



RESEARCH AND PROSPECT ON THE DEVELOPMENT OF SPORTS NUTRITION FOOD INDUSTRY IN CHINA

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ABSTRACT

This paper has made deep analysis of various factors affecting the development of sports nutrition food industry after summarizing the development history of our sports nutrition food industry systematically (Rostami et al., 2000), proposed strategic thinking which promotes the development of our sports nutrition food industry on this basis and aimed to provide valuable suggestions for the development of related departments and enterprises.

1. Introduction

Our sports nutrition food industry originated from the demand of serving for the improvement of competitive sports performance and the consumer group at that time was mainly professional athletes. Therefore in a period of time, sports nutrition food market was regarded as “niche market” however, with the change of situation, our sports nutrition food industry needs to change from “niche market” to “mass market” gradually, which requires systematic research on the market demand and supply, market positioning, market structure and enterprise behavior etc. of the whole industry to adapt to the change of market demand, this is also the realistic significance of this research (Senchina et al., 2011).

The writer has found out when checking the literature both at home and abroad that in the foreign research on sports nutrition food industry, most of literatures study the microscopic behavior from the perspective of management and market (Goodman et al. 2011). The development of sports nutrition food industry abroad is relatively mature, which

enables the researchers to analyze the consumer composition, technology development process, marketing program, government supervision, industry association effect and quality system etc. of sports nutrition food industry with comprehensive adoption of investigation, comparison, cases and other research methods (Yin, 2015). The research has adopted various theoretical tools, such as industrial spatial agglomeration theory and value chain analysis etc, which is of great reference significance and value. Most of domestic researches on sports nutrition food industry are focusing on the definition and classification of sports nutrition food, the development history of our sports nutrition industry and the size and development trend of foreign sports nutrition food market etc, while from an angle combining macro analysis and micro analysis together, systematic analysis of the market demand and supply, market structure, enterprise behavior and industry competitiveness of our sports nutrition food industry has not been found and the comparative analysis with foreign sports nutrition food industry is almost blank (Yang,

2011). In this sense, the research in this paper has more important theoretical significance.

This paper has made deep analysis of various factors affecting the development of sports nutrition food industry after summarizing the development history of our sports nutrition food industry systematically, proposed strategic thinking which promotes the development of our sports nutrition food industry on this basis and aimed to provide valuable suggestions for the development of related departments and enterprises.

2. Materials and methods

2.1. Market demand of our sports nutrition food industry

Market demand is the basis of enterprise survival and development. The development of sports nutrition food market can't be separated from market demand either, should be based on market demand and decided by the consumption structure formed by the demand market as well as the consumption amount brought about by this in the end (Maughan et al., 2004). The demand of sports nutrition food refers to the demand amount of the public for sports nutrition food. Sports nutrition food demand takes the purchase desire as premise and is restricted by the payment ability (Antonio et al., 2001). The demand of sports nutrition food can be divided into potential demand and effective demand. Potential demand is people's demand for sports nutrition food objectively, which includes the demand with purchase desire but restricted by payment ability and other factors temporarily as well as the demand without purchase desire temporarily (Devlin and Belski, 2014); the effective demand of sports nutrition food refers to the demand with purchase desire, payment ability and can be transferred to practical purchase behavior at current stage. The potential demand of sports nutrition food is the premise of effective demand, but the potential demand needs to be transferred into effective demand and finally cause sports nutrition consumption, which is the basic demand for the development of sports nutrition food industry (Bingham et al., 2015).

2.2. Economic factors affecting the market demand of our sports nutrition food industry

(1) Economic development and income level

Based on principles of economics, the increase of consumption demand and income increase present a positive correlation. Generally speaking, the lower income level of residents, the higher marginal propensity to consume (Liang, 2015); the higher income level of residents, the lower marginal propensity to consumer. In the aspect of social-economic structure, people with high income and low income should be few and the middle class accounts for the most, occupying the mainstream status. The distribution of overall population presents "olive" structure, which is good for the increase of consumption demand. Our current population distribution presents bell structure, where middle class is few (Liang, 2015); people with high income and low income are more. However, with the increasing income gap, most of the wealth concentrates on few people of high income, but the people with high income have low average propensity for sports nutrition food and the purchasing power is relatively surplus (Du, 2015); a lot of middle and low income people with potential consumption demand have high average propensity for sports nutrition food, but the purchasing power is seriously inadequate, the non-coordination between income level and average propensity to consume makes it difficult to transfer the potential demand for sports nutrition food to effective demand with payment ability, which has caused the decrease of average propensity to consume for sports nutrition food and then caused the limited demand amount and inadequate effective demand.

