

The Global Ginseng Market and Korean Ginseng

In-Ho Baeg*

ABSTRACT

Keywords

- *Panax ginseng*
- World ginseng market
- Global ginseng distribution
- Global ginseng production

Ginseng and ginseng products are distributed in approximately 190 countries around the world. The size of the ginseng market varies by country and there are no accurate statistics on production and distribution amounts per country. Therefore, it is difficult to make predictions about the global ginseng market. Governments and ginseng trading companies are in need of comprehensive data that shows the current status of the ginseng market to help them establish effective import, export, and sales and marketing policies. To address this need, this study examines the approximate size of the world ginseng market based on estimates of recent quantities of ginseng distributed in specific country as well as production by major ginseng producing countries.

In 2018, global ginseng production was about 86,223 tons based on fresh ginseng. China produced 50,164 tons, South Korea 23,265 tons, Canada 11,367 tons, the US 1,285 tons, Japan 30 tons, and other countries a combined 112 tons. The value of global ginseng production is estimated to be approximately \$5,900 million, with \$2,870 million (48.6%) in China, \$2,489 million (42.2%) in South Korea, \$478 million (8.1%) in Canada, \$54 million (0.9%) in the USA, \$4 million (0.1%) in Japan, and \$5 million (0.1%) in other countries. The value of ginseng products consumed for the last five years in South Korea was \$1,162 million in 2014, \$1,280 million in 2015, \$1,548 million in 2016, \$1,638 million in 2017, and \$1,762 million in 2018, showing that the market has been increasing in recent years. In particu-

lar, the Korea Ginseng Corporation (KGC), the biggest global ginseng company in South Korea, recorded sales of \$1,207 million in 2018. This represents about 69% of the South Korean ginseng market, and about 20% of global production. Since interest in alternative medicine and health food among consumers is increasing globally, the market for ginseng is expected to expand into the future.

I . INTRODUCTION

Ginseng is one of the most important goods used in health care and treating diseases in many areas of Asia, including Korea, China, Japan, and other Southeast Asian countries. Ginseng is currently distributed in more than 190 countries¹⁾ around the world. Depending on the characteristics of a country's consumers, ginseng may be used for agricultural products, foods and functional food products, dietary supplements, health supplements, cosmetics, and medicines. Trade in ginseng occurs between many countries and while statistics on ginseng imports and exports are available, there is no data on global ginseng production and the market value of that production. Therefore, this study focuses on the global ginseng market to help countries and companies that trade in ginseng, or intend to do so in the future, by estimating recent ginseng production volumes and the market size for each country. To predict the global ginseng market, I first analyze South Korea, where the size of the ginseng market can be predicted with reasonable accuracy. Then, I evaluate other countries' markets relative to South Korea. I focus on the size of South Korea's ginseng market, the largest in the world, and sales of the Korea Ginseng Corporation (KGC), the largest ginseng company in Korea. While there may be some discrepancies between the data

in this report and actual production and sales figures, as there is currently no actual statistical data my goal with this analysis is to provide useful data that can be a reference to people and companies interested in the ginseng market.

II . GLOBAL GINSENG PRODUCTION

Ginseng requires specific climate and soil conditions and is cultivated only in certain countries, including South Korea, China, the US, and Canada. As most countries do not provide official statistics on annual ginseng production, accurate data is difficult to obtain. Therefore, site visits, consultations, and statistical data from a subset of countries are currently the only sources of information available. Although this is less than ideal, the analysis should be helpful by providing an international perspective on ginseng.

