



Market Research on the Promotion of Exports to Japan of New Zealand Health and Functional Food Ingredients

FINAL REPORT

10 November, 2009

株式会社 矢野経済研究所
Yano Research Institute Ltd.

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Research Outline

1. Research Aims

The research looks at trends in Japan's health and functional food ingredient market, the demand potential of New Zealand health and functional food ingredients, and related issues. The aim is to provide information on which to base strategies for expanding the volume of such products on Japan's domestic market.

2. Coverage & Research Methods

- (1) Principal companies active in the functional food industry (direct interviews)
 - > Functional food ingredient suppliers (6); functional food end product providers (7); other related/peripheral companies
- (2) Data held by Yano Research Institute (re-gathering/re-analysis)

3. Coordination

Health Foods, Food & Science Dept., Life Science Division, Yano Research Institute Ltd.
Nakanosakaue Central Bldg., 2-46-2 Honcho, Nakano-ku, Tokyo 164-8620, Japan
TEL: +81-3-5371-6919 FAX: +81-3-5371-6963

Market Position of Functional Food

Medicine, Functional Food and Food for Specified Health Use

<Medicine>

- Medicines (pharmaceutical products) are regulated by the Pharmaceutical Affairs Act and a clear distinction is made between medicines and food. Medicines include 'prescription pharmaceutical products' prescribed by doctors and 'over-the-counter (OTC) pharmaceutical products' available for general purchase at pharmacies without a prescription from a doctor. 'Quasi-drug products' are treated as medicines, being defined in the Pharmaceutical Affairs Act as items with a mild effect on the human body.

<Food>

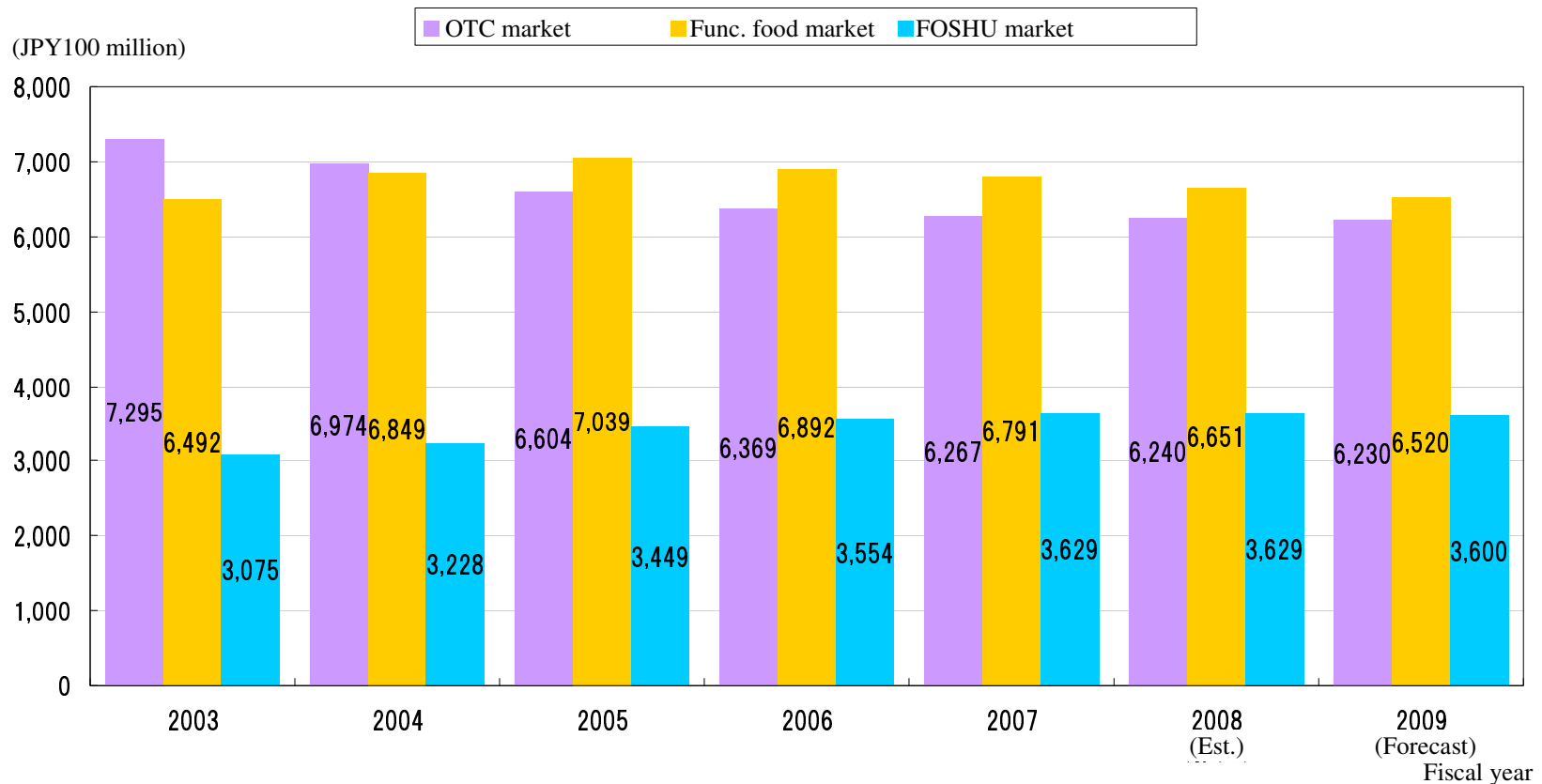
- A system of 'Food with Health Claims' has been established within the food domain. 'Food with Health Claims' is the general term for two types of food: 'Food for Specified Health Use (FOSHU)' (approved individually), which is food with medically and nutritionally-established effectiveness in reducing disease risk for which disease risk reduction claims may be shown to a certain degree after government approval; and 'Food with Nutrient Function Claims (FNFC)' (standards and criteria specified), which refers to food containing specific nutrients (e.g. vitamins or minerals) for which functions performed by those nutrients may be shown once government standards are met.
- Foods consumed for the purpose of maintaining or promoting health (other than 'Food with Health Claims') go by various descriptions, such as 'functional food' (health food) or 'dietary supplements,' but no legal definitions have yet been provided for any health maintenance or health promotion food other than 'Food with Health Claims.'

In this report, food in the form of pills, capsules, powders or mini drinks consumed for health maintenance or promotion is defined as 'functional food'

| Medicine | Food | | |
|--|---|--|--|
| <p>Pharmaceutical Products</p> <p>Quasi-Drug Products O T C 医 薬 品 医 薬 部 外 品</p> <p style="background-color: #800040; color: white; padding: 5px;">FY2007 Value of OTC shipments: JPY650 billion</p> | <p style="background-color: #e0ffff; text-align: center;">Food with Health Claims</p> <p style="text-align: center;">FOSHU: Food for Specified Health Use (Approved individually)</p> <p style="background-color: #0000ff; color: white; padding: 5px; text-align: center;">FY2007 FOSHU market size: JPY362.9 billion</p> | <p style="text-align: center;">FNFC: Food with Nutrient Function Claims (Standards and criteria specified)</p> <td style="background-color: #e0ffe0; vertical-align: top;"> <p style="text-align: center;">Other Food</p> <p style="background-color: #ffff00; text-align: center; padding: 5px;">Functional Food</p> <p style="background-color: #ffa500; color: white; padding: 5px; text-align: center;">FY2007 Functional Food market size: JPY679.1 billion</p> </td> | <p style="text-align: center;">Other Food</p> <p style="background-color: #ffff00; text-align: center; padding: 5px;">Functional Food</p> <p style="background-color: #ffa500; color: white; padding: 5px; text-align: center;">FY2007 Functional Food market size: JPY679.1 billion</p> |

Market Size: OTC Pharmaceuticals, Functional Food and FOSHU

- ◆ The functional food market has been larger than the OTC (general pharmaceutical products) market since fiscal 2005. The shift away from OTC products and toward functional food and FOSHU by consumers with heightened health and preventive awareness is considered to be one reason for contraction of the OTC market.
- ◆ The size of the FOSHU market reached JPY362.9 billion in 2007, but there has been no growth recently due to a prevailing sense of stagnation. Increasingly high hurdles for approval of foods as FOSHU are one major reason for the stagnation.



(OTC market figures to 2007 are sourced from Ministry of Health, Labour and Welfare pharmaceutical industry production statistics. OTC market figures from 2008 and all other figures are YRI estimates.)

Functional Food Market Trends

Functional Food Market Growth

- ◆ In the 1990s, major industry players such as Otsuka Pharmaceutical, Fanc1 and DHC entered the functional food market, offering consumers products at an affordable price. Deregulation of vitamins, minerals and herbs in the late 1990s also contributed to an increase in functional food availability.
- ◆ The functional food market doubled in size to JPY703.9 billion between 1993 and 2005. However, the market has been contracting since 2006 due to tougher controls and monitoring by government, a departure from functional food by consumers caught up in the functional food boom after the disappearance of TV health information programmes that stoked the trend, and sluggish sales of expensive items priced over JPY10,000.
- ◆ In addition to the above, the functional food market in 2008 was also affected by the economic downturn in the second half of the year, which had a clear impact on consumer spending. However, polarization of corporate performance and ingredient growth potential has become more defined as some companies, especially mail order companies, are enjoying brisk sales growth and some functional food ingredients are dramatically inflating the size of their markets.
- ◆ Although the functional food market is currently contracting, routine functional food consumption is now common and the market is expected to remain strong with a growing elderly population, which forms the main group of functional food users.

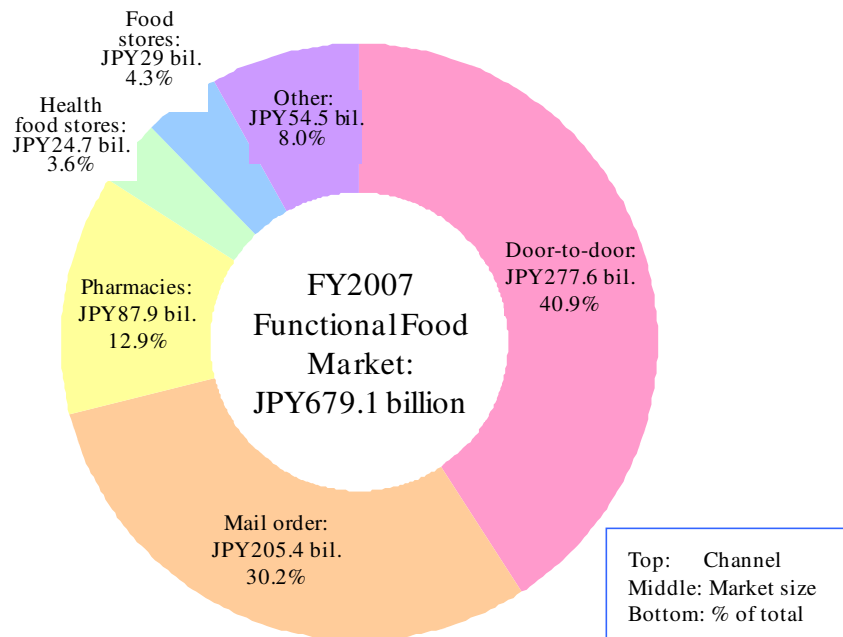
Size of the Functional Food Market (Shipments by Manufacturers/YRI Estimates)



Breakdown of Functional Food Distribution Channels

- ◆ Distribution channels in Japan's functional food market include non-store channels – 'door-to-door sales' and 'mail order sales' – and store-based channels – 'pharmacies,' 'health food stores' and 'food stores.'
- ◆ The Japan market characteristic is non-store sales accounting for 70% of the market. Product and marketing strategies tend to differ according to the distribution route.
- ◆ The market share of 'mail order' non-store channels has been growing in recent years.

Breakdown of Distribution Channels



Sales Leaders for Each Channel

Door-to-Door Sales *Functional food sales over JPY10 billion (Sales unit: JPY100 million)

| Rank | Company | FY2007 | | | |
|------|-------------------------------------|-------------|-------|--------|------------|
| | | Total Sales | Sales | YoY | % of Total |
| 1 | Miki Corporation | 900 | 765 | 94.4% | 85.0% |
| 2 | Amway Japan G.K. | 1,083 | 404 | 102.1% | 37.3% |
| 3 | Naturally Plus Co., Ltd. | 356 | 356 | 93.0% | 100.0% |
| 4 | Neways Japan Inc. | 630 | 322 | 94.2% | 51.1% |
| 5 | Nu Skin Japan Co., Ltd. | 521 | 295 | 94.6% | 56.6% |
| 6 | Forever Living Products Japan, Ltd. | 280 | 252 | 87.5% | 90.0% |
| 7 | Shaklee Japan K.K. | 143 | 124 | 99.2% | 86.6% |

Mail Order Sales *Functional food sales over JPY10 billion (Sales unit: JPY100 million)

| Rank | Company | FY2007 | | | |
|------|------------------------------------|-------------|-------|--------|------------|
| | | Total Sales | Sales | YoY | % of Total |
| 1 | Suntory Limited | 8,370 | 291 | 116.4% | 3.5% |
| 2 | Yazuya Co., Ltd. | 285 | 285 | 81.9% | 100.0% |
| 3 | DHC Corporation | 1,033 | 274 | 98.7% | 26.5% |
| 4 | Yamada Bee Farm Corporation | 325 | 214 | 101.9% | 65.8% |
| 5 | Everlife Co., Ltd. | 207 | 207 | 148.7% | 100.0% |
| 6 | Wakasa Seikatsu Co., Ltd. | 152 | 152 | 113.3% | 100.0% |
| 7 | Fancl Corporation | 993 | 135 | 91.3% | 13.6% |
| 8 | Kobayashi Pharmaceutical Co., Ltd. | 1,059 | 128 | 107.6% | 12.0% |

Store Sales *Functional food sales over JPY5 billion (Sales unit: JPY100 million)

| Rank | Company | FY2007 | | | |
|------|----------------------------------|-------------|-------|--------|------------|
| | | Total Sales | Sales | YoY | % of Total |
| 1 | Meiji Seika Kaisha, Ltd. | 3,016 | 190 | 105.6% | 6.3% |
| 2 | Shiseido Co., Ltd. | 7,235 | 160 | 114.3% | 2.2% |
| 3 | Fancl Corporation | 993 | 86 | 98.6% | 8.7% |
| 4 | Otsuka Pharmaceutical Co., Ltd. | 4,133 | 78 | 100.0% | 1.9% |
| 5 | Ajinomoto Co., Inc. | 7,109 | 61 | 112.1% | 0.9% |
| 6 | Kirin Yakult NextStage Co., Ltd. | 55 | 55 | 78.6% | 100.0% |
| 7 | Orihiro Co., Ltd. | 129 | 52 | 106.1% | 40.0% |

*Includes YRI estimates.

*Ajinomoto figures are amino VITAL sales.

*Kirin Yakult NextStage became Yakult Health Foods Co., Ltd. in April 2009.

Distribution Channel Trends: 1 – Door-to-Door Sales

Market Features

- ◆ Has long played a role in Japan's functional food market.
- ◆ Network marketing businesses account for approx. 90% of the market (salespeople recruit others to build up a distribution network).
- ◆ Many veteran companies have struggled recently because of tighter regulations and monitoring and difficulty recruiting new salespeople due to a changing social environment.

Main Customers

- ◆ Women, 40s-50s and above
 - *Main customers of veteran companies are 50s and above

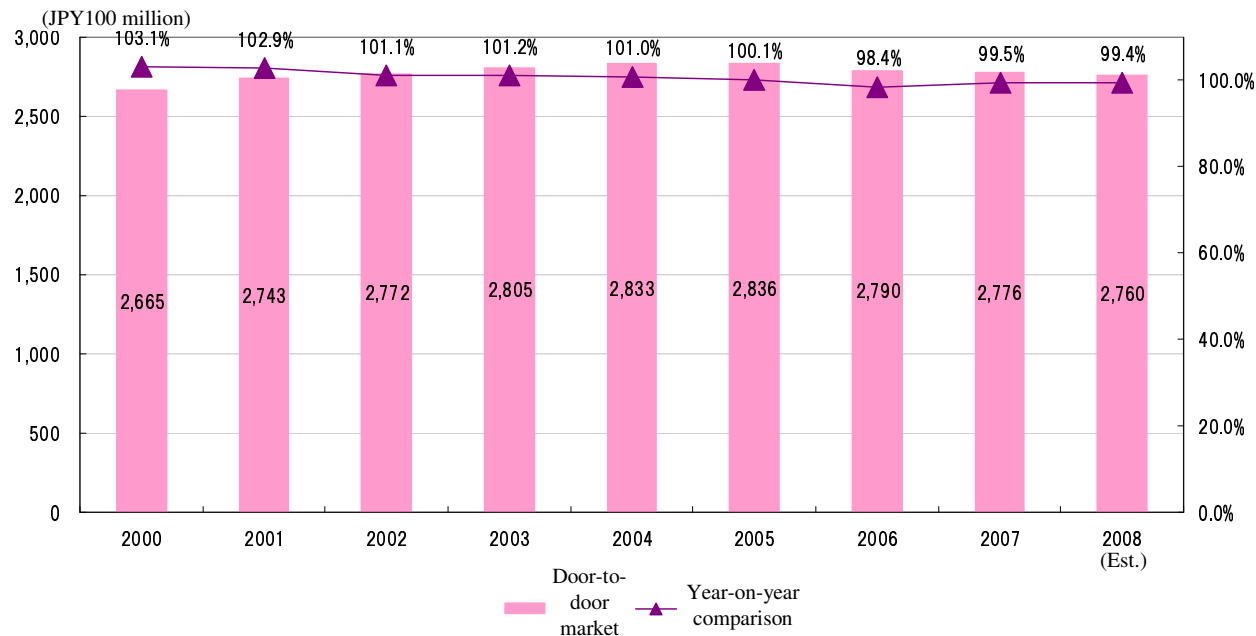
Purchasing Trends

- ◆ Interaction and communication allow sale of more expensive items and not well known ingredients are generally easier to sell as they can be demonstrated.
- ◆ 20-30% of wholesale prices is returned to salespeople in the form of bonuses based on sales performance.

Price Range

- ◆ Around JPY5,000-10,000
 - *Many products have high price tags, exceeding JPY10,000

Market Size: Door-to-Door Sales (Shipments by Manufacturers)



Distribution Channel Trends: 2 – Mail Order Sales

Market Features

- ◆ Has experienced growth in recent years.
- ◆ Two main types:
 - Companies selling functional food online as part of a broad product range that might include cosmetics; and
 - Mail order businesses focusing on one product per medium using newspapers, flyers and television etc.
- The latter has had many new entrants in recent years.

Main Customers

Internet: Women, 20s-30s

Newspaper/TV: 40s-50s and above

Purchasing Trends

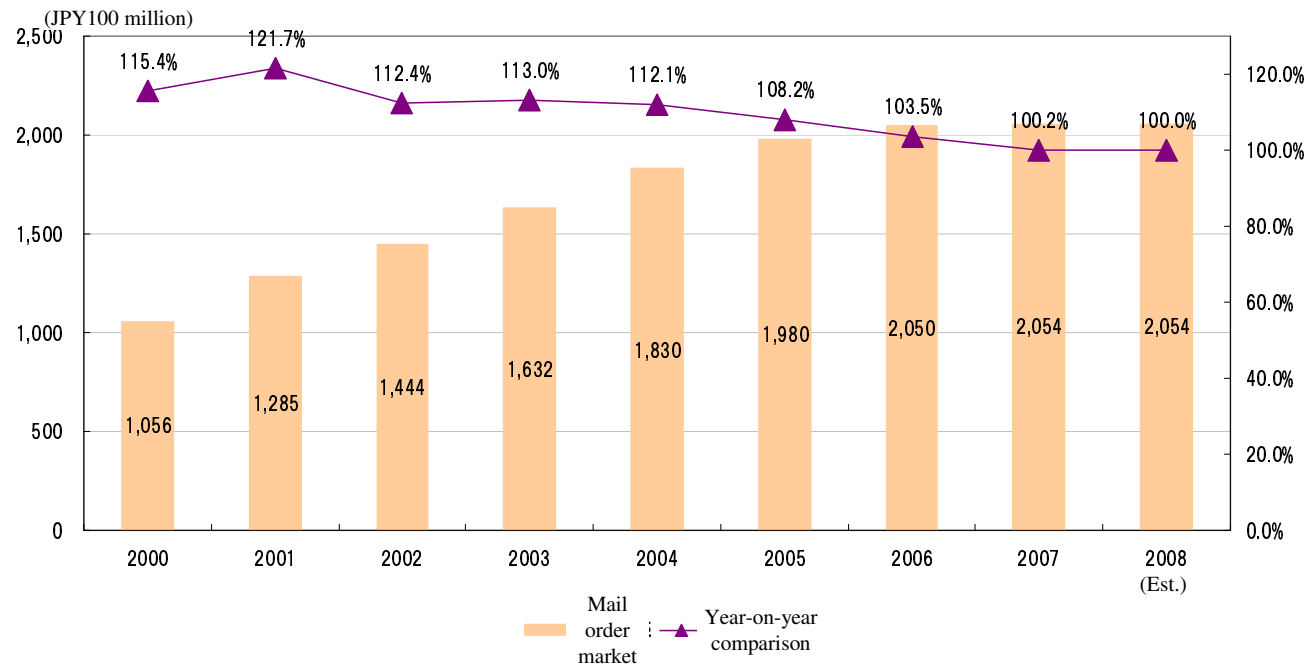
- ◆ The Internet allows deployment of diverse product lineups and convenience, for example with 24-hour shopping. Mainly used by the young to middle-aged.
- ◆ Newspapers, flyers and television channels are mainly used by middle-aged to elderly who wish to be well-informed.