(2) Consumer preference

The preference of consumers for sports nutrition food is also an important factor affecting the market demand for sports nutrition food and this preference is related to the cognition of physical exercise group for the function of sports nutrition food (Chen, 2015). Among sports group in China, most of people believe that they can exercise well without special sports nutrition food, while it is not the

same in developed countries; taking America as example, the sports group with adoption of sports nutrition food can be divided into four categories, which include professional athletes, amateur sports enthusiasts, bodybuilder enthusiasts and bodybuilders; the consumption proportions of sports nutrition food for these four categories are 23%, 19%, 35% and 23% respectively (Campbell et al. 2013). The sum of proportions of amateur sports enthusiasts and bodybuilder enthusiasts is 54%, exceeding half of the total consumption, which proves that in America, both professional athletes and amateur enthusiasts realize the functions and advantages of sports nutrition food and then consume sports nutrition food in a long run.

(3) Prices of sports nutrition products and prices of related products (Potgieter, 2013).

In economics, related products mainly refer to complementary and substitutes. Complementary refers to that the price increase (or decrease) of one product will cause the demand decrease (or increase) of the other product; substitute refers to that the price increase (or decrease) will cause the demand increase (or decrease) of the other product. In view of sports nutrition products, related products mainly refer to substitutes, including general health food and traditional food etc.

3.1. The market supply of sports nutrition food industry in China

In 2010, the sales amount of sport nutrition food in China has reached 222 million Yuan (as shown in Table 1).

From 2005 to 2010, the sales of sports nutrition food in China has increased by 98% in total nearly doubled. In 2010, it has increased by 17.6% (as shown in table 2). In view of the sales channels of health products from 2005 to 2010, the sales based on stores account for the most, but its proportion presents a downtrend (as shown in table 3); in 2010, the proportion is 68.4%; the sales without stores present an increasing trend, in 2010, the proportion is 31.6%, in which the direct sales is 30.6%, accounting for 96.8% of non-store sales channels. Other non-food retailers (gyms and slimming club etc.) are also main sales channels for sports nutrition products, which account for 90% of the sales amount. The market share of e-commerce is increasing due to its convenience as well as the promotion support of leading companies.

Table 1. Sports nutrition food sales of 2005-2010

Time	2005	2006	2007	2008	2009	2010
sales	112.3	117.2	154.3	162.3	198.5	212.6

Table 2. Sports nutrition food sales growth rate of 2005-2010

Time	2005	2006	2007	2008	2009	2010
sales	112.3	117.2	154.3	162.3	198.5	212.6

3. Results and discussions

Table 3. 2005-2010 analysis of consumer health products sales channels

Time	2005	2006	2007	2008	2009	2010
Based on the store's sales	67.2	74.2	70.2	70.6	68.2	68.5
Discount grocery retailers	7.8	8.5	8.6	9.5	7.5	7.1
Health food store	0.0	0.0	0.0	0.0	0.0	0.0
A large supermarket	0.5	0.5	0.4	0.6	0.5	0.4
Small grocery store retailers	4.5	5.2	5.6	4.8	4.6	4.4
The super market	0.5	0.4	0.6	0.5	0.5	0.4
Other grocery retailers	2.4	2.3	2.5	2.6	3.2	3.0

Non-store sales	56.3	52.1	50.9	58.4	49.6	54.2
Beauty of health	58.9	59.4	55.1	54.9	59.6	60.2
A pharmacy/drugstore	31.3	34.9	35.3	34.7	31.2	34.9
The grocery store	9.5	8.6	8.9	7.6	8.0	8.2
Other medical	0.0	0.0	0.0	0.0	0.0	0.0
Specialist retailers	0.1	0.2	0.2	0.1	0.3	0.2
Star market	32.5	28.6	27.1	26.9	29.5	25.6
No other grocery store sales	0.0	0.0	0.0	0.0	0.0	0.0
Vending machines	1.4	1.9	1.8	1.6	1.5	1.4
The network shopping	0.2	0.2	0.4	0.1	0.3	0.6
Direct selling	31.6	25.7	27.9	28.6	24.3	30.0
Total	100	100	100	100	100	100

3.2. Research on sports nutrition food in Europe and America

First, analyzing from the supply side of sports nutrition food, the increasing point of the whole sports nutrition food market focuses on supplementing moisture quickly, including instant drink type sports drink, water drink with high concentration nutrient supplement, sports drink with fast supplementary energy, past diet drink and rod products which can supplement energy quickly after sports.