Table 1 shows estimated global ginseng production as of 2018. China is the largest producer at 50,164 tons, South Korea ranks second with 23,265 tons, Canada is third with 11,367 tons, and the US is fourth with 1,285 tons. Total production by these four countries is 86,081 tons, representing approximately 99% of total ginseng production worldwide of 86,223 tons.²⁾³⁾

The ginseng that is cultivated in South Korea is *Panax*

Table 1. Estimated world ginseng production (based on fresh ginseng)

	China ¹⁾	South Korea ²⁾	Canada ³⁾	United State ⁴⁾	Japan ⁵⁾	Others ⁶⁾	Total
Ginseng Production (ton)*	50,164	23,265	11,367	1,285	30	112	86,223
Production Ratio (%)	58,2	27,0	13,2	1,5	0,0	0,1	100

¹⁾ 2020 overseas market research report (China), Korea Agro-Fisheries & Food Trade Corporation, 2020.

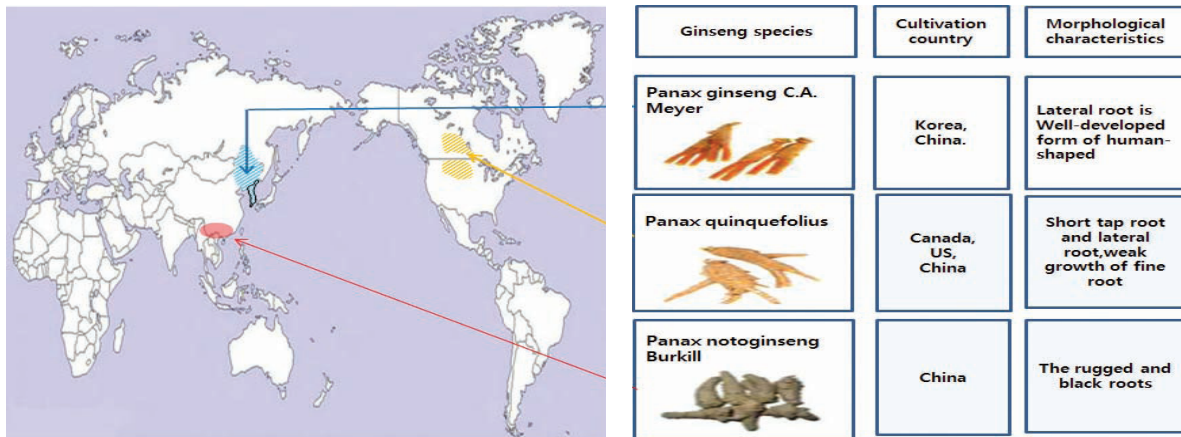
²⁾ 2020 overseas market research report, Ministry of Agriculture, Food and Rural Affairs, 2019.

³⁾ Canadian International Merchandise Trade Database, 2020.

⁴⁾ Carol Guensbug, With ginseng Festival, Wisconsin Growers Aim to Cultivate Broader Taste for Root, 2017. (<https://www.voanews.com/a/ginseng-festival-wisconsin-growers-cultivate-market/4025506.html>)

⁵⁾ 2018 Customized research on agri-food overseas market (Japan), Korea Aro-Fisheries & Food Trade Corporation, 2018.

⁶⁾ Ginseng roots (HS: 121120) Product trade, Exporters and Importers/OEC : The Observatory of Economic Complexity, 2020. <https://oec.world/en/profile/hs92/ginseng-roots?redirect=true>

**Fig. 1.** The world ginseng cultivation area

ginseng. Three species, namely *P. ginseng*, *P. quinquefolius* and *P. notoginseng* are cultivated in China. Canada and the US cultivate mostly *P. quinquefolius*. Based on production by species, *P. ginseng* dominates global production, followed by *P. quinquefolius* and *P. notoginseng* in that order (see Fig. 1). People grow ginseng up to four to six years old in South Korea and China, while three to four years in Canada and the US.

1. GLOBAL GINSENG DISTRIBUTION

Ginseng is currently distributed in more than 190 countries around the world. The sizes of ginseng mar-

kets differ by country due to customer consumption trends, distribution, types of ginseng products and ginseng businesses, and value-added. South Korea has the highest annual ginseng consumption per person in the world, at approximately 370g. Ginseng products are sold in department stores, hypermarkets, convenience stores, health food stores, franchise stores, duty-free shops, drugstores, home shopping, internet sites, etc. There are many different ginseng products, including raw ginseng root, powders, tablets, capsules, extracts, drinks, pouches, candies, and more. Depending upon the preferences of each country's consumers as well as various regulations, ginseng may be marketed as

an agricultural product, a food or functional food, a dietary or health supplement, an ingredient for cosmetics, as medicine, and so on.