Price Range (Per Month)

Internet: Around JPY1,000-3,000

Newspaper/TV: Around JPY3,000-5,000

Market Size: Mail Order Sales (Shipments by Manufacturers)



Distribution Channel Trends: 3 – Pharmacies

Market Features

- ◆ The market has grown (especially retail drugstores) but is recently sluggish due to saturation of stores and weaknesses in self-service selling of functional food.
- ◆ Numbers of traditional pharmacies are falling due to the spread of retail drugstores.
- ◆ Retail drugstores which also dispense medicine have increased in recent years.

Main Customers

Drugstores: Women, 20s-40s

Pharmacies: 60s and above

Purchasing Trends

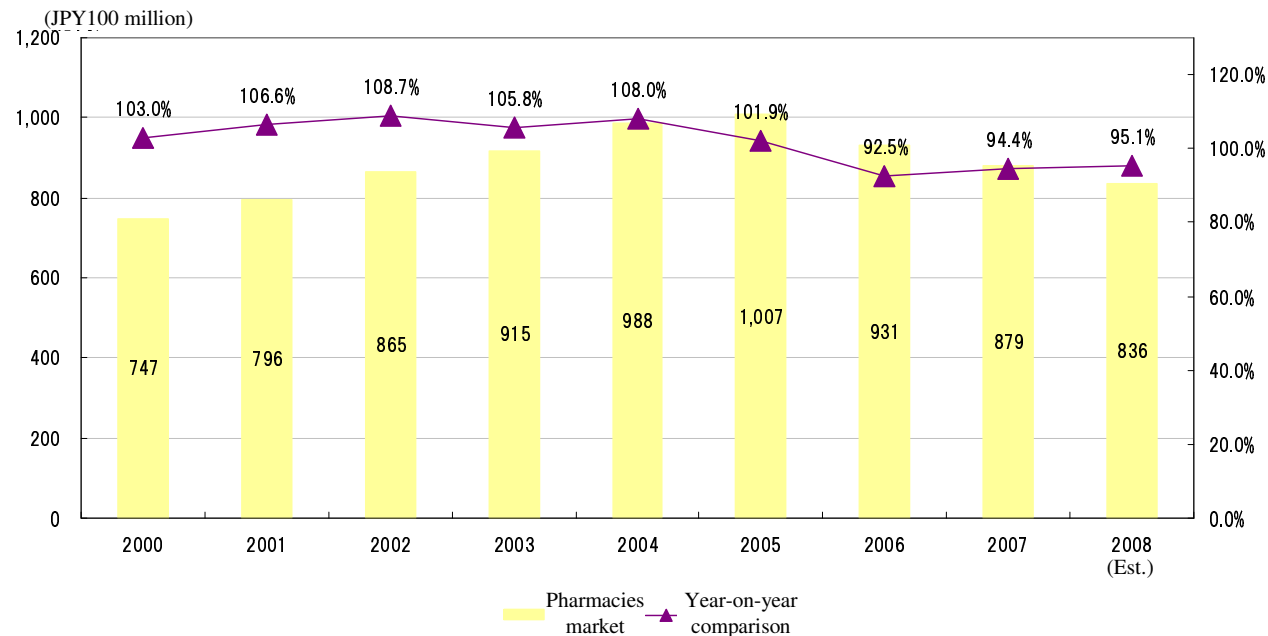
- ◆ In general, drugstores are self-service, while pharmacies provide consultation.
- ◆ Well-known ingredients tend to sell well at self-service drugstores. Green juice (*aojiru*) and collagen are popular ingredients, but many items succumb to intense price competition.
- ◆ Explanations can be provided at pharmacies, allowing sales of high-priced items, including immunostimulation products.

Price Range (Per Month)

Drugstores: Around JPY1,000-3,000

Pharmacies: Around JPY5,000-10,000

Market Size: Pharmacies (Shipments by Manufacturers)



Distribution Channel Trends: 4 – Health Food Stores

Market Features

- ◆ Stores include health food outlets, primarily located in food sections of department stores, as well as speciality health food stores and cosmetics outlets.
- ◆ Department store health food outlets have long been around, but have struggled in recent years. Department store health food wholesalers and retailers continue to go out of business.
- ◆ A few speciality health food store chains exist.
- ◆ Cosmetics outlets have been established by market leaders, Fancl and DHC.

Main Customers

Department stores: Women, 60s and above

Health food stores: Women, 30s-40s

Purchasing Trends

- ◆ Department store health food outlets have loyal customers aged 60 or above, but performance is sluggish due to aging customers and falling product prices.
- ◆ Speciality health food stores serve a core customer base of women in their 20s-50s and particularly women in their 30s-40s who are extremely health-conscious.
- ◆ Cosmetics outlets also serve women in their 20s-50s as a core customer base.

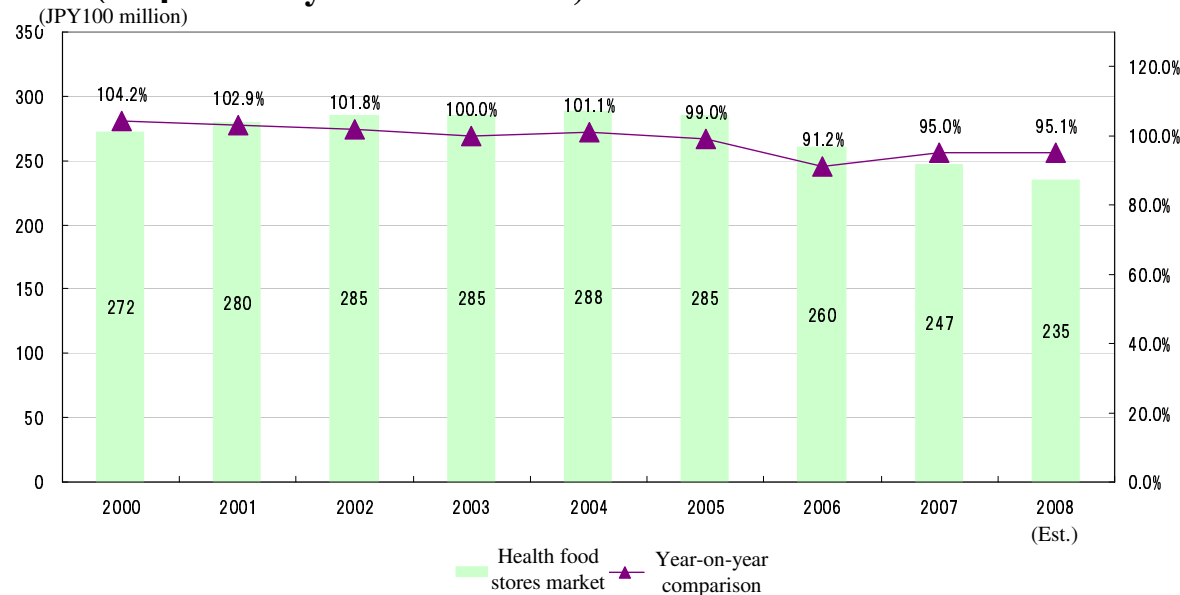
Price Range (or Average Spending Per Customer)

Department stores: Around JPY3,000-5,000/10,000

Health food stores (av. spending): Around JPY 11,000-12,000

Cosmetics outlets (av. spending): Around JPY5,000-6,000

Market Size: Health Food Stores (Shipments by Manufacturers)



Distribution Channel Trends: 5 – Food Stores

Market Features

- ◆ Convenience stores (CVS) and mass-market retailers, or supermarkets, are the main food store channels.
- ◆ CVS were once central to growth in the supplement (tablets, capsules) market, but this segment is currently sluggish.

Main Customers

CVS: Men and women, around 30s

MMR/Supermarkets: Women, 20s-60s and above

Purchasing Trends

- ◆ Affordable mini-drinks tend to perform well at CVS. Particularly strong demand exists for drinks offering revitalisation, improved liver function and beauty. There is a strong mindset among consumers to seek immediate effects for all kinds of ailments by consuming mini-drinks.

Price Range (Per Item)

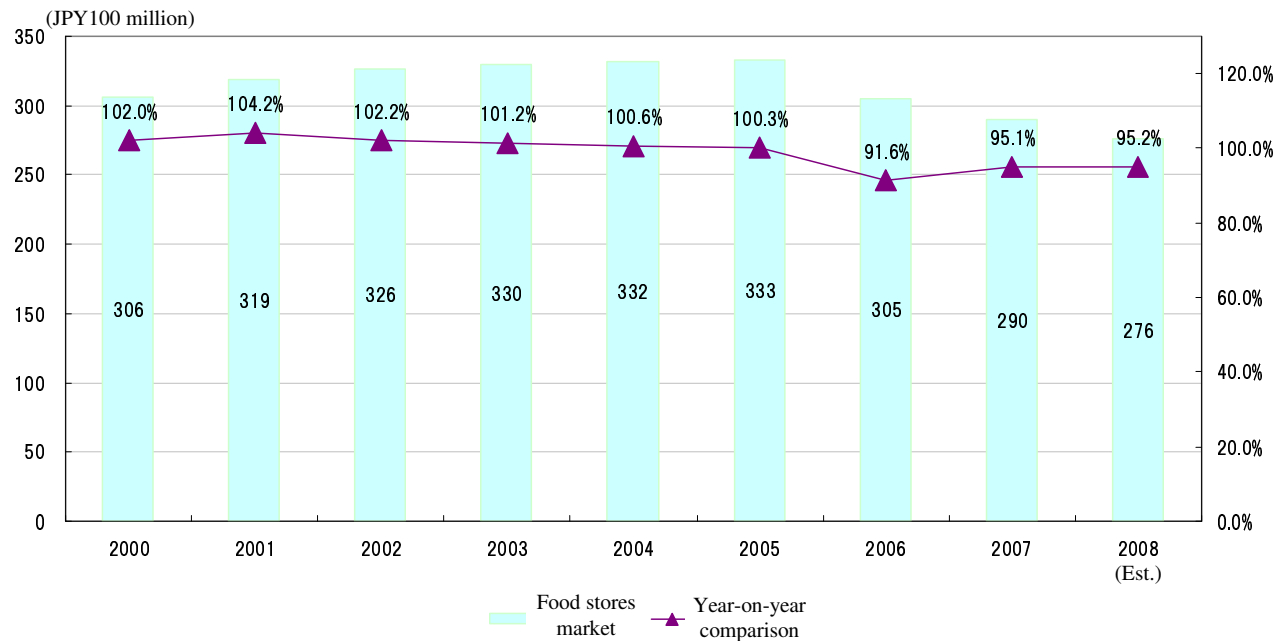
CVS:

Drinks – Around JPY200-300

Supplements (tablets, capsules, etc.) – Around JPY500-1,000

MMR/Supermarkets: Around JPY500-1,000

Market Size: Food Stores (Shipments by Manufacturers)



Distribution Channel Trends: 6 – Other Channels

Market Features

- ◆ *Haichi-yaku* (pay-per-usage home medicine kit) businesses and promotional seminars (demonstration sales of high-priced items to elderly at a temporary outlet) used to hold a large market share. Due to tighter monitoring and regulation, promotional seminars are becoming difficult. *Haichi-yaku* businesses are struggling due to the spread of drugstores.
- ◆ Other channels include beauty salons and fitness clubs, which have put more energy into functional food and other product sales in recent years.

Main Customers

- ◆ *Haichi-yaku*, promotional seminars: Elderly
- ◆ Salons, fitness clubs: Broad, mainly middle-aged/elderly

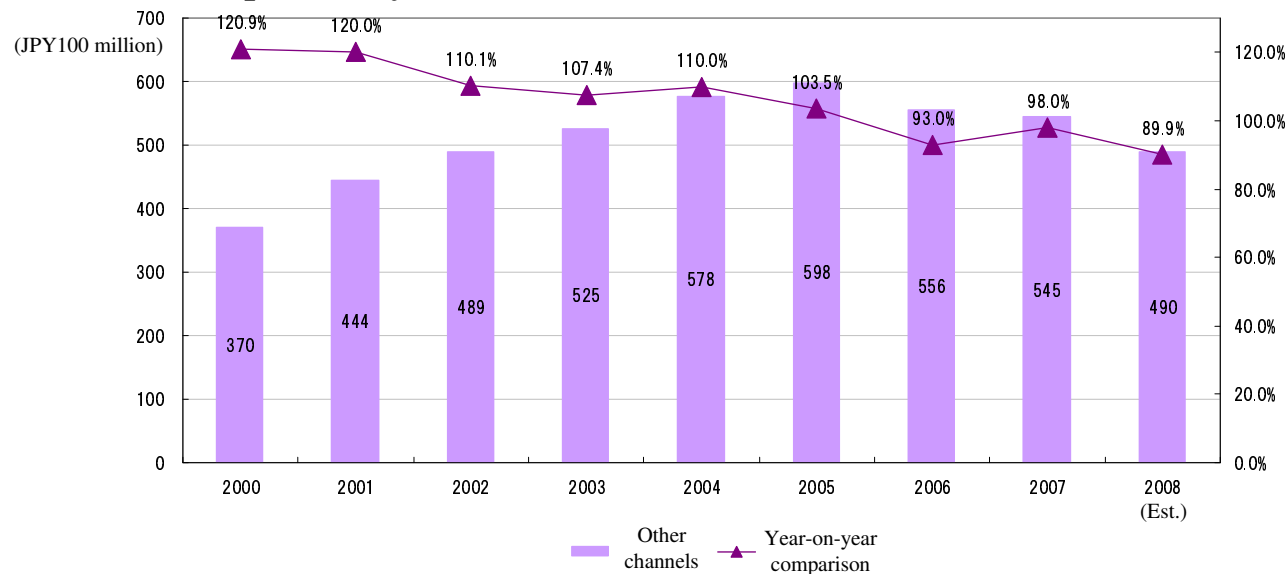
Purchasing Trends

- ◆ *Haichi-yaku* businesses can provide explanations, making them suitable for sales of high-priced items such as immuno-stimulating products.
- ◆ Beauty salons and fitness clubs are not big markets, but many users have clear objectives for attending those facilities, including beauty, weight control and health maintenance. Endorsement by such facilities can therefore be a very effective form of promotion.

Price Range (Per Item)

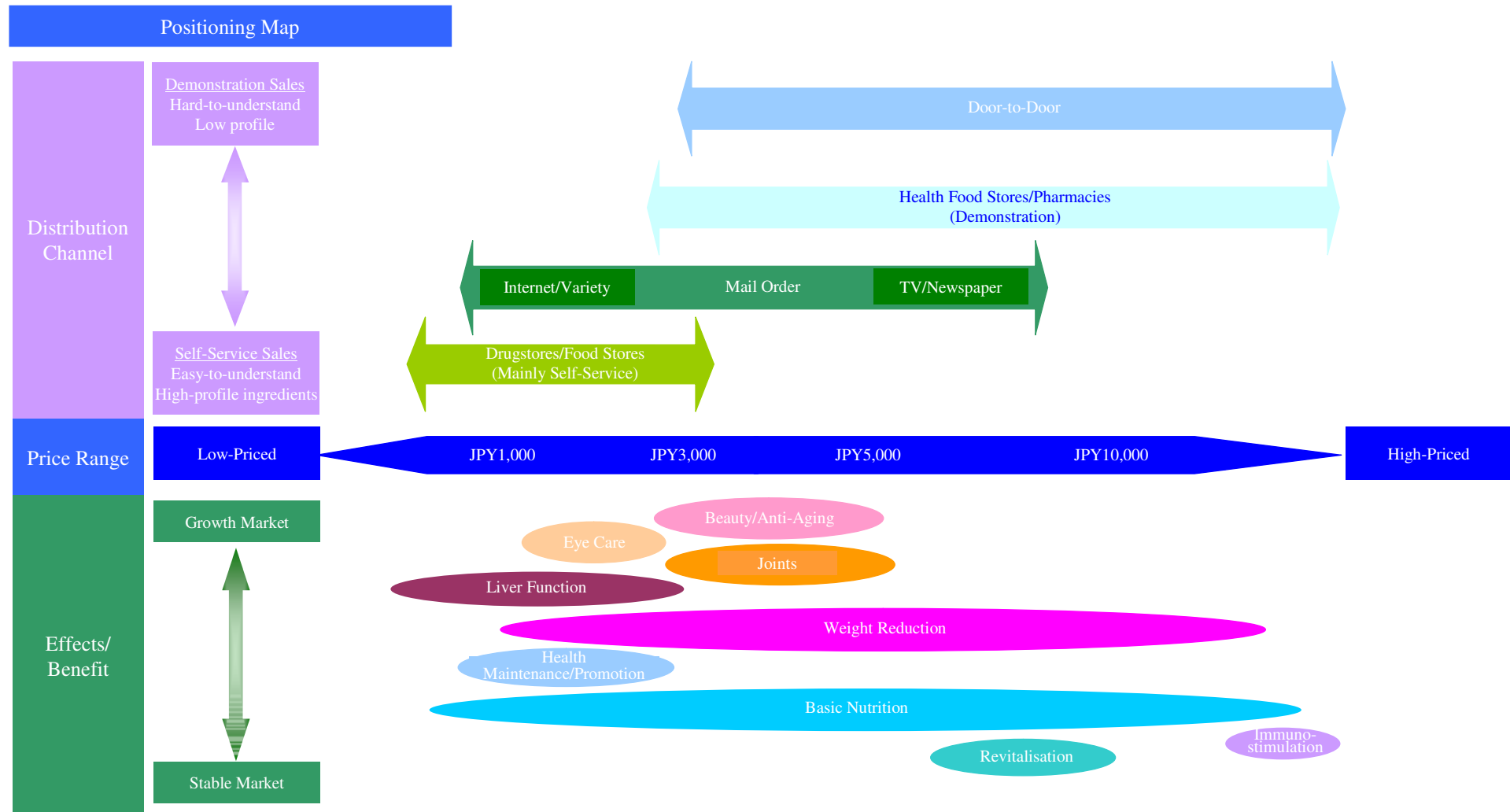
- ◆ *Haichi-yaku*: JPY5,000-10,000 or more
- ◆ Salons, fitness clubs: Around JPY3,000-10,000

Market Size: Other Channels (Shipments by Manufacturers)



Price Ranges, Distribution Channels and Health Function Positioning

- ◆ Prices of products differ greatly according to distribution channel and product benefits/properties.
- ◆ In general, channels such as door-to door suit products needing an explanation. Such products are more expensive.
- ◆ Well-known ingredients and daily-consumed products in the health maintenance and promotion category are the main ingredients sold by self-service, at an affordable price.



Specific Health Examinations/ Specific Health Guidance

- Commenced in April 2008. The ratio of people with or at risk of metabolic syndrome is particularly high among men over 40. Every other man and one woman in five belong to this group. The system was introduced to reduce deaths caused by lifestyle diseases (currently around 60% of deaths) and expenditure relating to lifestyle diseases (currently around 30% of national health expenditure). The examination is mandatory to people aged 40-70.
- Physicians, public health nurses and registered dieticians etc. provide Specific Health Guidance in line with examination guidelines to exam recipients with visceral obesity who are also at multiple risk of hyperlipidaemia, hypertension and hyperglycaemia.
- * Metabolic syndrome: A combination of visceral obesity and sugar, fat or other metabolic disorders and/or high blood pressure.

