



MARKET ACCESS SECRETARIAT
Global Analysis Report

Fortified/Functional Foods in China

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EXECUTIVE SUMMARY

Many factors are influencing the fortified/functional (FF) food market and its potential in China. The desire to improve overall health and support healthy aging is a significant trend brought on by a high median age rate that is only expected to grow. When coupled with the sheer size of the consumer market, this positions China as an excellent market opportunity for FF food products into the future.

The Chinese FF packaged food market was valued at US\$24.6 billion in 2012, and is expected to see strong, but slightly slower growth over the forecast period to 2017. Trends such as rising consumer power, improving on healthy lifestyles, and concern and awareness about the safety of standard food in China, particularly dairy, will contribute substantially to increased demand for FF foods. In addition, product improvements and innovation are positive factors that will also help stimulate the growth of FF packaged food in the country. However, price competition and developing market maturity will likely impact the overall value growth rate.

Fortified/functional baby food (milk formula) and FF dairy are the leaders in the FF sector in China, and are expected to continue experiencing dynamic growth. Research has also shown that the number of consumers seeking the benefits of fortified ingredients and milk formula is increasing. The parents of infants and young children are an important demographic for the FF sector.

The growing rate of chronic diseases amongst the global population is undeniable, and the costs associated with caring for these populations are rising. As a result industry and government are supporting efforts to develop new products that assist in maintaining a healthy diet, and the prevention of such ailments.

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OVERVIEW

For today's consumers, access to health-promoting and nutritious foods is extensive, and growing in terms of the variety and quantity of product offerings that target specific nutritional needs. Distribution of such products has spread through numerous specialized channels that focus on specific consumer segments including proactive, diet restricted, ailing, "at risk," and geriatric. To gain maximum results, companies are spending more time identifying which channels are best suited to reach their target audience, including taking advantage of the internet and social media. This focus has led many companies to employ various health care professionals and organizations to educate the public, and endorse products and ingredients for specific consumer segments.

Continually researching and developing new ways to "add value" to their products (either by new ingredients or uncovered market opportunities) has become second nature to food industry players in an effort to satisfy consumers' growing demand to better manage their health through diet. This need has resulted in many functional foods, ingredients, and supplements, such as omega-3s, probiotics, prebiotics and superfruit extracts, to name a few, being consumed on a regular basis.

Generationally, there are new market opportunities emerging for the increasing numbers of older consumers, and will increasingly demand foods that contribute to healthy aging. The younger consumer is also an important market segment that is eagerly seeking out improved nutritional foods and healthier products.

CONSUMERS

Chinese consumers have a strong interest in leading a healthy lifestyle, and believe that elements such as regular exercise, natural or organic food, and food with added benefits, are integral methods to achieving this end. Fruit and vegetables are the most commonly purchased food or drink items with the most obvious natural health associations. This keen interest in natural foods can be traced to the integral part traditional Chinese medicine plays in food culture.

For many Chinese, the traditional functional qualities of foods are still applicable and very much sought after. Typical daily physical nuances, such as excessive body heat, can be simply treated with 'cooling herbs', signalling the relevance of traditional food roles in the mainstream food industry.

Regional Trends

Some regional differences uncovered by Mintel, illustrate that there has been a noticeably high consumption of products containing friendly bacteria, such as probiotics in Beijing, traditional Chinese cooling herbs in Guangzhou, and tonic herbs in Guangzhou and Chengdu. In addition, both married consumers and households with children are responsible for purchasing most of the FF products sold across China, highlighting their importance within the broader market.

Socioeconomic Factors

In China, as in the rest of the world, many health concerns are closely related to age, and thus grow in occurrence as the population gets older. In 2012, the 40-49 age group was the largest demographic in China. However, by 2030 the overall aging of the population will accelerate and the 55-69 age group will become the dominant demographic. Additionally, China's Ministry of Health has stated the dietary structure of its population shows a serious lack of DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid), fatty acids that assist in the development and healthy functioning of the brain and eyes, among other things. Research conducted by Mintel further indicates that over half the Chinese adult population suffers from eye problems, reporting high levels of myopia (nearsightedness). While the



availability of FF foods to address these issues is currently limited, there is certainly room for innovation in these areas. For example, major companies in the oils and fats sector have begun to launch new products with enhanced levels of both DHA and EPA. As well, there are other common ailments (digestive problems) presenting opportunities for FF products that are proving successful in the market.