In South Korea, of the 23,265 tons of ginseng produced in 2018, 7,907 tons (34%) was sold as roots and 15,358 tons (66%) was used for processed products.⁴⁾ In the future, the market for processed ginseng products is likely to increase relative to the ginseng root market in South Korea because of the convenience of using processed ginseng.

In China, ginseng is used mainly by adults with root ginseng as the most popular product. Recently consumption of processed ginseng products such as extracts, drinks, and so on, has been increasing; these products are primarily sold in traditional medicine stores and online.⁵⁾ While ginseng is mainly used as a traditional medicine, since 2012 ginseng that is less than five years old has been used as a food.⁶⁾ In the future, various food markets in China that use ginseng are expected to expand.

In contrast, Canada⁷⁾ and the US export most of their ginseng as raw ginseng root to China, Hong Kong, and

Taiwan.

Due to a lack of accurate data, the amount of ginseng produced by individual countries worldwide is not known. Therefore, this analysis focuses on the largest, best-known ginseng producer, South Korea, and estimates the size of other ginseng markets through relative value comparisons of fresh ginseng, dried ginseng, red ginseng, and processed products. Based on this approach, the global market for ginseng production is estimated to be worth approximately \$5,900 million (Table 2). China accounts for \$2,870 million (48.6%) of this total, with South Korea at \$2,489 million (42.2%), Canada at \$479 million (8.1%), the US at \$54 million (0.9%), Japan at \$4 million (0.1%), and other countries a combined \$5 million (0.1%).

2. GLOBAL DISTRIBUTION OF ROOT GINSENG

Root ginseng is distributed in more than 53 countries around the world. Among them, 26 countries, including South Korea and China, are both importers and exporters. Five countries only export and 23 countries

Table 2. Estimated worldwide ginseng production market as of 2018

	China	South Korea	Canada	United States	Japan	others	Total
Ginseng production(ton)	50,164	23,265	11,367	1,285	30	112	86,223
Production market (million \$)	2,870 ¹⁾	2,489 ²⁾	478 ³⁾	54 ⁴⁾	4 ⁵⁾	5 ⁶⁾	5,900
Distribution Ratio (%)	48.6	42.2	8.1	0.9	0.1	0.1	100

¹⁾ China ; 2019 China ginseng industry analysis report. china reporting network.

²⁾ South Korea ; By applying market sizes of fresh ginseng, red ginseng and red ginseng products, white ginseng and white ginseng products in circulation. The added value per ton of fresh ginseng is estimated to \$106,998.

^{3), 4)} Canada, United States ; Most of ginseng is produced to the dried ginseng. The added value of fresh ginseng is estimated to \$42,079 per ton same as Korean dried ginseng.

⁵⁾ Japan ; Most of ginseng produced is distributed to the red ginseng. The added value of fresh ginseng is estimated to \$132,246 per ton same as Korean red ginseng.

⁶⁾ others ; Most of ginseng produced is estimated to the dried ginseng. The added value of fresh ginseng is estimated to \$42,079 per ton same as Korean dried ginseng.

only import (Table 3). The total trade value of imports and exports is approximately \$910 million. Based on the data in Table 3, the distribution of each country's root ginseng exports and imports are shown in Figure 2.

The total export value of root ginseng is estimated at \$455 million. Major exporting countries are China (\$139 million, 31%), Canada (\$122 million, 27%), South Korea (\$79.5 million, 18%), the US (\$52.7 million, 12%), Hong Kong (\$34.8 million, 8%), and Taiwan (\$12.5 million, 3%). These six countries collectively account for \$440 million or 97% of global ginseng exports. Among them, China, Canada, South Korea, and the US produce ginseng, while Hong Kong and Taiwan do not. Therefore, these

two countries are believed to process and then export imported ginseng. In summary, six countries are the main competitors for root ginseng exports.