Introduction of this system has raised awareness of metabolic syndrome in Japan.

As a result, middle-aged and elderly are becoming more health-conscious.

Jogging, hiking and cycling are becoming popular > sales increase in glucosamine and other products for joints.

*However, many people still believe relieving metabolic syndrome means dieting.

*At present, few people seek relief for metabolic syndrome with functional food.

- Pharmaceutical Affairs Law - Health Promotion Act - Act Against Unjustifiable Premiums and Misleading Representations

- The Pharmaceutical Affairs Law prohibits labelling indicating medicine-like effects on products other than medicine (prohibition of labelling/advertising of medicine-like effects, medicinal ingredient content and medicine-like dosage and administration information).
- The revised Health Promotion Act prohibits false or exaggerated advertising of health maintenance/promotion functions.
- The Unjustifiable Premiums and Misleading Representations Act deems the representation of raw materials or ingredients in a product as much different to what they actually are and the false representation of effect/benefit claims, or representation of effect/benefit claims not recognised as objectively founded, to be misleading representation.

Labelling and representation of food health claims is strictly prohibited.

Government controls and monitoring have been tightened a lot in recent years, with a large impact on the functional foods market.

Important Political/Administrative Developments

Democratic Party of Japan (DPJ) establishes a new coalition government (16 Sept, 2009 -)

Strengthening of policy pushing for protection of consumers

Consumer Affairs Agency established (1 Sept, 2009 -)

Previously-separate food labelling and consumer business now dealt with by the same government agency

*Ministry of Health, Labour and Welfare still has jurisdiction over the Pharmaceutical Affairs Law

Consumer Commission established (1 Sept, 2009 -)

A watchdog body of private sector experts for monitoring/checks of consumer affairs

Functional food controls and monitoring are expected to tighten due to a spotlight on consumer protection

Response by Functional Food Manufacturers

✓ Quality and safety enhancements

Labelling of country of origin/manufacturing, traceability, certification etc.

✓ Secure evidence

Acquisition of data from animal testing and clinical trials

✓ Enhancement of initiatives for improving corporate image and publicity about corporate attitude

Development of means of communicating with consumers, publicity about corporate stances

(TV commercials, Internet, communication through sports etc.)

*Survey Findings on
Health & Functional Food Ingredient Users*

| | |
|------------------------------|---|
| <p>Transaction Terms</p> | <p><u>Bulk Rates</u></p> <ul style="list-style-type: none"> • Ingredient prices: A large proportion have a preference for quality at a low price. • Functional food manufacturers set prices according to their customer base and distribution channels and will not use ingredients inconsistent with those prices. Manufacturers decide whether to use an ingredient after an overall judgment based on the ingredient's functionality, effective dosage and ingredient costs. Therefore, it is preferable that ingredient suppliers and trading houses take into account effective dosages and estimated ingredient costs when setting bulk rates. <p><u>Lot size</u></p> <ul style="list-style-type: none"> • Given problems with bulk management (inventory management, quality issues (spoilage, moisture, etc.)) and problems created by opening of cargo in quarantine, the majority prefer low-volume transactions. Transaction volume flexibility is also desired. |
| <p>Transaction Format</p> | <ul style="list-style-type: none"> • The majority of transactions for overseas ingredients are conducted via specialised trading houses due to differences between Japanese and overseas food regulations (relating to food additives, pharmaceutical substances, etc.), to hedge risks, and for ease of payment. • In some cases, functional food manufacturers specify a contract manufacturer to trading houses. |
| <p>Safety & Evidence</p> | <ul style="list-style-type: none"> • Data is essential in order to vouch for the quality of bulks. In addition to data from bulk manufacturers, large manufacturers often carry out their own tests using their own research centres or third parties. • When deciding whether to use a new ingredient, the majority of functional food manufacturers verify the ingredient's functionality data. Evidence is therefore essential when trying to sell new ingredients. |
| <p>Other</p> | <ul style="list-style-type: none"> • It is important that new ingredients provide an advantage (new function, superior effects, price, etc.). • There is a growing trend of using 'natural' and 'non-animal' ingredients where possible. |

Ingredient Manufacturer & Trading House Requirements

Manufacturing & Service

- Stable supply, quality assurance and traceability are essential requirements.
- Functional food manufacturers commented that they do not mind where ingredients are made if there is data to vouch for quality. However, avoiding ingredients from China is not unusual.
- Ingredient manufacturers often make approaches to functional food manufacturers. Therefore, suppliers and trading houses who only highlight an ingredient's strengths are often drowned out by the competition. It is important to engage in proposal-based sales having understood the customer's (functional food manufacturer's) customer base, price range and product concepts.
- Many trading houses appear to engage in sales activities encompassing an envisioned end product and possible promotion strategies.
- Some trading houses (e.g. Kenko Corp.) have tie-ups with contract manufacturers in Japan so they can offer integrated proposals from end product planning to commercialization and planning of promotion strategies.

Ingredient Data Acquisition & Publicity

- Effect/benefit claims of end products are subject to tight regulations. Supplier and trading house publicity of ingredient evidence data and research findings is therefore one of only a few methods for communicating ingredient functions to consumers. Sellers of end products containing such ingredients greatly appreciate aggressive publicity by suppliers and trading houses as it increases sales opportunities.
- Tradepia Corp., which imports Pycnogenol from Horphag Research Ltd., comments that ingredients like Pycnogenol, for which new clinical data emerges each year, are easy to promote, and says it has subsidized clinical data acquisition costs borne by suppliers in the past for ingredients likely to enjoy a boom in Japan.
- Lonza Japan Ltd., Japanese affiliate of fine chemicals manufacturer, Lonza Group, headquartered in Basel, Switzerland, actively disseminates information on L-carnitine.
- Yaizu Suisankagaku Industry Co., Ltd., which sells 'anserine,' a peptide found in muscle tissue of tuna and bonito, has released findings showing reduced uric acid levels. On 1 September, 2009, three companies – Taisho Pharmaceutical Co., Ltd., Nisshin Pharma Inc. and Nippon Milk Community Co., Ltd. – simultaneously released products containing anserine and held a joint press briefing, together with Yaizu Suisankagaku Industry, to place a spotlight on anserine, which was largely unknown.
- Joint promotional efforts by ingredient suppliers and multiple manufacturers employing the ingredients have been seen in recent years.

Use of Overseas Ingredients

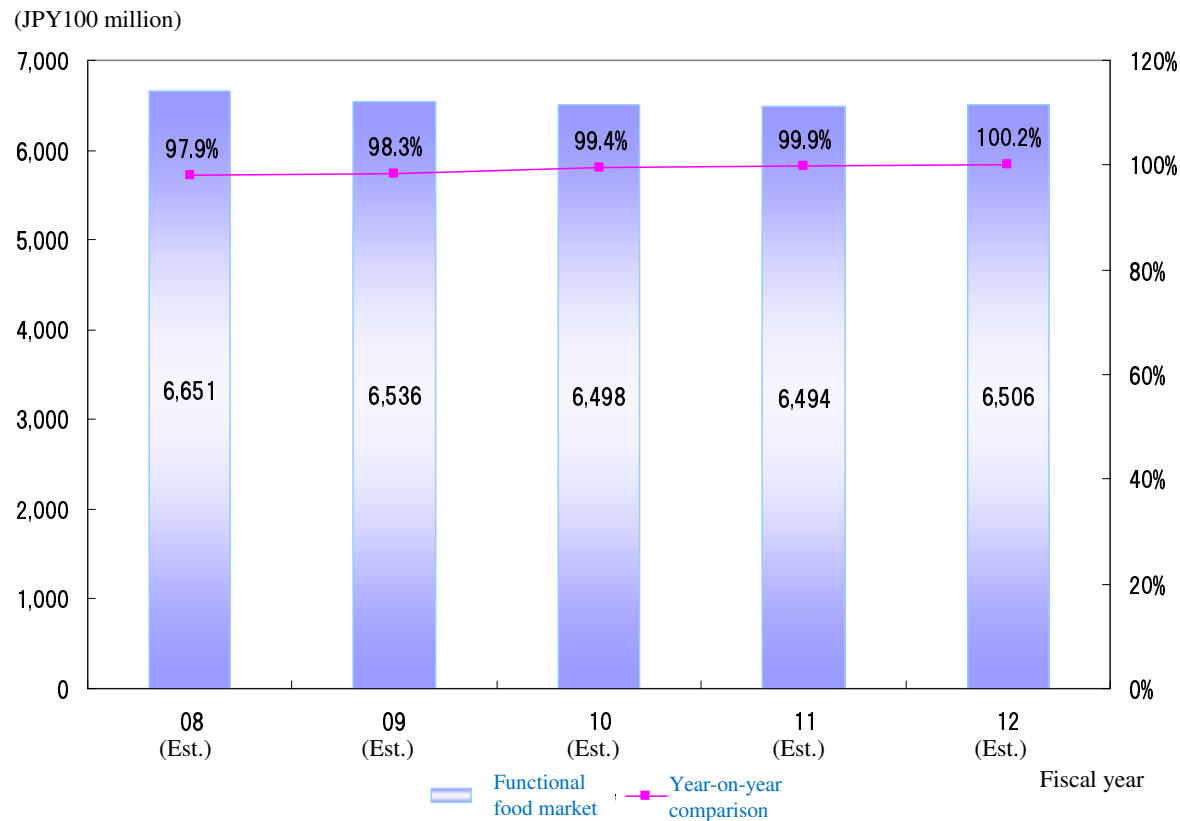
| | |
|---|---|
| Usage | <ul style="list-style-type: none"> • Functional food manufacturers rely a lot on overseas raw materials as functional food ingredients. • Some functional food manufacturers in principle do not care about ingredient origins if quality is assured. • Much caution is taken with items from high-risk countries like China (China's image is not good) and some trading houses purposely avoid trading Chinese products. But many functional food manufacturers (esp. small and medium-sized functional food manufacturers who compete on price) do use Chinese products to keep down costs. In some cases, ingredients consist of U.S. or European raw materials that have been processed in China (e.g. Scandinavian bilberry processed in China and imported to Japan). |
| Considerations for Usage | <ul style="list-style-type: none"> • Functional food manufacturers have often used overseas ingredients as mentioned above, inferring virtually no obstacles to usage of ingredients due to their overseas origin when there is quality assurance. • As mentioned above, however, country risk, stability of supply and traceability are major factors for determining whether to use an ingredient. • Some trading houses sell the fact they can ensure traceability with integrated systems comprising supplier, trading house and processor. • While functional food manufacturers demand strict quality management, there is still strong demand for cost performance. |
| Image of Overseas Companies & Ingredients | <ul style="list-style-type: none"> • Few functional food manufacturers expressed dissatisfaction with overseas suppliers as they access ingredients via trading houses. • Country of origin is used to promote functional foods when ingredients are found only in certain locations (scarcity value) or are from a location with a good image among consumers (e.g. 'Contains Scandinavian blueberry (bilberry)'), but many functional food manufacturers have little interest in the country of origin if there are no obvious advantages or disadvantages. In many cases, ingredients (secondary ingredients and food additives in particular) are imported from several locations and used according to circumstances. |
| Profile of NZ Ingredients & Intentions to Use | <ul style="list-style-type: none"> • Better known NZ ingredients include blackcurrant, dairy ingredients, manuka honey and kiwifruit extract. • NZ has a very favourable image (clean, green, safe, reliable, stringent agrochemical management, etc.). • However, knowledge of specific ingredients is thin. No concrete responses were given on intentions to use NZ ingredients, but some would welcome introductions of good ingredients. |

*Future Prospects of the Functional Foods Market
& Issues in Promoting NZ Ingredients*

Size Projections for the Functional Foods Market

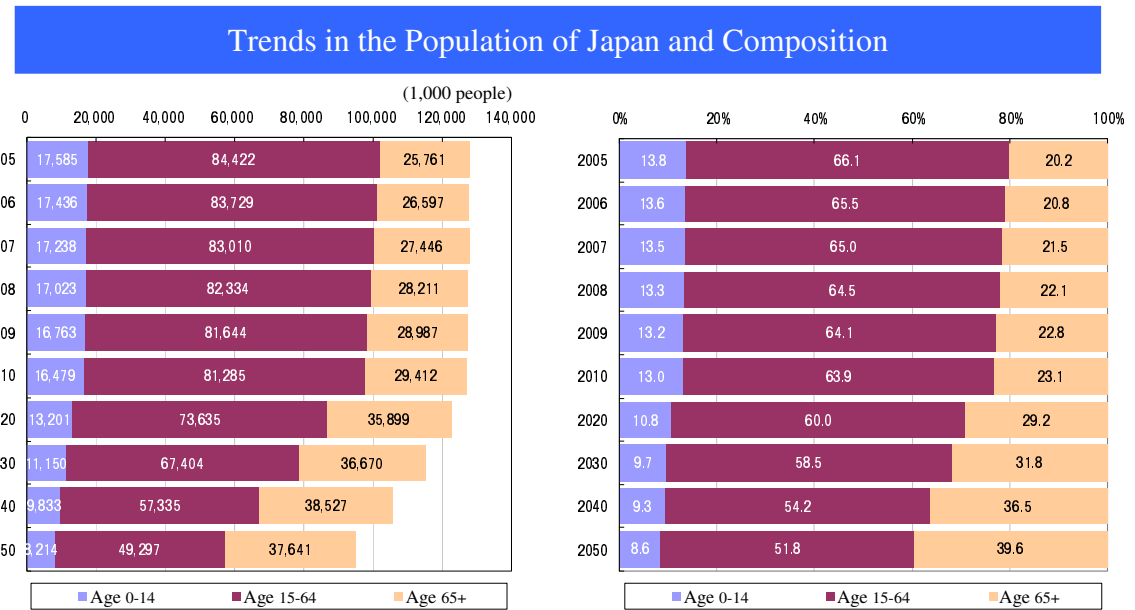
- ◆ Consumer belt-tightening is more defined due to the economic downturn from the second half of fiscal year 2008. In the functional foods market, consumers are making choices between products. As a result, all distribution channels except the robust mail order market are on the decline with the size of the functional foods market expected to contract in fiscal 2009.
- ◆ However, while the largest channel (door-to-door) and health food store channels are expected to continue a slight decline beyond fiscal 2009, we project the mail order channel to remain solid and pharmacy and food store channels to begin a gradual recovery. The level of contraction in the functional foods market as a whole will gradually subside, with a return to market expansion anticipated in fiscal 2012.

Size of the Functional Foods Market (Shipments by Manufacturers/YRI Estimates)

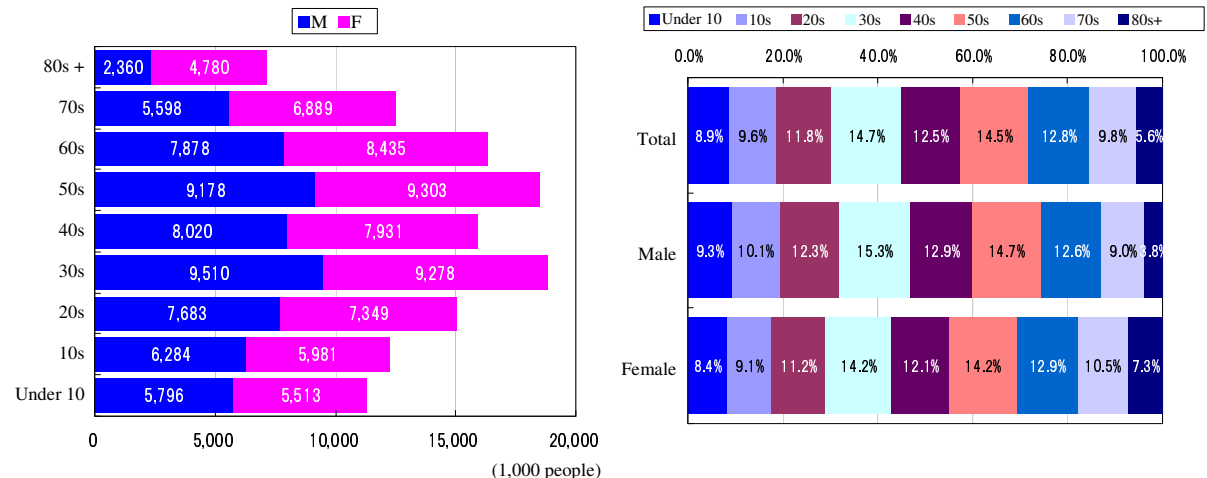


Demographics of Japan and the Functional Foods Market

- ◆ Japan is now an aging society with a falling birth rate. But while the population is decreasing, the number of elderly aged 65 or above will keep rising until 2040.
- ◆ Age structure of the population for 2007 shows that more than half (55.1%) the population are main functional food users (middle-aged or elderly aged 40 and above). Among females, a high proportion of women are in their 30s when many become conscious of self-beauty and physical health.



Proportion by Age Group (2007)



- ◆ The number of elderly who wish for active lives is increasing. Therefore, we anticipate greater needs for functional food to support comfortable living and functional food for health maintenance/promotion and disease prevention.
- ◆ The number of working women aged 30 and above is rising. We anticipate greater needs for functional food for beauty/skin maintenance, body maintenance and stress alleviation.

Populations on 1 October each year according to *Population Projections for Japan, December 2006* (medium variant fertility and death rates) issued by the National Institute of Population and Social Security Research

Consumer interest in health and beauty / anti-aging remains high

Methods for maintenance / promotion of consumer health and beauty, and consumer needs, are diversifying

Emergence of functional/healthy food

Zero/low/reduced-calories/sugar/fat
Food containing functional ingredients/nutrients
(vitamins/minerals, collagen etc.)

Growing interest in natural food / ecology

Mixed-grain rice
Organic / low-pesticide vegetables
Fresh food direct from the grower

Growing popularity of light sports

Jogging, running, walking, cycling, hiking etc.
Wii Fit video game etc.

Health and Beauty Function Trends in the Food Business

Adverse Trends:

- ✓ Declining disposable income has led to a spending slump and greater price sensitivity > Narrow consumption down to functional foods with perceptible effects / sensations

Favourable Trends:

- ✓ Areas where consumer needs remain strong > Beauty / anti-aging, quality of life etc.
- ✓ Greater need for functions reflecting social conditions > Fatigue relief, mental balance, better sleep etc.
- ✓ Manufacturers (esp. food manufacturers) are expanding health / beauty product line-ups > Dieting / combating metabolic syndrome, beauty maintenance, nutrient supplementation etc.

Recent Trends in the Functional Foods Market

Product

- High popularity of ingredients said to have perceptible effects (skin: collagen; joints: glucosamine; eye care: blueberry (bilberry))
- Trend toward combining functional ingredients to differentiate or improve perceptibility of effects (e.g. skin: collagen, hyaluronic acid, vitamin C etc.)
- Commercialisation of plant and marine-derived ingredients is progressing due to a safe/reliable image (e.g. marine collagen, marine placenta, plant placenta etc.)

Price

- Prices declining for hard-to-differentiate products, including vitamins, minerals, other basic nutrients and health maintenance/promotion products such as green juice (*aojiru*) and chlorella. Price competition is intensifying particularly among characteristically low-priced drugstores.
- In the mail order market, strategies such as offering trial prices to encourage consumers to try products and discounts for regular purchases are prominent

Promotion

- Ingredient suppliers and manufacturers are increasingly joining forces to promote ingredients not widely known
- Leading ingredient suppliers and manufacturers are increasingly disseminating evidence about ingredients (conference presentations, press releases, advertising etc.)
* Representation of effects/benefits on packaging or during sales activity is prohibited

Place (Channels)

- A major feature of the functional foods market is the large divergence between distribution channels in terms of product, marketing and sales strategies
- Door-to-door is suitable for selling high-priced products as products can be demonstrated. However, business conditions are worsening as recruiting of new salespeople has become difficult in recent years and government regulation/monitoring of door-to-door sales is more stringent.
- Mail order is a growth channel and relatively low barriers to entry mean an increasing number of companies are entering the business. Performance of entrants is generally polarised as strong or poor. Mail order business via television and newspaper advertising is brisk with major issues for companies being securing new customers and retention of loyal users.
- Drugstores are the prominent channel for store sales of functional foods. Functional food sales have struggled in recent years, but we are seeing large drugstore chains and functional food manufacturers teaming up to strengthen promotion and store presentation. Products for which this strategy is effective generally perform well. In particular, leading manufacturers such as Shiseido, Meiji Seika, Ajinomoto and Asahi Food & Healthcare have been harnessing their sales strengths and have been performing well via the drugstore channel in recent years.