RETAIL SALES

There is an ever-growing number of Chinese consumers purchasing food and drink products with associated health claims, with 50% stating they are buying more FF products (Mintel, 2012), contributing to the huge growth seen in national sales. The FF packaged food market in China reached value sales of US\$24.6 billion in 2012, having registered a compound annual growth rate (CAGR) of 21.8% from 2007 to 2012. Euromonitor is forecasting this impressive growth to remain, with the market value for the sector reaching US\$55 billion by 2017, albeit with a slightly slower CAGR of 17.5% expected from 2012 to 2017.

In 2012, the two largest subcategories within FF packaged food were baby food (milk formula), and dairy, representing 49% and 45% of total sales, respectively. Sales performance in the dairy subcategory is dominated by flavoured milk drinks and dairy-based yogurt, which both recorded impressive CAGRs over the 2007-2012 period. These product groups are expected to remain prominent within the overall FF sector over the 2012-2017 forecast period, although growth is expected to slow somewhat. However, the most significant FF packaged food subcategory in terms of growth was energy and nutrition bars, representing just 0.15% of total sales in 2012, but recording a CAGR of 72.3% from 2007-2012.

China Fortified/Functional Packaged Food Market Sizes – Retail Value in US\$ millions

Category	2007	2011	2012	2013*	2017	% CAGR 2007-12	% CAGR 2012-17
FF packaged food	9,169.3	20,683.2	24,587.8	29,121.1	55,005.2	21.8	17.5
Baby food: milk formula	4,119.4	9,905.2	12,025.8	14,567.7	28,427.9	23.9	18.8
Bakery products	624.2	1,068.4	1,223.3	1,385.7	2,092.4	14.4	11.3
Biscuits	267.8	447.6	517.9	594.2	938.4	14.1	12.6
Breakfast cereals	289.4	514.7	587.1	661.8	975.0	15.2	10.7
Bread	67.0	106.1	118.3	129.7	179.0	12.0	8.6
Confectionery	762.5	1,299.4	1,497.5	1,675.3	2,705.2	14.5	12.6
Chewing gum	665.2	1,152.6	1,329.3	1,483.4	2,375.7	14.9	12.3
Sugar confectionery	97.3	146.8	168.1	192.0	329.5	11.6	14.4
Dairy	3,554.7	8,112.4	9,478.0	11,052.4	20,955.2	21.7	17.2
Cheese	3.2	4.8	5.6	6.3	11.1	11.5	14.8
Flavoured milk drinks	1,674.0	4,381.7	5,048.9	5,771.8	10,661.6	24.7	16.1
Milk	141.5	250.9	289.7	327.5	516.7	15.4	12.3
Powder milk	583.1	719.9	795.4	876.8	1,269.3	6.4	9.8
Dairy-based yogurt	1,152.8	2,755.1	3,338.4	4,069.9	8,496.6	23.7	20.5
Slimming meal replacements	50.2	144.3	180.4	229.1	478.8	29.1	21.6
Vegetable and seed oil	55.7	120.9	145.7	169.1	283.4	21.2	14.2
Energy and nutrition bars	2.4	32.5	37.2	41.8	62.3	72.3	10.9

Source: Euromonitor, 2013

*Note: 2013 figures are estimates based on partial-year data



NEW PRODUCT LAUNCHES

According to Mintel, 458 new FF food products were launched in China in 2012, a slight decrease compared to the previous year. In 2011, the total number of new launches surged to 493, or almost double the amount recorded in 2010, emphasizing the fast-growing interest in this sector.

Ingredient Analysis

Fortified/functional nutraceutical ingredients are making good progress in the Chinese marketplace, and are trending in various food sectors. Popular ingredients fall under many categories, and include (but are not limited to) carotenoids, fiber, fatty acids, plant stanols/sterols, pre- and probiotics, phytoestrogens and soy proteins. In 2012, the most popular FF ingredients used by the top grossing FF foods were:

- Milk formula – food acids, vitamin E, and calcium
- Flavoured milk drinks – probiotics
- Dairy-based yogurt – probiotics

Among the 458 new FF food products launched in China in 2012, over 2,299 micronutrient instances were found. While the market recorded less FF product launches overall than in 2011, the proportion of those new products using certain nutrients has remained stable, or actually increased. FF additives such as those which promote bone health, improve the immune system, and those that are high in or provide additional fibre, all showed little movement in frequency of occurrence among new launches. However, low/no/reduced fat and antioxidant additives saw their rate of inclusion into food products grow.