The total value of root ginseng imports globally is \$455 million. Approximately 48 countries import ginseng, with the top 10 countries accounting for \$432.3 million (95.0%) of the total. These countries are Hong Kong (\$192 million, 42.2%), China (\$71.2 million, 15.6%), Japan (\$57.9 million, 12.7%), Taiwan (\$36.9 million, 8.1%), USA (\$28.2 million, 6.2%), Malaysia (\$12.0 million, 2.6%), Vietnam (\$12.0 million, 2.6%), Germany (\$8.08 million, 1.8%), Canada (\$7.66 million, 1.7%), and Singapore (\$6.38 million, 1.4%).

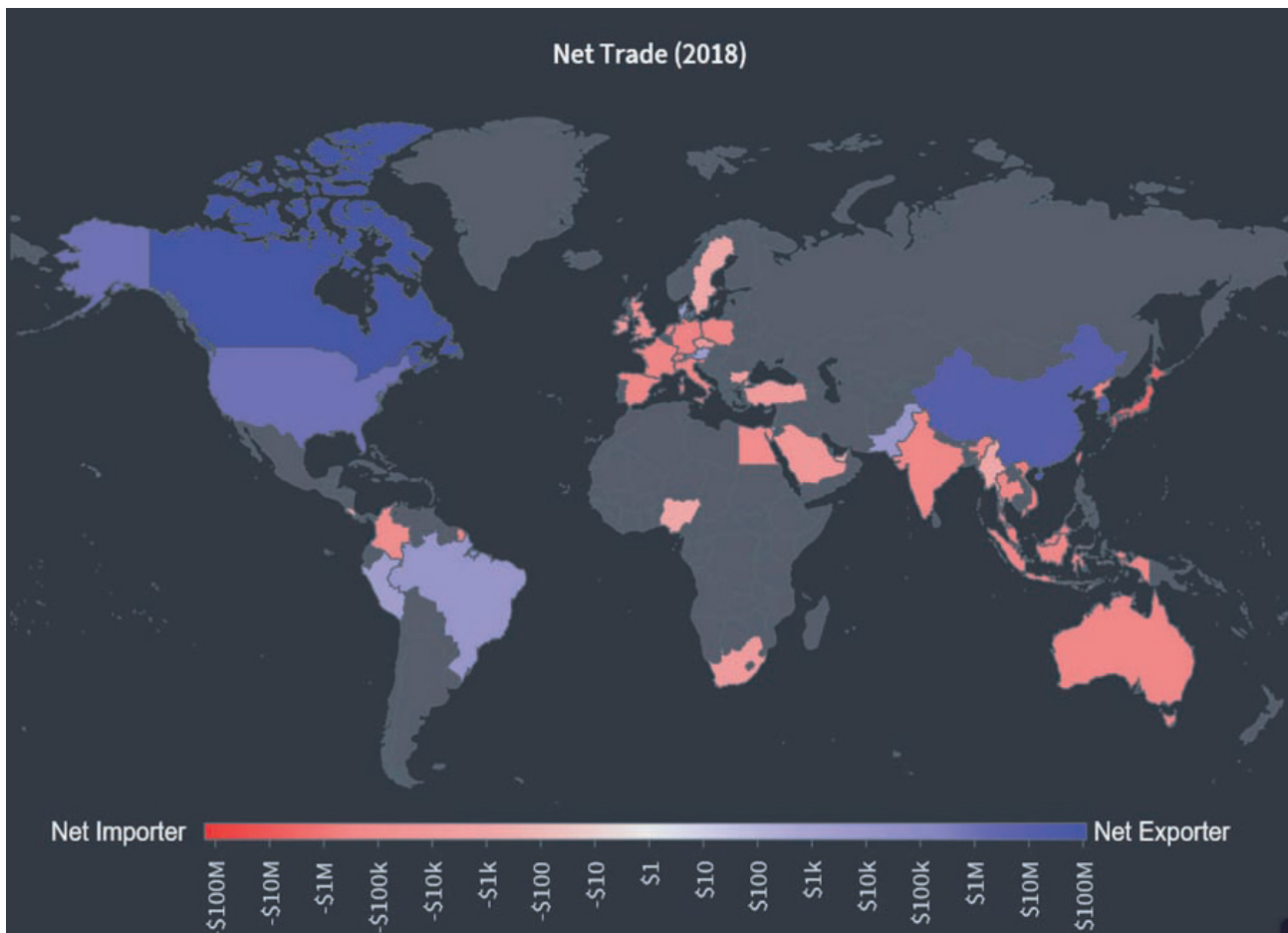


Figure 2. Distribution of global exports and imports of root ginseng (2018)
 Source: Ginseng roots (HS:121120) Product Trade, Exporters and Importers, 2020.
<https://oec.world/en/profile/hs92/ginseng-roots?redirect=true>

Table 3. Estimated value of exports and imports of ginseng root in 2018 (in USD 1,000)

No	Country name	Export(A)	Import(B)	Total volume(A+B)	(A-B)
1	China	139,000	71,200	210,200	67,800
2	Canada	122,000	7,660	129,660	114,340
3	South Korea	79,500	156	79,656	79,344
4	United States	52,700	28,200	80,900	24,500
5	Hong Kong	34,800	192,000	226,800	-157,200
6	Chinese Taipei	12,500	36,900	49,400	-24,400
7	Singapore	3,310	6,380	9,690	-3,070
8	Malaysia	2,890	12,000	14,890	-9,110
9	Germany	1,190	8,080	9,270	-6,890
10	Italy	1,090	3,130	4,220	-2,040
11	Belgium	711	186	897	525
12	United Kingdom	645	868	1,513	-223
13	France	629	2,610	3,239	-1,981