Trends in Functional/Health Food Ingredient Business

| | | |
|---|---|--|
| Shift to non-animal ingredients | ▶ | <ul style="list-style-type: none">■ An accelerating shift to plant and marine-derived ingredients due to BSE and other issues relating to animal-derived ingredients, as well as consumer sentiment ('plant-derived,' 'marine-derived,' 'marine ingredients' and 'fish-derived' evoke images of safety and reliability among Japanese consumers). |
| Quality/safety considerations | ▶ | <ul style="list-style-type: none">■ A spate of food problems in Japan in recent years (falsified labelling, pesticide residue in Chinese products etc.) has led to stricter import inspections and manufacturers are demanding proof of ingredient quality and safety and ingredient traceability. |
| Value on evidence | ▶ | <ul style="list-style-type: none">■ Government has tightened controls/monitoring relating to functional food, creating a greater need for data (from animal testing/clinical trials) as evidence of ingredient functions (especially new ingredients). * However, laws (e.g. Pharm. Affairs Act) prohibit labelling of effects/benefits on food (except FOSHU). |
| Low volume | ▶ | <ul style="list-style-type: none">■ In many cases, small quantities of a large variety of functional food ingredients are required. Therefore, functional food manufacturers often seek low-volume transactions for bulk ingredients.■ Functional food manufacturers often seek trade with companies flexible to the desired bulk quantity.■ When importing ingredients, cargo (esp. powders) is sometimes opened for inspection/examination on entry. Therefore, low-volume bulk is often preferred to minimise losses.■ Low-volume is also often requested to prevent spoiling (e.g. moisture, oxidation, degradation) |
| Role of trading houses for ingredient imports | ▶ | <ul style="list-style-type: none">■ Food ingredient usage is regulated by a system of designated food additives (only authorised additives may be used), standards for food additive usage (stipulating authorised food types and usage and residue limits) and specification of medicine ingredients (Pharmaceutical Affairs Act), with Japan diverging from overseas standards in many instances. Because problems have arisen due to inconsistency between Japanese and overseas standards (recalls of products containing substances not authorised in Japan as food additives, deaths due to consumption of functional foods containing pharmaceutical substances etc.), many functional food manufacturers import ingredients through trading houses who are familiar with both domestic and overseas laws and regulations (i.e. trading houses vouch for ingredient quality). |
| Outsourcing of production | ▶ | <ul style="list-style-type: none">■ In many cases, leading functional food manufacturers with broad product line ups, while retaining their own factories, outsource production of part or all forms they cannot produce themselves. There are also many manufacturers who outsource all production to outside companies. |
| Selling to brand manufacturers | ▶ | <ul style="list-style-type: none">■ Ingredients are diverse and competition is intense. When looking to develop new customers inside Japan (pitching to brand manufacturers), it is essential to put forward proposals by presenting an actual product or specific marketing strategy, for example. It is hard to expand sales simply by presenting a stand alone ingredient. |

| Selling Points and Merits | Problems/Issues and Obstacles |
|--|---|
| <ul style="list-style-type: none">• Often there is a strong price appeal (low price of Chinese ingredients, in particular, is a major selling point)• Entry of large foreign suppliers stimulates the market and promotional activity• Not-yet-available ingredients can be offered in Japan (uniqueness and lack of competition mean there is also demand from distributors and profitability is high)• Potential to develop new markets/users• Revelations about overseas ingredient functionality and advancement in evaluation methodology• Overseas performance (functionality/consumer needs)• Ingredients sold as medicine overseas have solid evidence (advantages for accumulation of clinical data/evidence) | <ul style="list-style-type: none">• Legislation (Pharmaceutical Affairs, Health Promotion and Unjustifiable Premiums and Misleading Representations Acts)• Concern about deterioration of the image of imported foods (image of food from China is particularly low among end users)/ Low image of some trading houses (dishonest businesses still exist)/ Inflow of below-standard ingredients• Communication with the country of export (ingredient suppliers) (some companies have issues relating to the ability to communicate smoothly, using email for example, depending on the country or company)• Some countries are slow to introduce quality assurance frameworks (reliability issues)• Traceability is restricted and depends on the company/ingredient (limited safety guarantees)• Sometimes there are risks concerning stable supply of ingredients |

Strategies and Issues for Promoting New Zealand Ingredients

| | Positive Factors | Negative Factors |
|----------|---|---|
| Internal | <ul style="list-style-type: none"> • New Zealand has a favourable image (clean, green etc.) • Recognised for stringent standards regarding use of agrochemicals • Kiwifruit extract, dairy ingredients and manuka honey are better known than other NZ ingredients (among trading houses and functional food manufacturers) | <ul style="list-style-type: none"> • NZ ingredients as a whole have a low profile and lack a real image |
| External | <ul style="list-style-type: none"> • Growing middle-aged/elderly and beauty/anti-aging functional food needs • Growing demand for safe, high-quality functional food • Increase in country of origin/manufacturing labelling • Functional food manufacturers are seeking new ingredients (differentiation strategy) | <ul style="list-style-type: none"> • Strong demands (from functional food manufacturers) cost of ingredients • Strict controls over product health claims • Falling functional food prices • Existence of representative ingredients in growth areas (e.g. eye care: blueberry (bilberry); joints: glucosamine) |



- ✓ Activities that raise the profile of New Zealand ingredients (information, campaigns, trading co.-manufacturer tie-ups etc.)
- ✓ Clarification of functionality of New Zealand products (esp. areas with growth potential) and gathering/dissemination of evidence
- ✓ Communication of 'New Zealand's perspectives (nature, environment, history etc.) + functionality of ingredients'
- ✓ Strengthening of ties with trading companies/importers (information-sharing, financial assistance for evidence/promotion etc.)
- ✓ Promote proposal-based sales, incorporating product design and marketing etc.
- ✓ Make stronger efforts to promote safety and quality

Main and High-Profile Health Functions

| Effects | Target | Outlook |
|---|--|--|
| Beauty/ Anti-Aging | Women | <ul style="list-style-type: none"> ◆ High interest among women (main functional food customers). ◆ Competition will intensify as active introduction of new products continues, but market as a whole is expected to be strong. |
| QOL (Quality of Life) Improvement | Middle-aged/Elderly | <ul style="list-style-type: none"> ◆ Growing needs for ingredients supporting day-to-day lifestyles of middle-aged and elderly (joints, urination, anti-dementia etc.). ◆ Growing needs for ingredients that alleviate concerns of modern humans (eye care, mental care/stress, sleep support). |
| Support for Sports | Middle-aged/Elderly | <ul style="list-style-type: none"> ◆ Light sports (golf, jogging, walking, hiking, cycling etc.) are becoming more popular, especially among middle-aged and elderly. ◆ Growing needs for ingredients supporting light sports (joints etc.) or which boost their effects (weight reduction, fat-burning etc.). |
| Lifestyle Diseases/ Metabolic Syndrome | Sufferers/ Partners of sufferers (who look after the family's health) | <ul style="list-style-type: none"> ◆ Seen as a promising market as interest in prevention/alleviation of metabolic syndrome is increasing, though the market for functional foods combating lifestyle diseases is currently stagnant. ◆ However, reduction of healthcare expenditure is a priority for government and measures introduced are expected to sustain consumer interest in alleviation of metabolic syndrome. ◆ Growth in supplement and mini-drink sales via mail order. |

Survey Data (Individual Companies)
Ingredient Manufacturers & Trading Houses

Trading House A

Company Outline

| | | |
|-------------|---|---------------|
| | Employees | 57 (Japan) |
| | Capital | 195 (JPY mil) |
| Locations | (Branch) Osaka; (Overseas branches) China, India, Russia, Egypt; (Affiliated companies) U.S., China, Germany | |
| Activities | Import/export of industrial chemicals; import/export of medicine raw materials and functional food ingredients; general sale of medicine and veterinary medicine; sale of micronutrients and agricultural materials; import of agrochemical materials; and others | |
| Ingredients | Herbal extracts; PS (phosphatidylserine); alpha-GPC (L-alpha-glycerylphosphorylcholine); coenzyme Q10; vitamin C; xylitol; bilberry; mineral yeast; and others | |

Main Products

| Product/Ingredient | Volume Supplied (per year) | Price (per unit) | Use, Packaging/Size, Main Ingredients, Supply Framework, Etc. |
|--------------------|----------------------------|------------------|---|
| Plant extracts | Undisclosed | | Herbal extracts (ginkgo leaf, etc.), incl. many from Europe |
| Chemicals | | | PS, coenzyme Q10, alpha-GPC, etc. |
| Mineral yeast | | | Mineral yeast (ingredients with reduced yeast smell) |
| Food additives | | | Vitamin C, xylitol, etc. |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|---------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 11,099 | 12,800 | 15,331 |
| Year-on-year (%) | 78.9 | 115.3 | 119.8 |
| Net profit (JPY mil) | 71 | 90 | 92 |
| Profit ratio (%) | 0.6 | 0.7 | 0.6 |
| Functional food sales (JPY mil) | (Est.) 3,500 | (Est.) 3,500 | (Est.) 3,500 |
| Year-on-year (%) | — | 100.0 | 100.0 |
| % of total | 31.5 | 27.3 | 22.8 |

*Business increased 20% in FY2008 due to strong business overseas, particularly India and China.

Main Trading Partners

| | |
|-----------|--|
| Suppliers | Kaneka Corp.; Nisshin Pharma; Ube Industries; Mitsubishi Rayon; Tokiwa Phytochemical; Godrej Soaps; Kenko (Qingdao); Chemi SpA; etc. |
| Customers | Brand manufacturers (functional food, food, etc.); contract manufacturers; etc. |

R&D Strategy

- Objective/reliable data/evidence is essential in the Japanese market and this is thoroughly communicated to overseas suppliers.
- New ingredients will preferably have new, additional functions. However, introduction of an ingredient and sales expansion may be possible if it is functionally superior to existing ingredients (and there is evidence). Ingredients must also be easy to promote (easy to sell/explain using packaging, advertising, etc.).
- Trading House A is actively searching for and adopting new ingredients from around the world, including Europe, the U.S. and South America, and is actively engaged in R&D.

Production & Purchasing Strategy

- Mainly procures functional food ingredients from overseas (and handles a small amount of domestic ingredients), around 50 such ingredients overall. Looks to introduce functional ingredients from around the world via locations in its global network.
- Ingredients predominantly from Europe, with some from North/South America.
- Tried to increase sales of PS and alpha-GPC these 1-2 years, but results weren't as expected, partly due to diminished ability to claim brain function enhancement and nerve function activation (reduced health claims). Resistance was also sensed among users in the case of alpha-GPC (still viewed as a medicinal ingredient).
- Has consolidated subsidiaries in the U.S. and China, Germany, India, Korea, Egypt and Russia. Each base carries out their own functional ingredient R&D and manufacturing.
- Collaborates with contract manufacturers in Japan to enable an integrated system from end product planning and proposal to commercialisation and promotional planning.
- Meets increasing traceability requirements for imported ingredients through its collaboration with domestic contract manufacturers. This is important for sales promotion.
- Also possesses manufacturing facilities, through joint ventures for example, as a strategy for ensuring capability for stable supply of ingredients and products.
- Views blackcurrant as a promising NZ ingredient due to rising eye care needs.
- Points to 'safety, reliability, high quality and authenticity' as images held of NZ ingredients and acknowledges their probable appeal to quality/safety-conscious manufacturers (as long as price differences are small).

Other

- Will maintain functional ingredient and food businesses as a main business area.
- Quarantine inspections may have become stricter for imported ingredients, but the effects are not all negative – it will be easier to weed out dishonest/doubtful businesses.
- Is approached often by Chinese manufacturers trying to sell various ingredients, but generally turns them down due to major doubts regarding quality and safety.

Sales & Marketing Strategy

- Conventional methods no longer work in the functional food business today, and fresh approaches to promotion are needed. Specifically, ideas for final products and concrete promotion strategies must be presented in addition to highlighting functional merits.
- As a trading house, wants to handle premium, high-profit ingredients. However, the economic downturn has reinforced preferences for low-price goods and companies are increasingly sticking to items they know they can sell (it is harder to take on new ingredients).
- 'Products with perceptible effects' are recent strong sellers, leading examples being glucosamine and chondroitin. As a result, products with long-term merits or for routine consumption are relatively more difficult to sell.
- Believes NZ-made could be used to sell ingredients, but the reality is any price disadvantage will hinder sales growth in a market where lower prices are preferred.
- Traceability is now a major factor in sales promotion and Trading House A will use aforementioned collaboration with domestic contract manufacturers effectively.

Market Assessment & Key Strategies

- Stricter regulations on functional food business in the last few years tighten restrictions on promotional/advertising methods (constraints on package labelling and advertising too tight). This has adversely affected purchasing by end users (because explanations of products have decreased), increasing impediments to business.
- Will aggressively push ingredients once designated as medicine but now treated as food (e.g. coenzyme Q10, L-carnitine, alpha-GPC) as their functions are easier to sell.
- Will continue efforts to maintain safety and quality control advantages.
- Intends to utilize its global network to uphold its position as an agent representing functional ingredient suppliers worldwide.
- Identifies 'bilberry, mineral yeast and branched-chain amino acids (BCAA)' among ingredients to watch.
- As for NZ ingredient potential, believes safety and reliability factors might help increase sales. However, the popularity of high-priced items has declined and only some manufacturers selling high-priced items will be able to adopt such ingredients in the current environment.

Ingredient Trading House B

Company Outline

| | | | |
|-------------|--|-----------|--------------|
| | | Employees | 52 |
| | | Capital | 25 (JPY mil) |
| Locations | (Branch) Osaka (Food research centre) Narashino; (Distribution centre) Narashino | | |
| Activities | Import/export and domestic sale of food ingredients, dietary supplement ingredients, medicine ingredients, beverage ingredients, feed ingredients, etc. (Functional ingredients: import and sale) | | |
| Ingredients | Lutein; zeaxanthin; multi-carotene preparations; tocotrienol; soy isoflavones; functional fats and oils; and others. *Overall, the company handles a lot of 'emulsifiers, plant proteins, vitamin E, natural food colouring and flavouring, and various bread ingredients' for the food industry. | | |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|---------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 3,569 | 3,742 | 3,510 |
| Year-on-year (%) | 93.2 | 104.8 | 93.8 |
| Net profit (JPY mil) | 241 | 38 | 54 |
| Profit ratio (%) | 6.8 | 1.0 | 1.5 |
| Functional food sales (JPY mil) | (Est.) 1,000 | (Est.) 980 | (Est.) 960 |
| Year-on-year (%) | — | 98.0 | 98.0 |
| % of total | 28.0 | 26.2 | 27.4 |

Main Trading Partners

| | |
|-----------|--|
| Suppliers | Carotech Inc. (palm, tocotrienol); Kalsec Inc. (natural antioxidants/rosemary extract); Tate & Lyle (polydextrose, maltodextrin); The Solae Company (soy lecithin, rapeseed lecithin, functional proteins); and others |
| Customers | Naturally Health Foods; contract manufacturers; functional food manufacturers (brand manufacturers); and others |

Sales Breakdown by End User

| | | | |
|------------|---------------------|------------------------|-------|
| User | Brand Manufacturers | Contract Manufacturers | Other |
| % of total | Secondary | Main | Some |

Main Products

| Product/Ingredient | Volume Supplied (per year) | Price (per unit) | Use, Packaging/Size, Main Ingredients, Supply Framework, Etc. |
|------------------------|----------------------------|------------------|--|
| Lutein (core product) | Undisclosed | | Functional food/cosmetics; free-form lutein; suspension - 20%, beads - 6%. |
| Zeaxanthin | | | Functional food; paprika-derived; suspension - 10%. |
| Multi-carotene preps | | | Functional food; carotene preps containing mix of 5 types of carotenoid. |
| Tocotrienol | | | Functional food; contains all 8 types of vitamin E, squalene/sterol/coenzyme Q10, carotenoid compounds, etc. |
| Soy isoflavones | | | Includes saponin; high-grade natural soy isoflavones product. |
| Functional fats & oils | | | General food/functional food; fish oils (EPA/DHA), etc. |

R&D Strategy

- In the functional food business, Ingredient Trading House B employs overseas functional ingredients and does not carry out its own R&D.
- Data is essential in Japan when handling new ingredients. Suppliers generally provide the data. U.S. and European evidence is of global standard, ensuring a high degree of safety.
- When adopting new ingredients, data will preferably reveal functions/benefits not appearing in existing evidence. Sales promotion must also be considered when screening data as evidence that cannot be used for promotion or advertising is pointless.
- NZ's image (i.e. safety, reliability, natural environment, etc.) in itself is an advantage for NZ ingredients and stressing this will strengthen the appeal. Unique evidence is still essential, however.

Production & Purchasing Strategy

- Generally handles imported functional ingredients (mainly from U.S. and Europe, but also India), primarily naturally-derived ingredients offering high safety and reliability. Ingredient Trading House B has data for all ingredients to backup safety and other claims. (Production based on GMP guidelines is another key factor.)
- Antioxidants are a major feature of the product line up. Specific strengths are items claiming anti-aging and anti-cancer effects. However, anti-aging ingredients are more prevalent in cosmetics than in functional food and their position as functional ingredients for functional food has waned somewhat (as only small amounts are added to cosmetics, the focus is on increasing sales for use in supplements).
- In terms of purchasing, most ingredients imported have been processed overseas, but some are processed in Japan. Chinese ingredients are generally not used.
- Overseas ingredients Ingredient Trading House B focuses on are hit items from U.S. and European markets unless a manufacturer specifies an ingredient. Systems allowing stable exports to Japan also have to be in place (stable supply capability). Safety and evidence are other prerequisites.
- NZ 'blackcurrant' is viewed as a promising eye care ingredient. However, sales growth might be difficult without extra functionality to outdo blueberry and a higher profile.
- In today's functional food business, ingredients suited to marketing (their functions are easy to advertise/promote) perform well. Even with outstanding evidence, ingredients tend to struggle if their functions cannot be easily displayed.
- In addition, low-volume transactions are increasing, as requested by corporate users and in order to hedge risk.

Other

- Importers must pay constant attention to foreign exchange movements. An appreciating yen is a concern for the near term.
- Ingredient Trading House B positions affiliated companies as 'pilot shops,' their main tasks being public relations for functional ingredients Ingredient Trading House B introduces, and observation and analysis of end user trends. Main items in the product lineup relate to lifestyle diseases, eye care and dieting. They include 'Hi-Lecithin, Hi-Complete E, Hi-Beta Carotene, Eye Guard/drinks, Multi-Carotene, EPA-DHA and Bijunso.' Distribution channels consist mainly of general merchandise stores (GMS) and department stores in provincial areas (Sendai, Kitakyushu, etc.), but some mail order routes are used.

Sales & Marketing Strategy

- Functional food business sales have been on a slight decline due to tighter restrictions on functional food advertising (brand-based market has levelled off).
- In terms of marketing, Ingredient Trading House B generally pitches directly to customers. For brand manufacturers, orders come either as a result of direct sales activities or via contract manufacturers (brand manufacturers sometimes designate a contract manufacturer).
- Actively participates in events and trade shows and recently exhibited at Hi/S-tec Japan in October 2009.
- When adopting new ingredients, importance is placed on factors including 'high profile/market potential,' 'high return,' 'stable supply capability,' 'evidence,' and 'safety/reliability.'
- Growth ingredients/ingredients to watch identified are: 'Items for skincare (e.g. tocotrienol), dieting (e.g. fucoxanthin), joints, eye care (e.g. lutein), and male vitality enhancement (PR difficult).' However, high expectations mean competition is intense even at the ingredient level and profitability is declining.
- Suggests that overseas suppliers looking to enter the Japanese market consider the hassles and risks involved and try to team up with a trading house.

