Japan the System for Food with Health Claims has been adopted, under which functions of food may be indicated (Figure 2). It should be noted that the Food Labelling Act prohibits the use of any name that can be confused with names for food with health claims or the use of any term indicating functions of nutrients of expected achievements of specific health purposes in labelling for other general food.



Classification of Orally-Ingested Goods

Pharmaceuticals (including quasi-pharmaceutical products and regenerative medicine)				
Food (pharmaceutical expressions are not permitted)	Food with health claims (functions may be indicated)	Food for specified health uses	Food that contains ingredients with health functions that affect physiological functions, etc. of the body to which labeling indicating expected achievement of specific health purposes is affixed	Business entities need to have each product undergo an examination concerning their effectiveness and safety, etc. and to obtain authorization for the labeling from the Consumer Affairs Agency
		Food with function claims	Food with labeling targeting people free from diseases to imply that functional ingredients are expected to improve and maintain good health	Based on the rules specified by the national government, business entities need to report necessary matters such as the scientific grounds for the safety and functional claims of food to the Consumer Affairs Agency before commencing sale of the relevant food
		Food with nutrient function claims	For food that conforms with the standards and criteria specified by the national government, functions of the nutrient ingredients may be indicated.	Business entities do not need to file an application for authorization or make reports to the Consumer Affairs Agency.
	General food		Functions may not be indicated.	

Figure 8: Classification of health & functional foods in Japan¹⁵

Careful attention is required when presenting and advertising so-called health foods, to avoid possible conflict with the provisions of the Health Promotion Act.

False or exaggerated claims include the treatment or prevention of diseases (e.g., arteriosclerosis, cold, influenza), improvement of bodily functions and alleviation of hangovers, and beautification of the body's appearance (e.g., skin improvements).

These so-called 'health food' products range from tea to other general foods. In Japan, mainstream foods in general cannot bear a functional claim.

¹⁵ The Japan Food Chemical Research Foundation

At present, manufacturers are able to make “Foods for Specified Health Uses” (FOSHU), “Foods with Function Claims” (FFC), and “Foods with Nutrient Function Claims” for health foods products.

Under FOSHU, the products are scientifically recognized as helpful for maintaining and promoting health, and are evaluated by the Japanese government, hence they are permitted to bear specific health claims.

Unlike FOSHU, FFC products are prohibited from bearing terms such as “diagnose”, “prevent”, “cure”, or “treat”, according to the Japan’s Consumer Affairs Agency.

Claims that imply the effectiveness of treatment or prevention of diseases are also prohibited. In addition, claims that target individuals suffering from a specific disease, such as “for people suffering from diabetes”, is also prohibited.

Also, claims that state intentional enhancement of beauty, such as skin whitening, are prohibited.

3.5 Regulations for Food Packaging

The Japanese regulatory framework for food and nutraceutical packaging components is ruled by government regulations based on the Food Sanitation Law standards that have been established by industry trade associations. A detailed analysis of these highly complex rules should be conducted on a product-by-product basis.

Regarding food-contact materials, the legislation forbids the sale of equipment or packages containing toxic or harmful substances that could affect human health.

For more technical information about packaging material regulations, please refer to “Specifications and Standards for Foods, Food Additives, etc. Under the Food Sanitation Act – (Abstract) 2010” (https://www.jetro.go.jp/ext_images/en/reports/regulations/pdf/foodext2010e.pdf).

3.6 Recycling of Empty Containers and Wrapping

The issue of empty package recycling is important not only for the relation between exporter and importer, but also for the product’s retail price. The Containers and Packaging Recycling Law covers empty jars made of glass but also any wrapping packages or bags that become unnecessary when contents have been consumed or removed (cardboard cartons are not included).

Moreover, users and manufacturers, as well as importers, assume the responsibility for waste. This means, they are responsible for recycling containers and wrapping materials in accordance with the volume that they manufacture or sell. Since it is practically impossible for individual business entities to collect waste containers and wrapping and recycle them on their own, the Japan Containers and Packaging Recycling Association (JCPRA), a government-designated organization, operates a recycling business on behalf of them. In turn, these business entities pay "recycling fees" to the JCPRA to fulfill their legal obligation.

The following labels (**Figure 9**) must be applied on packages according to the composition of all of their parts. When relevant, exporters should therefore communicate the components to their importers.



Figure 9: Labeling of Products Package Components¹⁶

3.7 Import and Distribution of Health Food Ingredients

Health food manufacturers frequently rely on overseas raw materials. According to Japanese companies interviewed for this report, manufacturers are willing to use imported ingredients as long as stable supply quantities and quality are continually assured. In addition, also the aspects of traceability and accuracy of efficacy claims are of significant importance.

Complexities of the Japanese distribution systems are well known. Japan has long been seen as a very difficult market to enter for foreign companies and to deal with its distribution system. Generally, the distribution system in Japan involves complex, inter-organizational and highly interdependent relationships among various companies.