14	Brazil	607	479	1,086	128
15	Switzerland	525	904	1,429	-379
16	Netherlands	467	1,160	1,627	-693
17	Afghanistan	256	0	256	256
18	Macau	215	3,290	3,505	-3,075
19	North Korea	185	2,170	2,355	-1,985
20	Austria	182	105	287	77
21	Vietnam	154	12,000	12,154	-11,846
22	Denmark	128	49	177	79
23	Pakistan	123	0	123	123
24	Spain	102	743	845	-641
25	Japan	95	57,900	57,995	-57,805
26	Syria	94	0	94	94
27	Burma	93	99	191	-6
28	Australia	85	825	910	-740
29	Peru	80	0	80	80
30	Indonesia	77	659	736	-583
31	India	56	406	462	-350
32	Israel	48	0	48	48
33	Slovenia	0	807	807	-807
34	Thailand	0	708	708	-708
35	Poland	0	361	361	-361
36	Egypt	0	251	251	-251
37	Colombia	0	238	238	-238
38	Russia	0	197	197	-197
39	Ireland	0	160	160	-160
40	Saudi Arabia	0	154	154	-154
41	Czechia	0	152	152	-152
42	South Africa	0	152	152	-152
43	Norway	0	114	114	-114
44	Turkey	0	108	108	-108
45	Finland	0	106	106	-106
46	Luxembourg	0	105	105	-105
47	Hungary	0	98	98	-98

No	Country name	Export(A)	Import(B)	Total volume(A+B)	(A-B)
48	Bulgaria	0	86	86	-86
49	Latvia	0	86	86	-86
50	Ukraine	0	77	77	-77
51	Chile	0	52	52	-52
52	Kuwait	0	49	49	-49
53	New Zealand	0	28	28	-28
54	Other Asia	39	264	303	-225
55	Other Europe	80	115	195	-35
56	Other Africa	128	127	255	1
57	Other North America	0	126	126	-126
58	Other South America	0	57	57	-57
	TOTAL	454,782	454,937	909,719	-154

Source : Ginseng roots (HS : 121120) Product trade, Exporters and Importers, 2020.