Many companies within the Chinese market are introducing new or relaunched products that incorporate FF ingredients, or emphasizing their use of such ingredients in core products, to grow their position in the sector. The following are some examples:

- The Wahaha Group's Shuang Wai Wai and Ru Wa Wa are iconic brands for drinking milk products that owe their popularity and high brand recognition to added amino acids, along with calcium and vitamins.
- The Menhniu Dairy Industry has introduced a new product called Yiyoute that contains GOS (galactooligosaccharide), whey protein powder, milk minerals, and vitamins, enabling the product to claim improved immunity and bolster calcium intake. This product won the innovation award at the 2011 SIAL China food show.
- The Hubei Lishizhen Health Oil Company's Shizheng Perilla cooking oil product has added linoleic acid targeting those seeking cardiovascular health. Linoleic acid is said to assist in regulating blood pressure and high cholesterol.
- Oil and fat companies have begun developing a series of oil products containing DHA Algal oil (from Fortune) and deep sea fish oil (from Jinlongyu) for their FF properties.

New Product Examples



Mingtailang He Tao Niu Nai Fu He Dan Bai Yin Pin (Walnut Milk Drink) is made with walnuts and milk. According to the manufacturer, walnuts help to nourish the blood and are good for the brain. Milk contains variety of amino acids and is said to be the best source of calcium.

Launched: December 2012

Pack Size: 240 ml

Price: US\$0.72

Claims: Brains and Nervous System, Other



Qimei Pasture Gao Gai Zhong Lao Nian Nai Fen (High Calcium Milk Powder for Middle Aged and Senior Groups) is enriched with taurine, prebiotics, calcium, iron and vitamins including vitamin A, vitamin C, vitamin D and vitamin E. The milk powder is said to help the formation and growth of tissues, help eyes to see better at night, offer antioxidant benefits, regulate the health of skin, mucosa, bones and teeth, promote the absorption of calcium, and aid in the formation of hemoglobin and red blood cells. This product is free from sugar.

Launched: December 2012

Pack Size: 400 g

Price: US\$4.46

Claims: Added Calcium, Antioxidant, Bone Health, Brain and Nervous System, Low/No/Reduced Sugar, Other, Prebiotic, Seniors (aged 55+), Vitamin/Mineral Fortified



Guo Zhou Lu Bao Jun Gu Gu Xiang La Chan Zui Gu (Spicy Mushroom) contains eight kinds of amino acids including lysine, tryptophan, leucine, isoleucine and methionine. According to the manufacturer, lysine and tryptophan produce more brain transmitter substances, improve the quality of sleep, help the synthesis of fatty acids of the body, strengthen the immune system and replenish iron to the body.

Launched: December 2012

Pack Size: 240 g

Price: US\$2.18

Claims: Brain and Nervous System, Immune System, Other

DISTRIBUTION CHANNELS

Many of the top grocery retailers in China are shifting their geographic focus as the markets in first-tier cities like Beijing and Shanghai are becoming saturated, and are looking at establishing a presence in second- and third-tier cities ahead of their competitors. The supermarket format is the most popular retail channel in the country, but both convenience stores and hypermarkets are showing strong growth in China, with intense competition to open new stores. Chinese supermarkets have consistently lost a fractional percentage point of their overall market share to hypermarkets since 2007. Small independent stores remain the second most popular store format in China.

Understanding the shopper remains crucial to success – knowledge of regional variations, catering to the country's growing middle class, and placing high priority on food safety are three important considerations. For example, Carrefour has split the country into four zones (East, South, North and Central) which allows it to cater to regional market diversities. Chinese shoppers see food safety as a top priority and, for those who can afford it, are buying more international and organic goods.

Based on total grocery sales, Auchan/RT Mart is the leading grocery retailer in China, followed by China Resources Enterprise, Walmart China, Carrefour and Lianhua. However, domestic operators represent 60% of the top 10 players. No single retailer held more than 1.2% of the Chinese market in 2012.