Market Assessment & Key Strategies

- Basically wishes to maintain its position as an ingredient trader and has no intention of getting involved as a contract manufacturer. Has introduced its own brand via an affiliated company but views this as test marketing.
- Due to high standards for quality and safety at Japanese manufacturers, Ingredient Trading House B does not plan to use Chinese ingredients in the near term (current conditions are not right in light of the company's corporate philosophy).
- The U.S. used to be the main origin of imports by far, but imports from other areas are on the rise due to an increase in highly-functional and high-quality ingredients, mainly in the U.S. and Europe. A large proportion of imports now come from Europe.
- Intends to continue centring business on carotenoids and intends to expand antioxidants business, including astaxanthin and lutein. To raise competitiveness against competing ingredients, Ingredient Trading House B is looking to push high-purity products, seen as an effective way to avoid price competition (antioxidant competitors have increased in the last few years and productivity has diminished with price competition).
- The new Democratic Party administration is expected to adversely affect the functional food industry (anticipated regulation tightening and shift toward consumer protection).
- NZ ingredients have strengths in 'safety, security and reliability' and could secure a certain level of demand. They also represent concepts consistent with Ingredient Trading House B's corporate philosophy (priority on safety).

Ingredient Trading House C

Company Outline

| | | | |
|-------------|--|-----------|--------------|
| | | Employees | 8 |
| | | Capital | 11 (JPY mil) |
| Locations | — | | |
| Activities | Import/export of functional food and related goods | | |
| Ingredients | Pycnogenol; SoyLife; astaZANTHIN; lutein; FenuLife Extract Powder; white kidney bean extract; L-carnitine; Zyactinase (kiwifruit extract); swallow's nest. | | |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|---------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 788 | 709 | 814 |
| Year-on-year (%) | 82.5 | 90.0 | 114.8 |
| Net profit (JPY mil) | △ | 4 | △ |
| Profit ratio (%) | | 0.6 | |
| Functional food sales (JPY mil) | 788 | 709 | 814 |
| Year-on-year (%) | 82.5 | 90.0 | 114.8 |
| % of total | 100.0 | 100.0 | 100.0 |

Customer Breakdown

| Customer | % of Total/Sales Trends |
|-----------------------------|---|
| Contract manufacturers | 30-40%; carry out sales activities, allowing access to new users |
| Planning companies | 30-40%; joint sales activities with Company C (product proposals) |
| Brand manufacturers & other | 20-30%; demanding transaction terms |

Main products

| Product/Ingredient | Volume Supplied (per year) | Price (per unit) | Use, Packaging/Size; Main Ingredients, Supply Framework, Etc. |
|---------------------------|----------------------------|-------------------|---|
| Pycnogenol | 400kg | JPY500,000/kg | Functional food/cosmetics; 1kg; pine bark; imported. |
| SoyLife | 1.5-2 tons | JPY5,000/kg | Functional food; 10kg; soy isoflavones; imported. |
| astaZANTHIN | 500kg | JPY140,000/kg | Functional food; 1kg; astaxanthin; imported. |
| White kidney bean extract | 1 ton | | Dieting ingredient; imported. |
| L-carnitine | 500-1,000kg | JPY5,000-8,000/kg | Dieting ingredient; fumarate; imported. |
| Zyactinase | 1 ton | JPY25,000/kg | Functional food; 5kg (or 1kg); kiwifruit extract; imported. |

Main Trading Partners

| | |
|-----------|--|
| Suppliers | Horphag Research (Pycnogenol); Fultram (white kidney bean extract); Valensa International (Citrus aurantium); PIVEG (lutein) |
| Customers | Amino Up Chemical; JRJ Pharmaceutical; AMS Life Science; Viox; Nippon Flour Mills; QOL; Jupiter Shop Channel; and others |

Sales Breakdown by End User

| User | Func. food manufacturers | Food manufacturers | Beverage manufacturers | Pharmaceutical manufacturers | Others |
|-----------------|--------------------------|---|------------------------|------------------------------|--------|
| Sales (JPY mil) | Approx. 750 | Approx. 65 | | | |
| % of total | 90%+ | Slightly less than 10% (incl. many cosmetics manufacturers) | | | |

Production & Purchasing Strategy

- Ingredient Trading House C handles functional food ingredients from a broad range of overseas origins, including 'Switzerland, France, Belgium, Spain, Australia, New Zealand, the U.S., Mexico, and China.'
- Ingredients handled are usually items that have been hits in Japan, or ingredients or products enjoying popularity overseas, for example in U.S. or Europe, which can be imported to Japan. Safety tests and existence of data are basically preconditions (especially clinical data). Safety is a priority and sampling (e.g. pesticide residues, antibiotics, heavy metals) is carried out on a timely basis.
- Handles NZ kiwifruit extract powder, one of Ingredient Trading House C's core ingredients. But while kiwifruit powder offers a large margin, the high price adversely means network marketing/system selling channels are used for distribution.
- The item is imported after processing of NZ kiwifruit in NZ. As Company C is pushing intestinal regulation as the ingredient's main benefit (clinical data obtained in Japan on 3 occasions at hospitals), OTC medicine and yoghurt products are the competition, not functional foods. The product is so far less competitive than FOSHU or OTC medicine.
- Ingredient Trading House C is the sole importer of the kiwifruit extract and there are almost no competitors.
- The minimum lot size is 5kg, but the company will trade in 1kg amounts.

Market Assessment & Key Strategies

- Will maintain its stance of introducing functional food ingredients from overseas for supply to Japanese manufacturers (own product/brand business seen as difficult).
- Also intends to shift the business focus away from mass-produced items (general items) to low-volume business with 'high quality/function, high added value/return, and brands/competitiveness' as key concepts.
- Ingredients that work and are popular overseas (esp. U.S. and Europe) have potential for success in Japan, too. Ingredient Trading House C therefore watches foreign markets for 'items suited to Japan,' 'items offering new benefits,' and 'items with topicality value.'
- Promising NZ ingredients are 'kiwifruit extract, blackcurrant (JPY3-3.5 billion market), boysenberry (Ingredient Trading House C has no boysenberry business).'
- Does purchase from China as Chinese ingredients have a big price advantage despite reliability and safety issues surfacing in some cases. Tests (sampling) for pesticide residues, antibiotics and heavy metals are conducted on a timely basis to confirm safety.

Sales & Marketing Strategy

- Markets functional food ingredients mainly to contract manufacturers, planning companies and brand manufacturers. Contract manufacturers are relied on to a certain extent for sales activities.
- In fiscal 2009, the focal Pycnogenol business has been strong but kiwifruit extract has been struggling (though it performed well in fiscal 2008).
- Sales of dieting ingredients (i.e. white bean extract, L-carnitine) are also strong but low prices and intense competition mean profitability is low.
- Differentiation by country of origin is a possible marketing approach, but only assuming no large price gap (at comparable prices, NZ ingredients will generally appeal to users more than Chinese ingredients).
- Businesses for which new clinical data emerges every year, like Pycnogenol, are easy to expand. Ingredient Trading House C has subsidized clinical data acquisition costs borne by the supplier in the past for ingredients likely to experience a boom in Japan.
- Currently views 'skin-smoothing/beauty items, dieting items, items for joints and eye care items' as growth ingredients in Japan.

R&D Strategy

- Does not carry out its own ingredient R&D, but does carry out independent clinical testing in cases (outsourced to CROs; sometimes cooperates with medical schools or general hospitals).
- Clinical/ data is vital in the functional food market and collecting clinical data actually in Japan is key.
- It is also vital, both for user convenience and hedging of customs risk, to use small packaging units for the Japanese market.
- When handling new ingredients, Ingredient Trading House C actively carries out PR if there is fresh clinical/ data. Sales growth is difficult without such data.
- When selecting new ingredients, emphasis is placed on criteria including 'high return (profit amount and ratio),' 'few or no competitors,' and 'high market potential.'
- A new ingredient items is unlikely to be adopted if success of the item is unforeseeable, even when a user has made a specific request. Distribution channels also need to be in place in advance or trading houses will be unable to help due to the risk of large promotional and other initial costs.
- Most overseas ingredient suppliers to the Japanese market go through a trading house (complicated regulations and systems hinder direct participation by foreign businesses).

Trading House D

Company Outline

| | | | |
|-------------|---|-----------|--------------|
| | | Employees | 42 |
| | | Capital | 80 (JPY mil) |
| Locations | (Branch) Osaka | | |
| Activities | Sale and import/export of medicine, quasi-pharmaceuticals, cosmetics, medical equipment, veterinary medicine, agrichemicals, reagents, chemicals, food, food additives, feed, and raw materials for the above | | |
| Ingredients | Kiwifruit extract/actinidin; blackcurrant; Otheran; taurine; chondroitin sulphate; placenta extract/Marine Placenta; pinitol; fucoidan; L-carnitine; coenzyme Q10; Valencia extract; GABA; and others | | |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|----------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 6,210 | 6,510 | 6,310 |
| Year-on-year (%) | 101.8 | 104.8 | 96.9 |
| Net profit (JPY mil) | 170 | 266 | 188 |
| Profit ratio (%) | 2.7 | 4.1 | 3.0 |
| Functional food sales (JPY mil)* | (Est.) 1,320 | (Est.) 1,290 | (Est.) 1,260 |
| Year-on-year (%) | 97.8 | 97.7 | 97.7 |
| % of total | 21.3 | 19.8 | 20.0 |

R&D Strategy

- Does not carry out its own functional food and ingredient R&D, but has an in-house test lab where imported ingredients undergo quality testing/trials using various analytical systems. Outside testing organisations are also used when internal testing is insufficient.
- Data is obtained by the supplying company. Trading House D does not often collect its own additional data or perform its own tests.
- If possible, clinical data demonstrating new functions/benefits should be supplied for new ingredients. Other data demonstrating a clear advantage over existing ingredients can also be used to promote the item.
- Priority criteria for new ingredient selection include 'profitability,' 'market potential' and 'safety.'
- Pushing NZ's GM-free status would be effective in raising product appeal in Japan. NZ ingredients are subject to strict guidelines on a par with U.S. and Europe laid down by the NZ Food Safety Authority, and are therefore safe by global standards.

Main Products

| Product/Ingredient | Volume Supplied (per year) | Price (per unit) | Use, Packaging/Size, Main Ingredients, Supply Framework, Etc. |
|---|----------------------------|------------------|---|
| Otheran | Undisclosed | | Functional food; imported (NZ). |
| Blackcurrant | | | Functional food; imported (NZ). |
| Pinitol | | | Functional food; imported (NZ). |
| Chondroitin sulph. | | | Imported (NZ). |
| Taurine | | | Imported (NZ). |
| Placenta extract/ Marine Placenta Kiwifruit extract | | | Functional food/cosmetics; imported (NZ). Functional food/general food; imported (NZ). |

Main Trading Partners

| | |
|-----------|---|
| Suppliers | New Zealand and others |
| Customers | Seiko Eiyo Yakuhin; Yakult Honsha; and others |

Production & Purchasing Strategy

- Mainly procures functional food ingredients from overseas (also handles domestic ingredients) with New Zealand ingredients a main feature. Requires safety and other data before handling ingredients and carries out its own sampling.
- NZ functional food ingredients in the current product line up include plant-derived items, such as 'blackcurrant, kiwifruit extract (actinidin) and Otheran (evening primrose seed polyphenol),' and animal-derived items, such as 'chondroitin sulphate, taurine and placenta extract (sheep-derived).' NZ ingredients are notable for inclusion of extracts derived from animals such as sheep and pigs.
- 'Blackcurrant' is a promising NZ ingredient (good quality due to large temperature fluctuation), but sales growth is difficult at present due to the high profile of blueberry, with which it competes on function. Blackcurrant is therefore currently sold mainly for use in beverages rather than as a functional food ingredient.
- Otheran is difficult to promote as a polyphenolic ingredient (cacao polyphenol has more appeal), therefore it is sold mostly as a cosmetics ingredient.
- Has served as an agent for NZ companies for over 30 years. Medicine ingredients and intermediates are currently main businesses. In the functional food market, Trading House D has introduced meat by-products, such as taurine (supplied to 1 customer and 2 trading houses). Company D notes it has a 25-35% share of the taurine for food market.
- Other functional food ingredients include 'blackcurrant (production increasing in NZ under government strategy), kiwifruit extract (actinidin), Otheran, placenta extract (sheep-derived), chondroitin (small amount), and Echinacea (very small amount).'
- Regarding food and ingredient imports, Chinese ingredients are subject to stricter quarantine inspections due to recent problems such as pesticide residues/antibiotics and mislabelling. As a trading house, Company D recognises merits of importing in large lots, but occasional sloppiness in quarantine (e.g. ingredient degradation due to opening for sampling) means small lots (from 20kg) are used as much as possible.

Other

- NZ imports seemingly on the rise are vegetables (scarce vegetables can be supplied as seasons are exactly opposite to Japan). However, the trend is moving toward improving profitability by increasing the degree of processing instead of dealing in fresh items.
- The core medicine ingredients business is performing well recently due to such factors as revisions to the Pharmaceutical Affairs Act. Functional food business accounts for around 20% of sales. Particularly in the last few years, ingredients for generic medicine have enjoyed growth, supporting earnings improvement.

Sales & Marketing Strategy

- In terms of marketing, when trying to secure new customers (e.g. pitching to brand manufacturers), it is vital to present ideas for an actual product and specific marketing strategies as it is difficult to expand sales by offering the ingredient alone. (The quality of the sales promotion plan is also important.)
- In terms of business, an item has to be capable of returning a profit on its own, but overall profitability the real guideline.
- Selling points for NZ food/ingredients are 'cleanliness, peace of mind, reliability, safety as an agricultural nation (stringent standards for agrochemical use), BSE-free.' Trading House D highlights these points when promoting products.
- Items can be promoted as NZ-made. But, as large price differences would make this difficult in the current market environment (low-price products are strong sellers in today's functional food market), a sense of price reasonableness has to be established.
- Ingredients to watch in the functional food market include 'placenta items and blackcurrant.'

Market Assessment & Key Strategies

- In the functional food ingredient business, Trading House D is trying to shift its focus to the contract manufacturing business rather than ingredient business (preference for high-profit business; will aim for in-house ingredient procurement). However, brand manufacturers demand high standards and safety requirements are particularly stringent (e.g. feed management/history, GM crop consumption, agrochemical usage, traceability, fattening, product specs/compliance, test data), therefore such business has not reached the desired scale.
- NZ ingredients are yet to experience a boom, but products associated with NZ, such as 'kiwifruit extract and blackcurrant,' hold potential.
- Views NZ ingredient potential in advantages as agricultural products (promoting opposite seasons to Japan's) rather than as processed functional food ingredients. Plans a consistent appeal by pushing safety and reliability.

Ingredient Manufacturer E

Company Outline

| | | | |
|-------------|--|-----------|--------------|
| | | Employees | 165 |
| | | Capital | 60 (JPY mil) |
| Locations | (Plants) Isehara, Kofu, Nirasaki | | |
| Activities | Manufacture and sale of medicine, functional food and food additives | | |
| Ingredients | Natural vitamin E; plant sterols; ginkgo leaves; blueberry; DHA; green tea extract; and others | | |

Main Products

| Product/Ingredient | % of Sales (monetary base) | Price (per unit) | Use, Packaging/Size, Main Ingredients, Supply Framework, Etc. |
|---------------------|-------------------------------|---------------------|--|
| Vitamin E | Approx. 50% | | Medicine, functional food (Eisai brand), general food. |
| Blueberry extract | Approx. 15% | | Functional food. |
| Plant sterols | Approx. 15% | | Food additives. |
| DHA/EPA | Approx. 5% | | Functional food. |
| Ginkgo leaf extract | Approx. 5% | | Functional food. |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|---------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 7,100 | 6,600 | 7,500 |
| Year-on-year (%) | — | 93.0 | 113.6 |
| Net profit (JPY mil) | 390 | 360 | 450 |
| Profit ratio (%) | 5.5 | 5.5 | 6.0 |
| Functional food sales (JPY mil) | (Est.) 2,300 | (Est.) 2,300 | (Est.) 2,300 |
| Year-on-year (%) | — | 100.0 | 100.0 |
| % of total | 32.4 | 34.8 | 30.7 |

Main Trading Partners

| | |
|-----------|--|
| Suppliers | Yamanashi Kagaku Kogyo; Mitsui & Co.; Ajinomoto Healthy Supply; and others |
| Customers | Eisai; Eisai Food & Chemical; Sannova; Kyokuto Chemical Ind.; Kongo Yakuhin; Kao Corporation; and others |

Sales Breakdown by End User

| User | Func. food manufacturers | Food manufacturers | Beverage manufacturers | Pharmaceutical manufacturers | Others |
|-----------------|-----------------------------|-----------------------|---------------------------|---------------------------------|--------|
| Sales (JPY mil) | 690 | 1,610 | | | |
| % of total | 30% | 70% | | | |

Production & Purchasing Strategy

- Prioritizes and advertises quality and safety and currently carries out all production in-house in Japan. Specifically, Ingredient Manufacturer E internally manufactures vitamin E from soybean cake, blueberry extract from bilberries, and ginkgo leaf extract using ginkgo leaves.
- Functional food business comprises almost 100% of ingredient supply.
- Ingredients are procured almost evenly from overseas and domestically, with domestic procurement being used for products such as DHA/EPA and ginkgo leaf extract.

Sales & Marketing Strategy

- Supplies ingredients for medicine, functional food and cosmetics, as well as food additive raw materials.
- Main customers are functional food manufacturers (incl. contract manufacturers). Others are pharmaceutical manufacturers and food manufacturers. Functional food ingredients account for around 30%.
- Vitamin E accounts for the highest proportion of sales, followed by blueberry extract and plant sterols, in turn followed by DHA/EPA and ginkgo leaf extract.
- Managed to increase sales in FY2008 due to in part to the introduction of a new product for the medicine industry.

R&D Strategy

- Business objectives are 'to search for materials containing substances with health benefits, and to develop technologies for extracting/commercialising beneficial substances from those materials.'
- In the search for functional ingredients, aims for a system for procuring items of high quality and with price advantages from around the world.
- Special effort is directed into quality control, with all plants conforming to GMP guidelines.
- In R&D, emphasis is placed on information from end users such as functional food manufacturers. Ingredient Manufacturer E also intends to direct more energy into quality and safety, while ensuring solid evidence.

Other

- The Democratic Party came to power in September 2009 and is expected to be more consumer-oriented. As a result, evidence will likely become more crucial and small to medium businesses who are unable to bear those evidence-gathering costs will probably struggle to develop new ingredients (industry reorganisation and a shakeout of businesses is also likely). A situation of survival of the fittest is also likely as all players continue to struggle to shape new strategies.
- As an ingredient manufacturer, a brand's profile will preferably have spill over effects for the profile of ingredients it contains.

Market Assessment & Key Strategies

- Supply of ingredients to overseas markets is also an option for the future, but that seems unrealistic at present due to differing legal regulations and practices (different needs) in other countries.
- A company strength is traceability, based on a domestic manufacturing system. This enables a high level of quality assurance.
- Sees the functional food market as a whole contracting 5% in the next 1-2 years.