<https://oec.world/en/profile/hs92/ginseng-roots?redirect=true>

In summary, ginseng produced in four countries, South Korea, China, Canada, and USA, is exported worldwide, and Korea and China are also the world's largest ginseng consumption markets. Four countries, namely China, Hong Kong, Taiwan and Singapore, are the world's largest consumers of root ginseng, but not producers.

3. SOUTH KOREA'S GINSENG MARKET

South Korea is the world's largest consumer of ginseng, with a market of approximately \$1,762 million as of 2018. The country is in a temperate region and has four distinct seasons, which is the perfect weather for ginseng cultivation. There are 20,556 ginseng farmers in South Korea. Many kinds of ginseng products are marketed in Korea, such as ginseng root, extract,

capsules, granulated tea, pouch drinks, bottled drinks, candies, and jelly. People of all ages consume ginseng products throughout the year, and the average ginseng consumption per person in Korea is 370g annually. Most ginseng products in Korea are consumed as health foods or health functional foods, and ginseng is one of the most popular products to give as a gift for holidays such as the Lunar New Year, Chuseok, Family Month, and Teacher's Day.

In addition to its use as a health food, ginseng is also used in cosmetics, medicines, household goods (in shampoo, soap, etc.), pet food, and other products. As ginseng is used in various types of products it is sold in many different distribution channels, including department stores, hypermarkets, health food stores, ginseng specialty stores, convenience stores, duty-free shops, pharmacies, door-to-door sales, home shopping, and

Table 4. Market size of each ginseng type in South Korea (2018)

	Fresh ginseng	Red ginseng	White ginseng	Taegeuk ginseng	Sum
Market size(million \$)	182	1,574	5	0.4	1,761.4
Ratio(%)	10.3	89.4	0.3	0.0	100

internet sales. In 2018, South Korea exported US\$ 187 million of ginseng to 91 countries. There are 567 root ginseng manufacturers and 697 processed ginseng product manufacturers in South Korea.

Fresh ginseng, red ginseng, white ginseng, black ginseng, and Taegeuk ginseng are the five ginseng types marketed in South Korea. In 2018, red ginseng and fresh ginseng accounted for 89.3% and 10.3% of the market, respectively [Table 4]. The Korean ginseng market is expanding from a traditional root ginseng market to focusing on processed products. In the case of red ginseng, the consumption of processed ginseng products (87%) is much higher than that of root ginseng (13%). product market.

Ginseng consumption grew at an average annual rate of 9.7% over the five year period from 2014 to 2018 (Fig. 3). The driving forces behind that growth are as follows: (1) As Korean society ages, consumers' interest in health has increased; (2) consumers' awareness of the health benefits of ginseng has increased; (3) ginseng consumption is increasing in younger generations; (4) various types of ginseng products have been developed; (5) online sales have increased; and (6) ginseng companies have improved their marketing practices.

The consumer market for ginseng is expected to evolve in response to changes in the market environ-

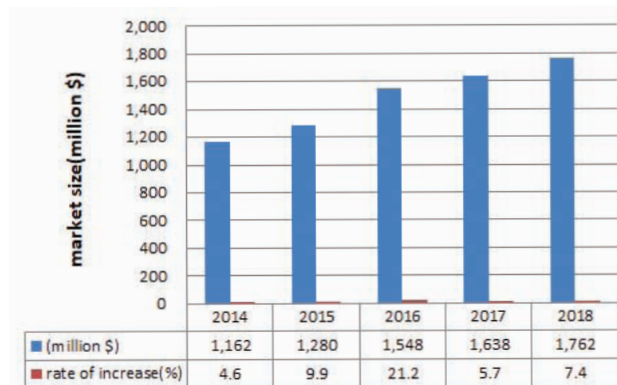


Fig. 3. Recent market trends for ginseng sales in South Korea.

ment, such as competition with other health foods, changes in the economic outlook, and growth in the consumer culture. In order to expand the ginseng market, it is important to develop a new ginseng consumption culture.