About half of the top 10 grocery retailers showed double-digit growth in grocery sales in 2012, with the fastest growth reported by China Resources Enterprise at 25.1%. Yonghui (20.2%) and Auchan/RT Mart (21.8%) also showed similarly impressive grocery sales growth. China Resources Enterprise positions itself as delivering high-quality food offerings. The retailer is present in 26 of China's 34 provinces. Lianhua has diversified its product offers to include those in the health and beauty, and premium categories to tap into the purchasing trends of China's growing middle-class population.



MARKET SHARES

Many food companies in the finished goods, pharmaceutical and ingredient sectors have displayed a strong commitment to the FF sector by engaging in innovation-related activities. To this end, these companies have established nutritional or functional food units, allocated financial investment or acquired the players who are developing new functional products.

The number of companies in the FF packaged food sector in China is extensive, with most companies holding only a small fraction of the market. Hangzhou Wahaha Group claims the largest share of market at just 13.1% in 2012. The company's success is attributed to the strong popularity of its flavoured milk drink, Nutrition Express. The next largest market share is held by Want Want Holdings Ltd. with 7.3%, another key player in FF flavoured milk drinks. Most of the core products from these two companies are targeted at children or younger consumers, an important niche market within FF packaged food, and emphasize ingredients that supplement healthy development.

China Fortified/Functional Packaged Food – Top 10 Market Shares by Company
– % Breakdown Based on Retail Value Sales

Company	2008	2009	2010	2011	2012
Hangzhou Wahaha Group	-	15.2	14.6	14.7	13.1
Want Want Holdings Ltd	4.9	6.0	6.6	7.0	7.3
Inner Mongolia Yili Industrial Group Co Ltd	3.5	3.4	3.5	3.8	3.9
Bright Food (Group) Co Ltd	1.8	1.8	1.9	2.3	2.9
China Mengniu Dairy Co Ltd	1.8	1.8	2.5	2.8	2.7
Mars Inc	2.5	2.1	1.9	1.8	1.8
Yakult Honsha Co Ltd	0.9	1.0	1.2	1.3	1.4
Orion Group	1.1	1.2	1.3	1.2	1.3
Mondelez International Inc	-	-	-	-	0.7
Herbalife Ltd	0.7	0.6	0.6	0.6	0.6

Source: Euromonitor, 2013

OPPORTUNITIES

Food manufacturers are highly motivated to engage in new product development in the FF sector, as consumer demand is influenced by a population looking to increase their daily intake of healthy and nutritious foods. While FF packaged food products are primarily targeted at certain niche populations, including children, seniors, pregnant women, or those with specific dietary needs, the broader population is increasingly seeking ways to supplement their diet. Furthermore, opportunities can be found in products with added benefits that consumers would normally purchase anyway, such as bakery goods enriched with calcium or drinks with FF ingredients offering overall immune-system support. Manufacturers can find success in using science to assist in product promotion, and in clearly communicating the health benefits associated with the added functional ingredients in their foods.

Opportunities are also present in product innovation, as well as new manufacturing techniques for FF-enhanced packaged foods. Great strides have been made internationally in processing technologies (spray drying, encapsulation and advanced emulsification methods) that improve the properties and taste of new products. For example, Versale Pharma from Belgium partnered with German company Brace GnbH to launch a probiotic culture that is encapsulated, which protects it from the environment, extending its stability and protecting it from other bacteria in the final food product. Manufacturers that can offer such scientifically heightened attributes in day-to-day products will likely find favour in this viable market.



FUTURE OUTLOOK

The outlook for FF packaged food sales in China remains favourable, with a CAGR of 17.5% expected from 2012 to 2017. Outstanding growth in sales for FF packaged food in China is predicted for most individual product categories, with baby food and dairy remaining the top two in terms of value sales. However, slimming meal replacements is forecast to record the best performance in terms of sales growth, with a CAGR of 21.6% over the same period, emphasizing that consumer demand for FF products that support a healthy lifestyle while offering convenience, will remain strong into the future.

Many FF packaged food categories are expected to see a moderate rise in average unit prices over the next few years. This will likely be attributed to increases in raw production and materials, however, rising disposable incomes and increasing health awareness will also lead to Chinese consumers trading up to higher end products, particularly those able to offer multiple health benefits.

The increasing sophistication of the Chinese consumer will encourage manufacturers to launch “premium” FF packaged foods. It is expected there will be an increase in commonly consumed products offering very specific or multiple health benefits, as well as items that incorporate ingredients commonly found in traditional Chinese medicine.

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