Manufacturer F

Company Outline

| | | | |
|-------------|---|-----------|------------------|
| | | Employees | 1,397 |
| | | Capital | 14,800 (JPY mil) |
| Locations | (Sales HQs) Kanto, Kansai; (Branches) Hokkaido, Tohoku, Kita Tohoku, Tokyo, Kanagawa, Kanto, Chubu, Shizuoka, Hokuriku, Kinki, Chugoku, Shikoku, Kyushu, Minami Kyushu; (Plants) 9 plants | | |
| Activities | Manufacture and sale of dairy products, fats and oils | | |
| Ingredients | (Dairy ingredients) Whey peptide (HW-3); milk ceramide (MC-5); Fe-lactoferrin (70/200); MBP | | |

Financial Performance

| Fiscal Year | Ended Mar. 2007 | Ended Mar. 2008 | Ended Mar. 2009 |
|---------------------------------|-----------------|-----------------|-----------------|
| Net sales (JPY mil) | 131,670 | 141,840 | 145,511 |
| Year-on-year (%) | 99.1 | 107.7 | 102.6 |
| Net profit (JPY mil) | 4,969 | 5,084 | 4,942 |
| Profit ratio (%) | 3.8 | 3.6 | 3.4 |
| Functional food sales (JPY mil) | | | |
| Year-on-year (%) | Undisclosed | | |
| % of total | | | |

Customer Breakdown

| Customers | % of Total/Trends |
|-------------------|---|
| Direct sales | 10-20%; primarily large corporations |
| Distributor sales | 80-90%; large corporations to small and medium businesses (seeking new small & medium business users) |

Main Products

| Product/Ingredient | Volume Supplied (per year) | Price (per unit) | Use, Supply Framework, Etc. |
|-------------------------|----------------------------|------------------|--|
| Whey peptide (HW-3) | | | Functional food, sports nutrition, sports drinks, beauty foods; imported. |
| Milk ceramide (MC-5) | | JPY60-70,000/kg | Functional food, beauty food, confectionary; imported. *5% ceramide content (high) |
| Fe-lactoferrin (70/200) | | Undisclosed | Functional food; imported. *Iron preparation without iron taste *70: Iron & lactoferrin promoted |
| MBP | | | FOSHU, functional food, general food. |

Main Trading Partners

| | |
|-----------|--|
| Suppliers | New Zealand |
| Customers | Tatua Japan (distributor); beverage manufacturers; food manufacturers; functional food manufacturers; and others |

Sales Breakdown by End User

| User | Func. food manufacturers | Food manufacturers | Beverage manufacturers | Pharmaceutical manufacturers | Others |
|-----------------|--------------------------|--------------------|------------------------|------------------------------|--------|
| Sales (JPY mil) | | | | | |
| % of total | Undisclosed | | | | |

Production & Purchasing Strategy

- All functional ingredients are milk-derived and manufacturing is outsourced to New Zealand companies (ingredients extracted from NZ milk are refined/processed in NZ before importing to Japan).
- Reasons for outsourcing manufacturing to NZ companies include: 'concern about stable ingredient procurement in Japan (e.g. lactoferrin content in raw milk is only 0.01-0.04%),' 'safety/reliability of NZ's dairy sector (BSE-free, no radioactive or heavy metal contamination, natural grazing).'
- Data is a prerequisite for all functional ingredients (Manufacturer F gathers this). Generally looks to make presentations to societies and submit papers.
- All ingredients currently handled are functional ingredients developed in-house. One characteristic is a focus on lifestyle improvement/enhancement ingredients, particularly for women.
- Other characteristics of Manufacturer F ingredients are: 'high functionality (with full evidence gathered in-house), low-cost (relative to competitors' items), flavour (milk flavour or flavour suitable for food: Fe-lactoferrin), ingredients for women.'
- Intends to direct effort into external sales of functional ingredients developed in-house (establishment of ingredient business), focusing in the near term on increasing sales of 5 items currently handled. Will also continue to seek items with high market potential from among ingredients developed through R&D, and new dairy ingredients.

Market Assessment & Key Strategies

- As a business direction, will strengthen external sales of effective and highly-functional ingredients (effective utilisation of IP acquired in-house).
- The functional ingredient business got underway in February 2007. In the near term, will promote high quality, safety, functionality, flavour and low cost of the 5 aforementioned items through educational and profile-raising activity (employing data).
- A characteristic of Manufacturer F's ingredient business is the high repeater rate among end users (general consumers). Manufacturer F attributes this to high perceptive effects and aims to develop faster-acting ingredients.
- Will continue to use NZ ingredients as NZ is known for safety and quality. As the small size of the sales team limits expansion of direct sales, distributor channels are being strengthened, though joint sales activities are unavoidable when pitching to brand manufacturers. Thus, there are issues in the area of business advancement.

Sales & Marketing Strategy

- This business is undertaken by the international nutritional food division (merged in April 2008 with the IP strategy office, which was in charge of functional ingredients), but sales promotion is greatly restricted by the team's small size. However, all ingredients have done well in terms of new applications – a 13-fold year-on-year increase for whey peptide (HW-3), 3-5-fold increase for milk ceramide (MC-5).
- Products are marketed mainly to brand manufacturers (of food, beverages, functional food, etc.) and both direct sales and distributor sales channels are used (even when distributors carry out sales activities on behalf of the company, joint activities are eventually required).
- Food and beverage manufacturers are currently main targets, the push being products that 'taste good.' For supplements, however, flavour is not a selling point, so functional and price merits are pushed (one less selling point).
- In terms of user company size, Manufacturer F seeks to stabilise business (hedge risk) by increasing small to medium sized customers, rather than seek rapid expansion through adoption of ingredients by large manufacturers.
- Believes NZ-made can be used as a selling point (a real high level of safety and NZ's good image have appeal as long as price differences are not large).
- Is pushing functional ingredients for women, therefore appealing to a target base which is highly health-conscious and concerned about improving standard of living.
- Manufacturer F's ceramide ingredient (MC-5) is competitive with a 5% ceramide content, compared to a 2-3% average, and a price advantage (JPY60-70,000/kg).

R&D Strategy

- Carries out its own functional ingredient R&D (all 5 aforementioned ingredients were developed in-house), obtains its data, and introduces ingredients with high potential to the market. Raw material procurement and manufacturing is outsourced to NZ companies (joint research and other cooperation is also undertaken).
- NZ is an agricultural country boasting excellent human resources and research in areas such as agriculture, organic chemistry, biology and horticulture, and therefore has advantages as a location for contract manufacturing.
- Evidence and data is vital in the functional food business and Manufacturer F will continue to focus on maintaining an advantage in this area.
- Always on the lookout for new dairy ingredients, but not many become products.
- 4 society presentations (and 2 academic papers) have been given for milk ceramide, 1 for whey peptide (1 paper in progress), 4 for Fe-lactoferrin, and 4 for MBP.
- Areas to watch include 'skin improvement/beauty items, sports/dieting items and lifestyle improvement items (for women).'

Survey Data (Individual Companies)
Functional Food Final Product Manufacturers

Cosmetics & Health Food Manufacturer G

- ◆ Leading manufacturer and seller of cosmetics and functional food. Percentages of total sales (FY2008) are cosmetics, 51.1%, functional food, 29.7%, and others, 19.2%.
- ◆ Founded in 1980 as a mail order cosmetics company. Entered the functional food market in 1994 via mail order channels. Commenced sales of functional food at Seven Eleven stores in 1999.
- ◆ Expanded business by selling at an affordable price through convenient channels such as mail order and convenience stores, but sales revenues for the functional food business as a whole have recently been declining (except for some products) due to intense competition and the disappearance of health information TV programs which stoked the ‘health boom.’

Company Outline & Financial Performance

| | | | | | | | | |
|------------------------|--|----------------|---|-----------------|---------------|--------------------------------|-------|------------|
| Established | 1981 | Employees | 713 | Capital | JPY10,795 mil | | | |
| Main banks | Bank of Tokyo-Mitsubishi UFJ; Mizuho Corporate Bank; Sumitomo Mitsui Banking Corp. | | | | | | | |
| Branches/Sales offices | (Stores: 197) As of Jun. 2009 | Main locations | (Office) Yokohama; (Research centre) Yokohama; (Biomedical centre) Yokohama; (Plants) 3 subsidiaries | | | | | |
| Fin. Performance | Fiscal year ended | Net sales | | Ordinary profit | | Functional food business sales | | |
| | | (JPY mil) | YoY | (JPY mil) | % | (JPY mil) | YoY | % of total |
| | Mar. 2005 | 87,937 | 103.5 | 5,490 | 6.2 | 31,131 | 105.0 | 35.4 |
| | Mar. 2006 | 95,322 | 108.4 | 9,113 | 9.6 | 33,246 | 106.8 | 34.9 |
| | Mar. 2007 | 101,065 | 106.0 | 8,388 | 8.3 | 31,665 | *95.2 | 31.3 |
| | Mar. 2008 | 99,349 | 98.3 | 7,765 | 7.8 | 30,017 | 94.8 | 30.2 |
| | Mar. 2009 | 98,004 | 98.6 | 6,938 | 7.1 | 29,088 | 96.9 | 29.7 |
| Mar. 2010 (est.) | 97,500 | 99.5 | 7,300 | 7.5 | 28,400 | 97.6 | 29.1 | |

*The method of accounting for point service discount expenses was changed in fiscal 2006.

*Net sales and functional food business sales figures are consolidated figures.

Functional food business sales consist of dietary supplement business sales.

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Channel/Category | Sales | % of total | Distribution route by product/ % of total |
|--|------------------|--------|------------|--|
| | Mail order sales | 13,011 | 44.7% | Company-run stores Other sales routes (7-Eleven, Ito Yokado, other GMS, supermarkets, export, etc.) |
| Store sales | 7,948 | 27.3% | | |
| Other (CVS, GMS, export, etc.) | 8,129 | 28.0% | | |

Product Trends

- Functional food sales in FY2008 were JPY29.088 billion, a 3.1% year-on-year decrease.
- Recent ongoing difficulty in businesses where differentiation is difficult (e.g. vitamins and herbs) was a major factor in declining revenues.
- Beauty supplements, on the other hand, have performed well recently due to aggressive marketing activities. Company G also handles cosmetics and has a strong image as a beauty company.
- An anti-aging product, which works by improving metabolism and contains 6 ingredients (active soy saponin B, coenzyme Q10, HTC collagen, soy isoflavone, hyaluronic acid and royal jelly) has greatly exceeded company targets despite the lack of any specific advertising. It targets women in their 40s-50s.
- Company G's core users are women in their 20s and 30s. Incorporating middle-aged to elderly, who are main functional food users, has been an issue in recent years. Some products targeting middle-aged and elderly, such as glucosamine, performed well in FY2008.
- In the mail order business, effort has gone into capturing new customers using newspaper advertisements for supplements targeting middle-aged to elderly.

Consumer Trends

- Company G sells cosmetics, therefore women make up the large majority of customers. Prices are low, too, so core customers are young.
- Functional food sales revenue continues to fall, but beauty products and dieting products sought by women in their 20s-30s (core customers) are strong.
- Effort has gone into capturing middle-aged to elderly users in recent years. Businesses that have been strengthened and are performing well include 'Bitoki', an anti-aging product targeting women in their 40s-50s, and products responding to issues faced by middle-aged to elderly.
- Company G's advantages in branding and product design cannot be easily leveraged for vitamins and herbs. Building a regular customer base is hard amid intense competition.
- Spending per customer via mail order was JPY5,873 in FY2008, up 1.0% from the previous year. However, 'live' customers (customers who have made at least one purchase in the last 7 months) have declined for both mail order and store sales (mail order, 6.8% year-on-year decrease; store sales, 11.8% decrease).

Production & Purchasing Trends

- Has a line up of over 100 functional food items, with over 400 different ingredients used in manufacturing. Small ingredient lots are therefore preferable.
- At present, NZ ingredients are mainly limited to lactose (used as a diluent). Overall, not many NZ ingredients are used.
- Company G is looking for new suppliers and gathers data on available items, proposals, latest technology and other up-to-date information from countries/regions worldwide. Procures ingredients and materials in line with a motto referring to a persistent quest for 'reliability, safety, high quality and low price,' and builds mutually-trusting and mutually-complementary relationships with suppliers, without discriminating on nationality or presence/absence of past business. Also selects trading partners who consider the environment, procuring from the most-suited places around the world at fair prices.
- Manufactures at plants of dietary supplement manufacturing subsidiaries. Manufactures some hard capsules, tablets and lipid-soluble items. Other manufacturing is outsourced.
- Plants are responsible for purchasing.
- Stipulates its own safety and quality guidelines for functional food, consisting of 8 points under two concepts – scientifically-backed 'safety' in product creation, and 'reliability' with full after-sales service. 'Safety' involves adherence to the industry's strictest standards in four areas – 1: ingredients, 2: development, 3: manufacturing, and 4: testing. For 'reliability,' service is performed through 5: counselling, 6: unlimited guarantee for returns, 7: medicine compatibility, and 8: communication (e.g. disclosure of origins). Such efforts are intended to reduce consumers' concerns.
- Ingredients are selected after strict checks covering, for example, pesticide residues and allergens. Health, nutritional and safety information is gathered by Company G's central research facility, technical departments and affiliated company, the Quality & Safety Research Center.
- Ingredients' places of origin and processing have been made public on Company G's website since September 2008.

Sales & Marketing Strategy

- Engages in mail order, store sales (directly-managed stores, except some cases) and wholesale (general distribution, overseas, etc.). Channel composition for functional food in FY2008 was mail order, 44.7%, store sales, 27.3%, and wholesale, 28.0%.
- Sales for each of the channels in FY2008 were: mail order, JPY13.011 billion (down 3.7% year-on-year), store sales, JPY7.948 billion (down 7.9%), and wholesale, JPY8.129 billion (up 3.2%).
- Mail order sales are contracting to a lesser degree (year-on-year changes: FY2007, -19.2, FY2008, -7.4, FY2009 plan, +3.1) and Company G aims to establish repeater products through promotional campaigns and raise the performance of existing products.
- Factors in declining store sales include fewer stores and a sales slump at existing stores. Company G plans to advance development of new store formats and its 'scrap and build' program.
- Overseas wholesale sales are strong, particularly in China, and account for around 5% of functional food sales. Drinks containing collagen or for dieting are very popular.

Key Strategies

- 'Selection and focus' will be applied to dietary supplements. The product line up will be reorganised, and beauty supplements for women and products for middle-aged and elderly strengthened. Aims are to further expand the beauty supplement business and capture new middle-aged to elderly customers. Company G also aims to set up a made-to-order supplement program for mail order and directly-managed store channels.
- Mail order customer service will be strengthened to improve customer loyalty and highly-profitable Internet sales will be further enhanced.
- New store sales formats will be developed and 'scrap and build' advanced.
- Overseas, efforts to develop the Chinese market will continue and unprofitable areas will be reviewed. Company G views 2009 as its inaugural year of globalisation. Equity and business partnerships in Hong Kong and China were turned into subsidiaries in September 2009 through acquisition of 40% of outstanding shares.
- Aims for JPY28.4 billion sales (2.4% year-on-year decrease) in the dietary supplement business in FY2009.

R&D Framework & Trends

- Product development is either 'market-in' or 'ingredient-based.' Design and development of market-in products is undertaken by product planning departments, after which ingredients are selected. Ingredient-based development involves functionality research by in-house researchers. The best functions are turned into products.
- The central research facility carries out research on ingredient and product functionality. Evidence is obtained for collagen, a focal item, and items whose functions remain unclear even after clinical trials or which are based on proprietary formulas.
- The Quality & Safety Research Center, an affiliate, performs ingredient analysis.

Door to Door Sales Company H

- ◆ Leading door-to-door (network marketing) company. Founded in 1975. In 1986, became the first network marketing company and company selling mainly functional food to be listed on the stock exchange. Yamanouchi Pharmaceutical (now Astellas Pharma) was parent company from February 1989 to May 2004. Currently positioned as an operating company for a holding company. Products are manufactured by a group company (Shizuoka Prefecture, established 1978).
- ◆ A veteran in the functional food market. Salespeople are mainly women aged 50 or above. New salespeople are not easy to secure and sales are declining. However, importance is placed on solidarity among subscribers and Company H is performing well relative to others in the highly volatile network marketing industry.

Company Outline & Financial Performance

| | | | | | | | | |
|------------------|---|---------------------|--|---------------------------|------------|---|-------|------------|
| Location | | | | | | | | |
| Established | 2004* | Employees | 152 | Capital | JPY400 mil | | | |
| Main banks | Mizuho Corporate Bank; Chuo Mitsui Trust and Banking; Sumitomo Mitsui | | | | | | | |
| Service counters | 9 locations | Main locations | Sapporo, Sendai, Maebashi, Tokyo, Yokohama, Osaka, Matsuyama, Fukuoka, Okinawa | | | | | |
| Fin. Performance | Fiscal year ended | Net sales (JPY mil) | | Ordinary profit (JPY mil) | | *Functional food business sales (JPY mil) | | |
| | | | YoY | | % | | YoY | % of total |
| | Mar. 2005 | 17,144 | 100.0 | - | - | 14,800 | 100.0 | 86.3 |
| | Mar. 2006 | 16,088 | 93.8 | - | - | 13,900 | 93.9 | 86.4 |
| | Mar. 2007 | 14,450 | 89.8 | - | - | 12,500 | 89.9 | 86.5 |
| | Mar. 2008 | 14,315 | 99.1 | - | - | 12,400 | 99.2 | 86.6 |
| | Mar. 2009 | 13,710 | 95.8 | - | - | 11,870 | 95.6 | 86.6 |
| Mar. 2010 (est.) | - | - | - | - | - | - | - | |

*Founded in 1975 as a Japanese corporation. Had a new start in 2004 with a change of parent company

Breakdown of Functional Food Sales

| | | | | |
|--|---------------------------|--------|------------|--|
| Func. food sales breakdown for the latest FY (JPY mil) | Products/Product category | Sales | % of total | Distribution route by product/% of total |
| | Basic Core | 11,870 | 100.0 | Sales by regular users: 100.0% |
| | Basic Group | | | |
| | ID Group | | | |
| Dietary Supplements | | | | |

Main Trading Partners

| | | | |
|-----------------------|---|--------------------------------|-----------------------------|
| Main trading partners | Main suppliers | Main items purchased | Main customers |
| | 1.Chiba Flour Milling 2.Kyowa Wellness 3.Others | Dietary supplement ingredients | 1.Supervisors (direct sale) |

R&D Framework & Trends

- Seeks tie-ups with universities and various other research institutions.
- Has an eye on developing global business through tie-ups with U.S. companies. Plans to develop a unique product line through information exchange with the U.S. and collaboration.

Product Trends

- Sales do not fluctuate wildly due to the existence of many long-time users and strong core products, but sales of existing products tend to fall slightly when new or renewed products are introduced.
- 'cinch,' launched in November 2007 following the rise in metabolic syndrome concerns, is a dieting item available in three forms – shake, tablet and bar. With dieting products, it is vital that users do not lose interest and continue to use the product. Company H wants to sustain sales with such measures as timely introduction of new flavours.
- A promising immuno-stimulation product employing the combined extracts of four plants (pumpkin seed, safflower flowers, plantain seed and Japanese honeysuckle flowers) as its main ingredient has enjoyed solid sales for offering protection against pandemic influenza. Company H believes relative affordability was a supporting factor.
- A product consisting of glucosamine mixed with Devil's Claw extract, from the African herb, is Company H's top performer in terms of sales value. Company H believes this is due to suitability for the customer base (50s and above). On the other hand, a collagen drink containing fish-derived collagen mixed with ingredients such as ginseng extract, royal jelly and hyaluronic acid has struggled relative to the rest of the market. Factors in this sluggishness likely include the fact that collagen can be purchased at an affordable price via mail order or drugstores and other retailers. The formula also needs to be enhanced. However, the unit price of collagen products is low and door-to-door sales is not seen as a profitable sales method.

Sales & Marketing Strategy

- Is working to increase the number of subscribers under the vision, 'Sharing "healthy and happy lives" with as many people as possible,' through seminars and promotional campaigns incorporating practical ideas for capturing new regular users. However, capturing new subscribers continues to be difficult.
- When launching a new large item, sales promotion involves campaigns suited to the product's characteristics and target users.
- A regular purchase program is in place for all products, targeting members and distributors. For continued purchases over a certain period of time, participants accumulate points that allow them to receive gifts.

Consumer Trends

- Main distributors are women, predominantly housewives. The core age group is late 50s. Recent challenges are increasing the number of new distributors and members who are regular users. A particular challenge is working out how to increase the number of young users in their 30s and 40s.
- Dieting needs among consumers are very high and there is a strong tendency to try out one product or method after another rather than stick to one product. Incorporating exercise into a diet program with diet food is also effective, but many consumers do not persist as there is a strong preference for effortless dieting.

Production & Purchasing Trends

- Production is mainly carried out by a group company, partly by contract manufacturers.
- Ingredient selection and clinical trials are carried out at headquarters.
- No NZ ingredients are currently used by Company H.
- Has previously been offered green-lipped mussels but did not take them as they weren't consistent with Company H's product concepts.
- Functional food manufacturers tend to avoid livestock-derived ingredients.
- There are no adverse aspects to NZ's image.
- Views NZ dairy ingredients as promising.
- Global ingredient selection criteria are 1) naturally-derived, and 2) made from naturally-derived ingredients. Ingredients are then selected after an overall judgment based, for example, on evidence and safety.
- Uses overseas ingredients but doesn't import directly, seeking assurance by employing trading houses or manufacturers familiar with foreign/domestic laws and restrictions.
- Most offers come from trading houses. Introductions sometimes come via the purchasing division of a U.S. group company.
- Negotiates with suppliers for lot sizes to suit circumstances of production.