4. KOREA GINSENG CORPORATION'S RED GINSENG BUSINESS

Korea Ginseng Corporation (KGC), established in 1899, is the world's largest ginseng company. At the time of its founding, KGC was a government-affiliated

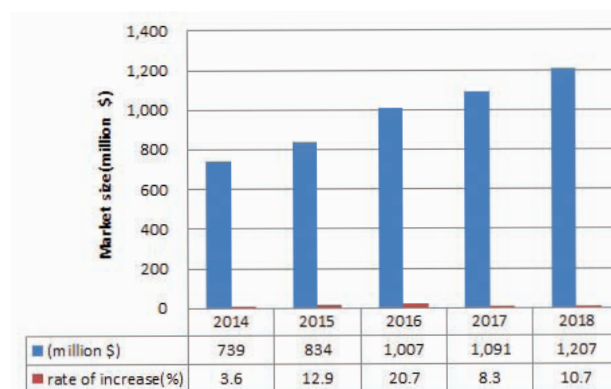


Fig. 4. KGC's annual sales, 2014 to 2018

company and became a corporation in 1999.⁸⁾ KGC sells red ginseng from 6-year-old roots as its core product. KGC's annual sales in 2018 were \$1,207 million, consisting of \$1,102 million in domestic sales and exports of \$105 million, making it the largest ginseng company in the world. Sales increased continually from 2014 to 2018 as shown in Fig. 4.⁹⁾

KGC purchases raw ginseng from contract farmers. Through contract cultivation, the entire six-year ginseng cultivation process is strictly managed so that KGC can procure high quality raw materials. KGC has its own research institute that conducts market-oriented R&D such as ginseng cultivation research, ingredient

analysis, ginseng efficacy research, and new product development.

KGC is expanding its market by developing a variety of new products using red ginseng, such as health foods, health functional foods, cosmetics, pharmaceuticals, pet food, cafe, and others. These products are sold through various distribution channels such as department stores, hypermarkets, convenience stores, door-to-door sales, duty-free shops, home shopping,

promoting customer services such as optimal customized sales services for its customers and markets, and rapid response services to customers.

III. FORECAST OF GLOBAL GINSENG CONSUMPTION

Advances in science and technology have increased the average human lifespan and people want to enjoy



Fig. 5. KGC's "Jeong Kwan Jang" stores. (From left; Duty-free shop, Department store, Hypermarket, Ginseng specialty store)

and the internet.

Based on its internationally recognized brand "Jeong Kwan Jang," KGC operates exclusive stores-within-a-store (Fig. 5) that sell only "Jeong Kwan Jang" products in department stores, duty-free shops, hypermarkets, and ginseng specialty stores. KGC exports its products to 40 countries.

KGC's signature product is root red ginseng, which is divided into Cheonsam, Jisam, and Yangsam based on its grade. However, recently the market for processed products containing red ginseng has been increasing more than the root red ginseng market. KGC is engaging in promotional marketing that is designed to increase consumers' pride in purchasing its products based on its analysis of domestic and international markets and brand advertisements. It is also moving toward a "continuous globalization of red ginseng" by

good health in their retirement years. As a result, many consumers have become more interested in health foods that are both safe and beneficial to physical health. Ginseng is safe and scientific evidence regarding its beneficial effects is clear. This suggests demand for ginseng products will increase in the future.