¹⁶ Source: Japan Containers and Packaging Recycling Association (JCPRA) and Ministry of Economy, Trade and Industry, Japan

Due to complexity of import procedures, the manufacturer purchase overseas raw materials through importers or trading houses, who are specialized in raw materials. It is very seldom for manufactures to import raw materials directly.

Most Japanese trading companies/importers specializing in buying bulk ingredients tend to favor quality at a low price, which is set according to their customer bases and distribution channels.

4 OPPORTUNITIES AND CHALLENGES FOR FINNISH CHAGA PRODUCERS IN JAPAN

In the context of the project, which aims to develop value chains and new product ideas for Chaga, we can provide some concluding remarks in relation to the opportunities and challenges for Finnish Chaga producers in the medicinal mushrooms market in Japan.

The global Chaga Mushroom Extract market, valued at 16 million US\$ in 2018, is expected to reach 21 million US\$ by the end of 2025, growing at a Compound Annual Growth Rate (CAGR) of 3.5% during 2019-2025¹⁷. The growing trend of functional food ingredients in Japan could accelerate the market growth of Chaga in the near future.

Opportunities:

- **Growing demand for food products with potential health benefits**, which has been pushing the incorporation of healthy ingredients in various food products. In this context, Chaga mushrooms have high potential, as they contain the highest levels of Superoxide Dismutase (SOD), which is considered to be one of the most powerful antioxidant and anti-inflammatory substances.
- **Japanese producers are constantly looking for new raw materials** for food products, especially if they have clear health benefits.
- **EU-Japan Economic Partnership Agreement (EPA)** is providing new opportunities for Finnish exporters. EPA, introduced in 2019, has eliminated customs duties for medicinal mushrooms, which would could give Finnish producers price related advantages in comparison to non-EU producers.
- **An increasing interest in partnerships between companies** that result in co-branding and co-marketing between ingredient suppliers and manufacturers of finished products.
- **Finland and Finnish products hold a good reputation** among Japanese consumers.

Challenges:

¹⁷ QY Research, INC.

- Currently, **the health benefits of the Chaga mushroom are not well known** in Japan, either among producers or customers.

To change this situation a coordinated (e.g., Finnish Pakuri Association) promotion campaign would be needed, which would emphasize the health benefits of Chaga, possibilities for its use and, in particular, highlight the benefits (e.g., higher contents of active substances, lower contents of pollutants – heavy metals and radiation) of Finnish Chaga and Chaga products as compared to other producing countries (e.g., Russia, USA). An example of such an approach is the promotion of Canadian blueberries, which was implemented by the [Wild Blueberry Association of North America](#).

- The **Japanese consumers have very specific preferences** in terms of product characteristics (see Section 2.3 of this report).

Thus, for a successful placement of Finnish Chaga products in the Japanese market, the development of innovative products tailored to the needs of the Japanese market is needed. Potentially, also additional evidence on the health benefits of Chaga products would need to be provided to further strengthen the acceptance of, and trust in, Chaga products by consumers.

- Preferences of Japanese consumers are not only driven by evidence and facts, and they tend to prefer products that can be related to a **historic or emotional background (story)**. Thus, it is important to promote the modern Chaga products in relation to the historic use of Chaga in Finland.
- Japanese importers require **raw materials and/or products of excellent** (e.g., cleanness, contents of active substances) **and stable** (no significant fluctuations) **quality**.

This would require the Finnish producers to develop and implement adequate quality control procedures in the production processes of raw materials and /or products. Additionally, to differentiate the Finnish Chaga from other producing countries would imply that the quality of the product should be superior.

- Last but not least, it is crucial to **find the right local partner** in Japan (see Section 3 of this report). A common mistake made by foreign companies is to try to use a list of importers as a basis for “cold calls” on prospective agents. The Japanese prefer to do business with someone only when they have been properly introduced and have met face-to-face. There are many importers in Japan, however meeting the right partner who is willing to invest in your products, may require patience and dedication.

To conclude, Chaga and its health benefits are still rather new to the Japanese consumers and manufacturers. Thus, to achieve a successful placement of Finnish Chaga products, it would require a well-coordinated promotion of these products in the Japanese market in addition to clear (research) evidences on Chaga’s health benefits. Such, a promotion would need to be supported by the availability of innovative products tailored to the needs of Japanese customers.

Annex I: Relevant Organisations and Trade Fairs

- [Japan Superfoods Association](#)
- [International Superfood Association](#)
- [The Japan Reishi Association](#)
- [Japan Functional Food research Association](#)
- [Japan Special Forest Product Promotion Association](#)
- [Food Chemicals Newspaper](#)

- [Diet&Beauty Fair Asia](#)
- [ifia/HFE JAPAN](#)
- [Tokyo Health Industry Show](#)
- [Cosme Tokyo](#)
- [Drink Japan](#)
- [Foodex Japan](#)