Key Strategies

- Will pursue health and beauty based on a corporate ideal of 'harmony with nature,' and focus on development of new products with appeal in raising standards of living.
- Will look to globalise by further strengthening joint product development with the U.S. Regarding commercialisation, will place importance on aligning product concepts and adopt ingredients that can be used in Japan.
- The product line up will be key to capturing new subscribers. Much effort will therefore go into developing products that will attract new customers while also sustaining existing products. However, the existing line up is broad and Company H hopes to restructure it so it is easier to understand.

Cosmetics Company I

- ◆ Top Japanese cosmetics manufacturer selling via routes including cosmetics chain stores and pharmacies. Solid sales infrastructure is a major strength, with different companies performing sales activities for cosmetics store and pharmacy routes.
- ◆ Expanding the ‘healthcare business,’ which includes functional food, is a company-wide objective. To firmly establish a brand as quick as possible, marketing resources have recently been concentrated on ‘collagen’ to foster that business.

Company Outline & Financial Performance

| Established | 1872 | Employees | 3,500 | Capital | JPY64,506 mil | | | |
|------------------------|---|--------------------------|---|--------------------------------|---------------|--------------------------------|-------|------------|
| Main banks | Mizuho Bank; Bank of Tokyo-Mitsubishi UFJ; Chuo Mitsui Trust and Banking; Mitsubishi UFJ Trust and Banking; Hyakujushi Bank; 77 Bank; Daishi Bank; Gunma Bank | | | | | | | |
| Branches/Sales offices | 7 locations | Main locations | Tokyo, Yokohama, Kamakura, Kuki, Kakegawa | | | | | |
| Fin. Performance | Fiscal year ended | Net sales (consolidated) | | Ordinary profit (consolidated) | | Functional food business sales | | |
| | | (JPY mil) | YoY | (JPY mil) | % | (JPY mil) | YoY | % of total |
| | Mar. 2006 | 670,957 | 104.9 | 42,161 | 6.3 | 15,000 | 135.1 | 2.2 |
| | Mar. 2007 | 694,594 | 103.5 | 53,465 | 7.6 | 14,000 | 93.3 | 2.0 |
| | Mar. 2008 | 723,484 | 104.2 | 65,088 | 9.0 | 16,000 | 114.3 | 2.2 |
| | Mar. 2009 | 690,256 | 95.4 | 52,061 | 7.5 | 17,000 | 106.3 | 2.5 |
| | Mar. 2010 (Est.) | 650,000 | 94.2 | 51,000 | 7.8 | - | - | - |

R&D Framework & Trends

- Directs effort into looking for original ingredients and the company’s research centre searches for highly-usable ingredients. Company I also approaches ingredient manufacturers and trading houses.
- Will stick fast to its stance of properly confirming evidence so products can be recommended to customers with confidence.

Consumer Trends

- The large majority of core customers are women.
- Customers of Company I’s cosmetics store sales routes are aged from late 40s to early 60s. However, young people and middle-aged to elderly customers also feature at retail drugstores, especially in the collagen business.
- Company I is strongly associated with beauty and many people purchasing the company’s functional food products have ‘beauty’ as an ultimate goal.

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Product/Product category | Sales | % of total | Distribution route by product/% of total |
|--|--------------------------|-------|------------|--|
| | Collagen products | 6,700 | 39.4 | Mainly chain stores; Also uses pharmacies and drugstore mass retailers, etc. *The Benefique line is only available at cosmetics outlets |
| Q10 AA, Benefique Q10 | 1,700 | 10.0 | | |
| Others | 8,600 | 50.6 | | |
| <Other core products> | | | | |
| Benefique Gymrind Super Burn | | | | |

Main Trading Partners

| Main trading partners | Main suppliers | Main items purchased | Main customers |
|-----------------------|----------------|----------------------|---|
| | - | - | 1. Cosmetics stores 2. Pharmacies 3. Drugstores |

Product Trends

- Managed a 2-digit year-on-year increase in FY2008 1st half but momentum was lost in the 2nd half following a downturn in consumption. As a result, functional food sales for the full year ended at JPY17 billion, up approx. JPY1 billion year-on-year. Conditions remain tough in FY2009 1st half, but the previous year's level is currently maintained.
- Consumers associate Company I with beauty and sales of functional food containing collagen, especially drinks, have recently been strong, driving functional food sales overall. FY2008 collagen sales were JPY6.7 billion, up just over 10% year-on-year.
- Company I's collagen product concept is to increase collagen production in the body.
- A product made using *chomeiso* (lit. 'long-life grass'), cultivated under contract on Yonaguni Island, Okinawa, is performing well. The focus is on creating an image incorporating Yonaguni's world view (nature, lifestyle, culture). Factors in the strong performance are peace of mind (from cultivation on Yonaguni) and striking a chord with women. Company I is working to raise the profile of the 'Chomeiso' product through exposure in magazines alongside Yonaguni Island, the origin of its ingredient.
- 'Chomeiso' is sold mainly via cosmetics stores, where explanations can be provided. As the response from those stores and consumers has been positive, Company I will look to nurture the product into a strong business like collagen.
- Coenzyme Q10 is a product/ingredient fostered together with retailers who understand the ingredient's merits. The boom has ended, but performance remains stable, sustained by consumers/retailers who like the ingredient/product. FY2008 coenzyme Q10 sales were slightly lower than FY2007 (JPY1.8 bil), though roughly the same.
- With the renewal of skin-whitening serum products, skin-whitening functional food products were also renewed (e.g. by increasing ingredient content) to strengthen skin-whitening promotion both inside and outside the body. Strong competition exists in the form of medicine and cosmetics, but functional food items can be displayed alongside cosmetics in a skin-whitening section (medicine cannot). This appeal will be leveraged at sales outlets.

Key Strategies

- Will pursue recommendations to promote beauty for women. As well as making inroads with existing products, will put forward recommendations for achieving all-round beauty, including dieting and health.
- Dieting is a major need among women. Company I plans to leverage this business with untried approaches and usage and situational recommendations.
- Looks to expand business by bolstering the range of products supporting the 'wellness' of women. Wants to put forward recommendations to support the entire body. Wants to search for good ingredients, which are needed for that purpose.

Production & Purchasing Trends

- Manuka honey has a strong image as an NZ ingredient.
- NZ has an extremely clean image. Instead of focusing solely on the ingredient's function, cleverly intertwining aspects of NZ, where the ingredient was raised, including its world view, history and nature, would be an effective way to strike a chord, especially with women (core functional food users).
- Domestic functional food ingredients are limited, inevitably pushing up the proportion of overseas ingredients. Almost all functional plant extracts are from overseas.
- Key issues are whether safety (which differs with the country) is consistent with domestic regulations and whether control frameworks are in place. As it is difficult for Company I to control these issues directly, trading houses act as a go-between. Costs may be higher than for direct transactions, but this is necessary to hedge risks.
- All functional food manufacturing is outsourced.
- Company I or its research centres carry out product design and ingredient selection.
- Safety trials and experience with food are of paramount importance, and more so than before. Even with familiar ingredients that are very safe or for which there is great demand, Company I sometimes obtains its own effectiveness data in order to differentiate its product from a different angle.
- Basic effectiveness data is a critical factor during preliminary screening of new ingredients.

Sales & Marketing Strategy

- Has a policy of concentrating marketing costs on nurturing/developing business.
- For 'Collagen,' an aggressive TV commercial campaign was used to raise the product's profile, and persistent promotional efforts involving store presentation and tasting events, for example, also contributed. Plans year-round continual marketing activities for 'Collagen' and ongoing focus on commercials and store presentation to raise profile.
- Retail drugstore and cosmetics store distribution channels each account for roughly half the functional food business.
- At drugstores, continued effort will go into presentation that will appeal to consumers. Amid volatility in the drugstore industry, will seek and analyse information in order to make new layout and concept-based recommendations to retailers.
- Beauty consultants, as a means of in-store communication, are a major strength for cosmetics stores. Sales of beauty food are strong at standalone stores and department stores where consultation is provided.
- Cosmetics stores manage to capture regular users with a 'Beauty Foods Mate' system whereby products are sent to customers each month. 19 items in 8 product groups are covered. Customers receive 2 months of product free when ordering 12 months worth.

Manufacturer J

- ◆ Top-class company in the oils manufacturing industry. Created in 2004 with the merger of 3 industry leaders. The functional food business was inherited from Honen Corporation.
- ◆ The ‘functional foods and fine chemical business’ involves the sale (mainly at pharmacies and department stores, etc.) of functional foods such as vitamin E, isoflavone and lecithin after extracting useful ingredients from residue remaining after oil extraction from soybeans. Also a supplier of ingredients such as isoflavone.

Company Outline & Financial Performance

| | | | | | | | | |
|------------------------|---|---------------------|---|---------------------------|---------------|--|-------|------------|
| Established | April 2002 | Employees | 1,072 | Capital | JPY10,000 mil | | | |
| Main banks | Mizuho Corporate Bank; Norinchukin Bank; Bank of Tokyo-Mitsubishi UFJ | | | | | | | |
| Branches/Sales offices | 13 locations | Main locations | (Main branches) Tokyo, Osaka; (Branches) Hokkaido, Tohoku, Kanto, Shizuoka, Nagoya, Hokuriku, Chugoku, Shikoku, Kyushu; (Sales offices) 2 offices | | | | | |
| Fin. Performance | Fiscal year ended | Net sales (JPY mil) | | Ordinary profit (JPY mil) | | Functional food business sales (JPY mil) | | |
| | | | YoY | | % | | YoY | % of total |
| | Mar. 2006 | 169,794 | 94.7 | 9,193 | 5.4 | 1,470 | 95.5 | 0.9 |
| | Mar. 2007 | 163,393 | 96.2 | 6,954 | 4.3 | 1,339 | 91.1 | 0.8 |
| | Mar. 2008 | 190,844 | 116.8 | 4,377 | 2.3 | 1,477 | 110.3 | 0.8 |
| | Mar. 2009 | 223,219 | 117.0 | 4,403 | 2.0 | 1,480 | 100.2 | 0.7 |
| | Mar. 2010 (Est.) | 190,000 | 85.1 | 6,700 | 3.5 | | | |

*‘Net sales’ and ‘Functional food business sales’ are consolidated figures.

Sales & Marketing Strategy

- In FY2008, department stores accounted for a lower percentage (35% => 30%) while drugstores stayed level (45%). The co-op channel improved however, increasing the percentage accounted for by mail order, co-ops and others (20% => 25%).
- Distribution conditions have been difficult with department store closures and waning retail drugstore momentum.
- Department store sales growth is unlikely, but a department store presence will hopefully have the effect of advertising.
- Ability to explain products via catalogues for joint purchasing is seen as a reason for co-op sales growth. The reliable image of co-ops is another contributing factor.
- As a new channel, will strengthen approaches to health insurance associations, which are obligated to carry out specific health examinations/specific health guidance in connection to metabolic syndrome.
- Is focusing on advertising and promotional campaigns through tie-ups with drugstores and department stores, and runs ads in health magazines and magazines for housewives.

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Product/Product category | Sales | % of total | Distribution route by product/% of total |
|--|--|-------|--------------------------------------|--|
| | Collagen products (incl. collagen and hyaluronic acid) | 680 | 45.9% | Pharmacies: 45.0% |
| Lecithin | 230 | 15.5% | Health food/department stores: 30.0% | |
| ‘elf’ | 270 | 18.2% | Mail order, co-ops, etc.: 25.0% | |
| Soy isoflavone | 40 | 2.7% | | |
| Others | 260 | 17.6% | | |

Main Trading Partners

| Main trading partners | Main suppliers | Main items purchased | Main customers |
|-----------------------|----------------|----------------------|--|
| | — | — | 1. Tampei Nakata 2. Iwaki 3. AFC Moriya 4. Riken 5. Others |

R&D Framework & Trends

- Regarding functional food product design, Manufacturer J’s functional food product department carries out product concept determination to planning and ingredient selection together with developers.

Consumer Trends

- Users of ‘Honen Nano Collagen & Hyaluronic Acid’ series products are in their 50s, which is older than the age group originally targeted. Business is stable as this age group is more likely to continue purchasing the product if they like it. Also tried to entice younger users (40s, etc.) through a promotional campaign for related products in FY2009 1st half.

Product Trends

- Functional food sales in FY2008 were JPY1.48 billion, 100.2% compared to the previous year. Beauty supplements performed particularly well.
- 2008 was a good year, but business continues to be sluggish in 2009. Demand usually slumps in Jan-Feb, but tough conditions continued from March through to June.
- Competition has intensified in the collagen business and Company J is feeling a sense of urgency. Currently only collagen, glucosamine and blueberry anticipate growth.
- Carried out a promotional campaign from July 2009, mainly at drugstores, to celebrate a product's 10th anniversary. Monthly performance has been 100-105% in July – September. Would naturally wish for more growth, but performance could be seen as good considering the tough economic conditions. The campaign contributed to a 100.6% performance by functional foods in FY2009 1st half (Apr-Sep). This was slightly better than the previous year but did not meet original targets.
- Manufacturer J's focal product is currently 'Honen Nano Collagen & Hyaluronic Acid' and sales are increasing. It contains nano-size collagen peptides mixed with hyaluronic acid. Highly-perceptible effects are viewed as a factor in the product's strength.
- A product for alleviating metabolic syndrome launched in September 2007 was well-received at the start but sales are currently struggling. Major factors include competition with other metabolic syndrome items, such as medicines and health-oriented food products, a tendency to simply see dieting as the way to alleviate the syndrome, and the fact that men were targeted but men have not acted to alleviate the syndrome with supplement consumption. Another reason for the slump is that the product is not reaching their target customers as main drugstore and department store users are women. Ideally, health insurance associations, which are obligated to carry out specific health examinations/specific health guidance, could recommend functional food as a way to alleviate metabolic syndrome. Manufacturer J plans to strengthen its approach to such associations.
- Core products, 'elf' and 'Lecithin,' have an established user base and sales do not fluctuate much. The businesses are strong.
- Soy isoflavone business has slumped to a quarter of its peak size. The issue of the upper limit (the safe supplemental daily intake upper limit for soy isoflavone, as a FOSHU, has been set at 30mg/day) had a major impact and demand is yet to fully recover. Besides confusion that has arisen among consumers, manufacturers have great concern about being unable to advocate consumption amounts higher than the upper limit.

Production & Purchasing Trends

- Manufacturing is carried out at a company-owned plant. GMP certification was acquired for functional food ingredients and health supplements in 2009. Outsourcing is employed on occasion in the commercialisation stage.
- None of the main ingredients are NZ ingredients.
- No NZ ingredients come to mind straight away, but the dairy association is strong.
- NZ has a good, laid-back image.
- As a oils manufacturer, Manufacturer J imports soybeans. Soy items used for functional foods are obtained by extracting beneficial components (e.g. isoflavone, lecithin) from soybean residue after oil extraction.
- When using overseas ingredients, it is important to consider issues such as differences relating to food laws and regulations from country to country and agrochemical residues.
- Trading houses are used due to payment and currency issues. However, the end product manufacturer is ultimately responsible for quality and Manufacturer J takes responsibility for quality inspections, which are undertaken in-house or by an independent party. Test results provided by an independent party increase the degree of trust from outside, particularly in the case of new ingredients.
- When selecting ingredients, information provided by trading houses, ingredient manufacturers and from trade shows, among other sources, is referenced. Ingredient manufacturers often make an approach.
- Besides very familiar ingredients, evidence and other data is preferable for assessing new ingredients. It is also best if anticipated users and selling points are clear.
- As product price has to be consistent with the end product's target users, ingredients used must also be accommodative to the end product price (e.g. expensive ingredients cannot be used for low-price functional food targeting young people).
- Have received introductions to ingredients from foreign embassies and corporations in the past, but an ingredient on its own has no appeal. Manufacturer J wants full proposals encompassing expected benefits and evidence, target users, and other aspects.

Key Strategies

- Besides continued efforts with co-ops, Manufacturer J plans to commence approaches to health insurance associations.
- Looking to the future, Manufacturer J also looks to experiment with supplements, with form, for example, and introduce products bordering on food.

Pharmaceutical Company K

- ◆ Leading developer, manufacturer and seller of OTC pharmaceuticals and sanitary products.
- ◆ Started functional food business in 1999 via mail order. Also took over a functional food business (Eucommia tea) in 2003.
- ◆ Employs mainly the mail order channel. Store sales channels, principally drugstores and pharmacies, are also used.

Company Outline & Financial Performance

| Established | | 1919 | | Employees | | 1,321 | | Capital | | JPY3,450 mil | |
|------------------------|-------------------|-------------|--------|-----------------|--------|--------------------------------|-------|------------|--|--------------|--|
| Main banks | | — | | | | | | | | | |
| Branches/Sales offices | | 9 locations | | Main locations | | Osaka, Tokyo, Nagoya, etc. | | | | | |
| Fin. Performance | Fiscal year ended | Net sales | | Ordinary profit | | Functional food business sales | | | | | |
| | | (JPY mil) | YoY | (JPY mil) | % | (JPY mil) | YoY | % of total | | | |
| | Mar. 2007 | 100,588 | 107.3 | 13,655 | 13.6 | 11,186 | 97.9 | 11.1 | | | |
| | Mar. 2008 | 105,941 | 105.31 | 14,401 | 13.6 | 11,991 | 107.2 | 11.3 | | | |
| Mar. 2009 | 112,092 | 05.8 | 14,401 | 14.2 | 12,982 | 108.3 | 11.6 | | | | |

Consumer Trends

- Mail order is the main distribution channel, therefore users are older. In terms of order method, few orders are made via the Internet. The vast majority of orders are made by phone, main customers being 50 or older. Customers are relatively younger at stores

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Product/Product category | Sales | % of total | Distribution route by product/% of total |
|--|--------------------------|--------|------------|--|
| | Eucommia tea | 1,500 | 11.6 | |
| | Supplements and others | 11,482 | 88.4 | |

Main Trading Partners

| Main trading partners | Main suppliers | Main items purchased | Main customers |
|-----------------------|----------------|----------------------|--|
| | — | — | General customers Pharmacies, supermarkets and home centres |

Product Trends

- Pharmaceutical Company K's functional food business centres on core Eucommia tea items. As well as multi-vitamins, other supplements and dietary fibre, products added recently include 'Edicare' (a supplement for ED).
- Annual sales are JPY12.982 billion, around 80% of which are mail order sales.
- Mail order sales account for much of functional food movements with store sales also employed. 120-130 functional food items are available, around 100 items of which are sold by mail order, 30 items via store sales (incl. items sold via both channels).
- Items sold in stores include supplements containing general (popular) ingredients and dietary fibre.
- Items sold only via mail order include high-priced items and items with special purposes, such as 'Edicare.'
- Strong sellers include 'Blueberry & Nikko Maple Set,' 'Yasai-tsubu' (vegetable tablets), 'Edicare,' 'Multi-Vitamins,' and 'Glucosamine & Collagen Set.'
- Strong sellers in stores are general-purpose supplements such as 'Multi-Vitamins' and 'Easy Fiber' dietary fibre. 'Easy Fiber,' a standard dieting product, is also sold as a private brand for distributors.
- Eucommia tea product sales are approx. JPY1.5 billion, accounting for more than 10% of functional food sales. A wide range of Eucommia tea items are available.
- 'Edicare,' sold only via mail order, is performing well. It is sold as a supplement for people wanting to remain active, but it is also effective in improving blood flow, body revitalisation and improving one's constitution. An agreement has been entered with the Swiss possessor of a patent for the product, giving Pharmaceutical Company K Japanese distribution rights. The product formula has been modified for Japanese people, containing US-patented arginine mixed with Pycnogenol.
- Pharmaceutical Company K is dedicated to 'easy-to-understand marketing.' In October 2009, the company launched five FOSHU items as the 'Tokuho no Chikara' (FOSHU Power) series, using naming that makes product benefits easy to identify – 'Cholesterol,' 'Blood Triglycerides,' 'Blood Pressure,' 'Blood Sugar,' and 'Intestinal Regulation,' referring to areas of improvement in relation to lifestyle habits.