A number of ginseng's health benefits have been studied recently, including flu prevention,¹⁰⁾¹¹⁾ immunity enhancement,¹²⁾¹³⁾¹⁴⁾ anti-fatigue,¹⁵⁾ memory improvement,¹⁶⁾ antioxidant activity,¹⁷⁾ blood circulation improvement,¹⁸⁾ menopause symptom relief,¹⁹⁾ anti-diabetes,²⁰⁾²¹⁾ prevention and treatment of atopic dermatitis,²²⁾ UV protection,²³⁾²⁴⁾ erectile dysfunction treatment,²⁵⁾ and anti-stress effects.²⁶⁾

China is both the world's largest producer and consumer of ginseng. The market value of Chinese ginseng production is approximately \$2,870 million. The

Chinese people have used root ginseng in traditional Chinese medicine for a long time. Interestingly, while ginseng is cultivated in northeast China it is mostly consumed in China's southern region.

Six-year-old ginseng is legally classified as a medicine in China, which has been one of the obstacles to the development of China's ginseng market. However, in 2012, ginseng less than 5 years of age was classified as a food; as a result, the market is expected to grow significantly.

In Taiwan, root ginseng is widely used as a traditional medicine and is distributed through herbal drug stores. Consumers in Taiwan usually take ginseng from November to May, and most are adults over 40. With the expansion of online distribution channels such as home shopping,²⁷⁾ consumption of processed ginseng products in Taiwan is expected to increase. Taiwan imports all of the ginseng it consumes.

Japan imports most ginseng products and consumes processed ginseng products rather than root ginseng, as medicine and health food. The primary market for health foods in Japan is expanding from those in their 50s and 60s to include adults in their 30s. Ginseng is mainly distributed via mail order sales, in health food stores, and by door-to-door sales,²⁸⁾ Historically, awareness of and familiarity with Korean ginseng among Japanese consumers is high, and ginseng consumption is expected to continue to increase due to consumers' interest in maintaining good health as they age.

Vietnam is an emerging growth market for ginseng, with an annual average growth rate of 9% since 2014. Among terms describing popular health functional foods, the word "ginseng" was expressed the most, and the demand for ginseng gifts at department stores is high. Ginseng is recognized as a health food, and ginseng products are distributed through various channels such as drug stores, supermarkets, door-to-

door sales, online, and via home shopping. Increased consumption among young people²⁹⁾ is expected to further expand the ginseng market in Vietnam.

The US exports most of its domestically produced root ginseng but imports most of its ginseng products. From 2014 to 2018, U.S. ginseng imports grew an average of 1% annually, a growing number of domestic and foreign companies are handling ginseng in the US, and the types and prices of ginseng are diversifying. Thus, a market is developing in which consumers can selectively purchase ginseng products according to their economic power.³⁰⁾ Due to the growing interest in health and an expansion in the age groups that take ginseng, consumption is expected to continue to grow in the US.

The ginseng market is expanding not only as a health food but also in industrial uses such as medicines, cosmetics, and pet foods. In addition, new products are being developed to make it more convenient for customers to purchase and consume ginseng. This trend is expected to spread beyond the traditional root ginseng market to the processed product market that meets diverse customer preferences.

IV. CONCLUSION

With the development of medical technology and improvements in living conditions, many countries are experiencing an aging of their population, and interest in achieving a "healthy longevity" is deepening. Recently, ginseng's numerous disease prevention and treatment effects have been identified, increasing its status as a beneficial health food. The major producers of ginseng around the world, South Korea, China, Canada, and the US, distribute raw and processed gin-

seng to over 190 countries. The main ginseng consuming countries are South Korea, China, Taiwan, Japan, Vietnam, and the US, and the ginseng markets in these countries are expanding. As ginseng's use as a health food increases it is being distributed through various channels. As a result, the customer base for purchasing and consuming ginseng is becoming more diversified, the popularity of convenient processed products is increasing, and various product development efforts are being introduced.

The combination of ginseng, a health food that can treat or even prevent various diseases, and people's fundamental desire to improve their quality of life, can provide the gift of good health to mankind. This should support continuous consumption of ginseng. Therefore, the ginseng industry is expected to continue to grow worldwide.

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