Production & Purchasing Trends

- Creates products in-house using ingredients obtained from ingredient manufacturers and importing trading houses.
- Many functional food ingredients are imported ingredients, use of which is inevitable, whether they like it or not. Selection criteria for items are clear benefits and a high degree of safety.
- When acquiring distribution rights, Pharmaceutical Company K takes evidence obtained by the other party for patenting and matches it against scientifically-based guidelines it employs as a pharmaceutical company. In other words, suppliers of new ingredients are asked to carry out safety trials and provide evidence, but Pharmaceutical Company K also performs its own tests.
- Functions and benefits matching people's needs are paramount. Price and other criteria follow. Ingredients are also easier to accept the cheaper they are and the smaller the lot.
- Naturally, submission of safety data and evidence is required and Pharmaceutical Company K also performs tests. Manufacturing must also be carried out in line with GMP guidelines.
- Has products containing 'blackcurrant' and 'lactoferrin' on the market. However, has not disclosed whether those ingredients are from NZ. An ingredient will not necessarily be deemed good on the basis it is from NZ. Evidence is needed to show that the ingredient is unique to NZ or that NZ ingredients have greater functions or benefits than other countries' ingredients.
- Ingredients are adopted in two ways – Pharmaceutical Company K approaches an ingredient manufacturer to determine whether they have ingredients with effects/benefits responding to consumer needs, or ingredient manufacturers come forward with proposals.
- Many new ingredients recently adopted resulted from approaches by advertising agents.
- Imports some ingredients from countries of origin, including items processed in other countries, but ingredients are generally purchased from ingredient manufacturers in Japan.

Sales & Marketing Strategy

- As a pharmaceutical company, has strength in access to medicine routes. Pharmacies and home centres are main distribution channels. Efforts therefore focus on initiatives such as having marketing personnel specifically for retail drugstores. While products are available in some convenience stores, intense competition from other companies' products make it hard to secure shelf space. Will actively engage in sales activities targeting channels such as general merchandise stores (GMS) and supermarkets.
- Sells some products exclusively via the online store.
- As many products are sold only via mail order, TV commercials are purposely run to raise market profile, highlighting the quality on offer as a pharmaceutical company.
- A 'customer consultation office' has also been set up to interact with customers. Dialogue allows identification of customers' true thoughts. The aim is to let no dissatisfaction go unnoticed. Annually over 70,000 comments are compiled and analysed qualitatively, not quantitatively, so that even minority opinions will be used to identify real problems that customers have.
- Mail order customers are sent a regular members' newsletter.
- Sales promotion at stores involves sales personnel visiting pharmacies and drugstores to set up in-store displays and using sales promotion kits to attract customers with POP displays and volume presentations, using their initiative to convey the merits of products and beneficial ingredients.

Key Strategies

- Has been focusing on the healthcare business for the last four years. In the food business, announces a new product at a pace of one per month to raise the company's topicality value. Intends to continue drawing attention to its paramount focus on quality as a pharmaceutical company.
- As well as focusing on core mail order sales, Pharmaceutical Company K will also direct energy into relatively-weaker store sales channels (mass retailers, retail drugstores, etc.).
- Part of that has involved redesigning packaging for 11 'Pharmaceutical Company K supplement' items since March 2009. Until now, white packaging with a green lettering portion was used for all products; now, illustrations are used to enable easy identification of contents and different colours are used for different targets. Packaging colours are pink for women, yellow for vitamins, blue for men (zinc products) and green for specialised functions.
- Will push ahead with ingredient research, putting effort into functional food for lifestyle diseases.
- Intends to actively seek FOSHU designation, particularly with Eucommia tea products. Will look into FOSHU applications as it enables a strong appeal to consumers with effect/benefit claims which cannot be labelled on general food items.

R&D Framework & Trends

- Carries out clinical trials and tests of functions and benefits through ingredient research and announces research findings.

Pharmaceutical Company L

- ◆ Old company founded in 1893. Manufactures and sells medicine, quasi-drug products, medical equipment and food.
- ◆ Core businesses are healthcare and capsules. The healthcare business involves manufacture and sale of products including the core 'Bifina' series, and 'Ryokucha Aojiru' (green tea green juice), agaricus, and glucosamine. In the capsules business, Company L's strength is its seamless capsules, and in addition to its own products, the company opens its doors to other companies, actively accepting consignments, mainly from overseas, including North America and Europe.

Company Outline & Financial Performance

| Established | 1936 | Employees | 205 | Capital | JPY3,537 mil | | | |
|------------------------|---|----------------|---|-----------------|--------------|---------------------------------------|------|------------|
| Main banks | Bank of Tokyo-Mitsubishi UFJ; Sumitomo Mitsui Banking Corp.; Resona; and others | | | | | | | |
| Branches/Sales offices | — | Main locations | (Plants) Osaka, Shiga, Shizuoka, Toyama | | | | | |
| Fin. Performance | Fiscal year ended | Net sales | | Ordinary profit | | Functional food business sales (est.) | | |
| | | (JPY mil) | YoY | (JPY mil) | % | (JPY mil) | YoY | % of total |
| | Mar. 2007 | 7,669 | 80.9 | -761 | — | 3,949 | 72.2 | 51.5 |
| | Mar. 2008 | 7,197 | 93.8 | 212 | — | 3,722 | 94.3 | 51.7 |
| Mar. 2009 | 7,739 | 107.5 | 248 | 117.0 | 3,841 | 103.2 | 49.6 | |

Consumer Trends

- The vast majority of orders are phone orders, accounting for around 90%. Main customers primarily consist of people in their 60s, followed by people in their 50s and 70s.

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Product/Product category | Sales | % of total | Distribution route by product/% of total |
|--|--------------------------|-------|---|---|
| | Bifina series | 1,550 | 40.4% | Store sales (Medicare Systems): slightly under 8% |
| Diet series | 100 | 2.6% | Mail order sales: slightly over 92% | |
| Agaricus | 150 | 3.9% | (special routes via subsidiaries are also used) | |
| Ryokucha Aojiru (green tea green juice) | 500 | 13.0% | | |
| Glucosamine | 280 | 7.3% | | |
| Others (dieting and others) | 1,261 | 32.8% | | |

*YRI estimates

Main Trading Partners

| Main trading partners | Main suppliers | Main items purchased | Main customers |
|-----------------------|---|----------------------------------|--|
| | Hanshin Yoki; Morinaga Milk Industry; Q.P. Corp.; Daisen; Nagase Biochemical Sales; Daiwa Printing; Toppan Printing; Tochimoto Tenkaido | Functional food ingredient bulks | 1. General customers 2. Medicare Systems (pharmacies channel, etc.) |

Product Trends

- Functional food sales in FY2008 were JPY3.841 billion, 103.2% compared to the previous year. Approx. 92% of functional food sales were mail order sales.
- While Pharmaceutical Company L's highly original products enjoyed more than 20% growth year-on-year, other product groups were forced to struggle – sales of *aojiru*, a core item, contracted and competition intensified in the mail order market.
- The functional food business is based on, 'Let the power of nature guide you to better health,' and product development is undertaken along the same lines.
- Sales of Pharmaceutical Company L's core product were JPY1.55 billion in FY2008, 132.9% compared to the previous year. The product has highly-perceptible effects that can be felt after continued consumption over a week. Ability to capture new customers by running newspaper ads was also a factor in the sales growth. The line up is broad and double-protection capsules, a proprietary technology, allow bifido-bacteria and lactic acid bacteria to reach the intestines without being dissolved by gastric acid. In September 2009, a Category 2 pharmaceutical product was launched to help bolster the series.
- Sales of 'Yuki Ryokucha Aojiru' (organic green tea green juice), another core item, were JPY0.5 billion in FY2008, falling dramatically from the previous year. The product's ingredients – barley grass, green tea leaves and powdered green tea – are all organically produced, it is rich in dietary fibre, and the taste mellow; but competition is intense due to other companies lowering their prices. The product's features ('Japan-made' and 'Organic JAS certification') are not enough to drive sales, and differentiation is difficult.
- In February 2008, FOSHU products ('Shokubutsu-iri Funmatsu Matcha' (powdered green tea with dietary fibre) and 'Pharmaceutical Company L Sardine-Care') were launched for mail order. Together with 'Cholesterol Fiber,' introduced earlier, these make up a complete range of FOSHU items for combating metabolic syndrome. 'Shokubutsu-iri Funmatsu Matcha' contains indigestible dextrin for moderating glucose absorption, working to moderate rapidly-rising blood sugar levels after meals. 'Pharmaceutical Company L Sardine-Care' contains sardine peptide, a component of which (valyl-tyrosine) works to control substances that raise blood pressure.
- In March 2009, 'Megavita EX' was launched. This is a super multi-vitamin and mineral product with high-power content of 26 vitamins and minerals.

Sales & Marketing Strategy

- The mail order business, which was launched in 1993, has over 1.55 million members, 150,000 of which are active members (receiving the members' newsletter). Active members are a stable foundation for the functional food business and Company L is switching the focus of promotion away from capturing new users to a focus on 'vitalising active users/expanding the stable customer base.'
- In the mail order business, more opportunities to interact directly with customers are complementing conventional advertising methods using mass media. Workgroups and seminars are held a few times each year for customers, providing opportunities for two-way communication. Group interviews are also implemented on a regular basis as part of active efforts to create opportunities to hear directly from customers.
- The call centre enables use of telephone as a communication tool. Information dissemination and gathering capabilities, as well as customer consultation desk functions, are being strengthened. With priority on dialogue with customers, consistent and thorough operator training will be effective not only in terms of marketing, but also for information gathering and customer consultation. A special skincare line has been set up, allowing customers to pose questions to specialists.
- The call centre was turned into a separate company in March 2009, allowing a more sophisticated consultation service. Professional personnel (e.g. chemists, public health nurses and dieticians) have been employed.
- Will naturally pour energy into the core mail order business. For the weaker store sales channel (mass retailers, drugstores, etc.), affiliated companies will be used to focus on mainly oral care and medi-care (plasters, antiseptic, etc.).
- Main advertising strategies include 15-second TV commercial slots, newspaper and magazine ads, promotional campaigns, limited-time prices, and sampling.
- TV commercials were broadcast in Kanto and Kansai regions from November to December 2008 following the October launch of the renewed 'Bifina' series. The commercials were also shown at some cinemas over the New Year period.
- A TV commercial from April 2009 features cellist Hitomi Niikura whose performance depicts morning freshness to impart the idea of 'morning rhythm.' In September 2009, this was replaced with a 15-second slot for the new 'Bifina' laxative. Efforts are underway to create explicit demand for the 'Bifina' series, which has latent popularity.
- Stricter government restrictions on advertising have become notable in recent years. Pharmaceutical Company L has responded with advertising and sales promotion strategies adhering to those restrictions, strengthening the focus on compliance.
- With metabolic syndrome exams made compulsory, Pharmaceutical Company L set up a subsidiary to provide Specific Health Guidance in December 2008. The subsidiary implements specialised examinations and Specific Health Guidance seminars nationwide.

Production & Purchasing Trends

- Uses ingredients from ingredient manufacturers or ingredient importers (trading houses) to manufacture pills and capsules at its own plants or contract plants.
 - Many domestic ingredients are purchased from ingredient manufacturers and many imports from ingredient importers (trading houses). Most are purchased from domestic ingredient R&D trading houses and ingredient manufacturers.
 - Selection criteria for functional food ingredients are sound health claims and high safety. Another key criteria is effects/benefits responding to consumer needs.
 - Country of origin is not a concern unless its a country with high risk (e.g. China).
 - When adopting new ingredients, the supplier is asked to carry out safety trials and provide evidence. Pharmaceutical Company L will later perform its own tests.
 - Ingredient manufacturing must comply with GMP guidelines.
- ★‘Lactoferrin’ is NZ-made, purchased from an ingredient R&D trading house. Was looking for lactoferrin suited to Pharmaceutical Company L’s enteric capsules (dissolve in the intestine, not the stomach) that would have a direct effect on the intestines. Pharmaceutical Company L adopted the lactoferrin recommended by an R&D trading house as it matched. It happened to be NZ-made, though that wasn’t a consideration.
- ★‘B+PLUS’ uses blackcurrant extract. Blackcurrant extract was used as a colorant and for the beauty effects of anthocyanin. The blackcurrants are from NZ.
- Dairy products, meat and other items associated with NZ are found around Japan and NZ has an image of supplying ‘good product.’ Pharmaceutical Company L has a strong interest in NZ.
 - When Meiji Seika enjoyed popularity with its ‘Cassis-i’ product, Pharmaceutical Company L started researching blackcurrant as an ingredient that could work as an enhancer for blueberry, but judged it not good enough for that purpose and chose not to use it. But blackcurrant is used as a colorant in ‘B+PLUS Hyaluronic Acid.’ However, now beauty effects are also expected.
 - Will continue to use good ingredients and ingredients consistent with consumer needs, and is always interested in related information. Ingredients are adopted in two ways – Pharmaceutical Company L approaches ingredient manufacturers, asking if they have ingredients with effects/benefits responding to consumer needs, or ingredient manufacturers come forward with a proposal. Pharmaceutical Company L is always searching for new ingredients, but it is hard to find items on a level with ‘coenzyme Q10.’ Pharmaceutical Company L is currently looking for a differentiating ingredient to add to ‘glucosamine.’
 - Pharmaceutical Company L also carries out ingredient-related R&D and sells ingredients like rose hip and salacia.

R&D Framework & Trends

- Relocated its plant and research facility to Hirakata, Osaka, and a development plant, focusing on R&D, has been operating since January 2009. The centre plays a diverse role, as a production base – mixing, shaping, capsule filling and packaging for Jintan products – and as a logistics centre for ingredients and products.
- FOSHU certification has been obtained for three items for combating metabolic syndrome. Certification will be sought where possible as it allows labelling of health claims and related data for marketing purposes. Naturally, cost effectiveness will also be taken into account.

Key Strategies

- Functional food business accounts for more than half Pharmaceutical Company L’s sales. In addition to ongoing efforts to market the ‘Bifina’ series, which has high uniqueness value, brands will be reorganised around core ‘Jintan’ and ‘Medicare’ brands. Aggressive sales strategies will be deployed based on integrated advertising and promotion activities.
- Sales volumes for bulks will be increased in tandem with development of Pharmaceutical Company L products employing unique crude ingredients – rose hip, *kothala himbutu* (*Salacia reticulata*), *aseniyaku* (*Uncaria gambir*) and *amacha* (*Hydrangea macrophylla* var. *thunbergii*).
- In the encapsulation business, Pharmaceutical Company L’s proprietary technology is recognised, and new products of 3-4 American and European companies in probiotics and confectionary fields are about to be introduced to the market. Strengthening the encapsulation business will help establish a more solid and stable revenue base.
- The call centre has been spun off as a separate company. Will enter the call centre outsourcing business employing functional food mail order expertise and engage in aggressive marketing.

Manufacturer M

- ◆ Subsidiary of a leading alcoholic beverage manufacturer and seller. Manufactures and sells quasi-drug products, confectionary and industrial food items in addition to functional food.
- ◆ Used to sell primarily through the pharmacies channel, and mainly retail drugstores, but effort has been directed into mail order in recent years, employing methods such as television infomercials.

Company Outline & Financial Performance

| Established | 1994 | Employees | 350 | Capital | JPY3,200 mil | | | |
|------------------------|---|----------------|---|-----------------|--------------|--------------------------------|-------|------------|
| Main banks | Sumitomo Mitsui Banking Corp.; Agriculture Forestry and Fisheries Finance Corporation | | | | | | | |
| Branches/Sales offices | 7 locations | Main locations | (Main Branches) Tokyo, Osaka; (Branches) Hokkaido, Sendai, Nagoya, Fukuoka, Wide-Area; (Plants) Ibaraki, Osaka, Tochigi | | | | | |
| Fin. Performance | Fiscal year ended | Net sales | | Ordinary profit | | Functional food business sales | | |
| | | (JPY mil) | YoY | (JPY mil) | % | (JPY mil) | YoY | % of total |
| | Dec. 2004 | 22,364 | 101.5 | — | — | 2,650 | 120.5 | 11.8 |
| | Dec. 2005 | 26,803 | 119.9 | — | — | 2,800 | 105.7 | 10.6 |
| | Dec. 2006 | 30,319 | 113.1 | (Undisclosed) | | 3,600 | 128.6 | 11.9 |
| | Dec. 2007 | 35,427 | 115.4 | — | — | 3,900 | 108.3 | 11.1 |
| | Dec. 2008 | 38,800 | 109.5 | — | — | 4,600 | 117.9 | 11.9 |

Breakdown of Functional Food Sales

| Func. food sales breakdown for the latest FY (JPY mil) | Product/Product category | Sales | % of total | Distribution route by product/% of total |
|--|--|-------|-----------------|--|
| | Brewer's yeast products (excl. medicine) | 600 | 13.0% | Mail order: 35% |
| Dear-Natura and other supplements | 3,000 | 65.2% | Pharmacies: 65% | |
| Slim Up Slim | 1,000 | 21.7% | | |
| | *YRI estimates | | | *YRI estimates |

Main Trading Partners

| Main trading partners | Main suppliers | Main items purchased | Main customers |
|-----------------------|----------------|----------------------|--|
| 1. Holding company | | Brewer's yeast, etc. | Tampei Nakata; general customers; and others |

Product Trends

- Has introduced a range of 25 supplements under a single brand from April 2007. Has focused on developing the business, for example through TV commercials, pushing 'no artificial colouring or preservatives.' Series sales in FY2008 were JPY1.3 billion, a 34% year-on-year increase. '29 Aminos, Multi-Vitamins and Minerals' is performing particularly well, accounting for 20-30% of the brand's sales.
 - Is recently directing effort into mail order. 'Glucosamine with Chondroitin' has been performing well as an exclusive mail order item. 'Glucosamine' was renewed in July 2009. Proprietary technology was used to reduce the daily recommended intake from 10 to 6 pills and improve ease of consumption without altering the daily health ingredient intake, pill size or price.
 - The focus for Slim Up Slim series meal replacement dieting products was on brand development, with TV commercials run at one point, but sales have been contracting since the meal replacement boom ended. However, sales have been recovering in 2009 in part due to a new product introduced in autumn 2008.
 - Will put effort into items targeting 'health and beauty' due to rising beauty awareness among consumers. In September 2009, launched 'Perfect-Collagen' (JPY1,785 incl. tax), which contains low molecular weight collagen mixed with hyaluronic acid, elastin and an original ingredient, 'Bi-taishitsu Nyusan-kin' (pro-beauty lactobacillus), among others. Manufacturer M also entered the cosmetics business from 2008 looking to strengthen promotion of beauty both inside and outside the body.
 - Integrated a company with a core ginkgo leaf functional food business in September 2008.
- * Manufacturer M manufactures brewer's yeast products at its Osaka plant, 'Dear-Natura' at its Ibaraki Plant and manufacturing of other products is outsourced.

R&D Framework & Trends

- Basic research is carried out by Manufacturer M employees working at the parent company's research facility.
- Manufacturer M carries out product planning and development.

Sales & Marketing Strategy

- Distribution channels used are pharmacies, 65%, and mail order, 35%.
- Recent efforts in the mail order business have resulted in mail order accounting for an increasing proportion of sales.
- In the mail order business, infomercials have been broadcast nationwide, mainly in the Tokyo region, on satellite television. Challenges include strengthening the infomercial approach and increasing the number of repeaters, with more regular purchases, etc.
- Retail drugstores are the main pharmacy channel. Joint efforts with specific chains will be enhanced, and sales resources focused to secure outlets and promotion opportunities.
- As for the integrated company, will continue sales to member pharmacies while looking to increase sales via other channels, including retail drugstores, dispensing pharmacies and medical institutions.

Production & Purchasing Trends

- Manufacturer M has three plants. Ibaraki Plant (Hitachi Ota, Ibaraki Pref.) manufactures many products, specialising in the 'Dear-Natura' line. Manufacturing of most other products is outsourced. (Osaka Plant produces quasi-drug products; Tochigi Plant manufactures products for industrial use, such as seasoning, employing ingredients including yeast extract.)
- Ibaraki Plant acquired ISO 22000 food safety management system certification in 2006 and dietary supplement GMP certification in August 2009.
- Quality assurance is being strengthened through the group's quality control framework.

Key Strategies

- Will continue efforts to develop the 'Dear-Natura' brand and work to raise its profile.
- Hopes, through the merger, to diversify sales channels, incorporating routes targeting doctors/clinics and dispensing pharmacies that enable purchasing by consultation.