All sports nutrition foods can be divided into two categories based on the directions of its influence on health, the first category is to promote health with increase, such as improving or increasing products with body materials, vitamins, dietary fiber, antioxidants, amino acids, creatine and protein etc or increase body function, such as improving the products of energy level, body water level and promoting recovery etc; the other category is to promote healthy products by decreasing some substances of the body, such as products decreasing body sodium, fat, sugar, trans fats and synthetic pigment etc.

Based on the research report of BCC Investigation Company, in global sports nutrition food market, the America accounts for 49% and the Europe (Russia is excluded) accounts for 26%, while in European market (Russia is excluded), Germany, Britain and Italy account for 60%. The growth situation of sports nutrition food is as shown in Figure 1.

In the field of sports and health nutrition, sports drinks market accounts for the most and develops rapidly.

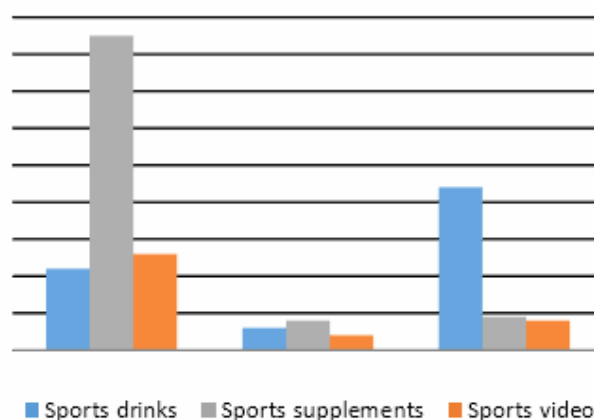


Figure 1. Nutrition proportion

In 2007, the worldwide income is 24.9 billion US dollars, which is expected to reach 87 billion US dollars in 2013 with annual growth rate of 25.6%. In 2007, the global value of sports food is 1.2 billion US dollars, which achieved 1.5 billion US dollars in 2013 and will achieve 2.5 billion US dollars in 2013, increasing at a speed of 10% every year.

In view of the demand terminal of sports nutrition food, consumers are paying more and more attention to healthy and convenient way of life, while sports nutrition food offers perfect selection to meet the demands of this aspect. Consumers of sports nutrition food, sports drinks

and sports supplements can be divided into following four different groups: bodybuilders, professional or amateur athletes, leisure athletes and consumers pursuing for way of life. Bodybuilders pursue body-building exercise, which achieves the purpose of muscle growth through combining the weight training and increasing the caloric intake together. Athletes include all professional and amateur athletes (bodybuilders are excluded). Leisure athletes represent non-professional athletes, who can't reach the same level as athletes and bodybuilders in physical exertion. This group of people generally takes exercise as recreation of weekend or focuses on maintaining the body. Consumers pursuing way of life use sports nutrition food but not take exercise as the purpose. The consumed sports nutrition food by this group is mainly used as refreshing drink and replaces daily meal or consumes a healthy snack occasionally. This group of consumers can improve the energy level in short time with adoption of sports nutrition food. This group of consumers seeking for way of life is consumers for sports nutrition food with the fastest growth speed and has become an important component of the market. These consumers wish to experience the enjoyment of products brought about to their health.

3.3. Strategic thinking of the development of sports nutrition food industry in China

There are various ways of satisfying people's demand for health, which include public medical products and services provided by the government, public sports facilities and services provided by the government as well as the health care products and sports products and services provided by market mechanism. In view of the voice for changing the governmental functions at the moment, government departments in the future make great efforts in providing public sports products and service to ensure the basic physical training needs of the public and then make more and more people participate in the exercise. Besides the basic needs of the public, there are also a lot of diversified and personalized sports demands caused by different

income levels. The sports nutrition food industry of China originated from competitive sports and has formed subdivided and specialized market positioning mode gradually, which is to say at the moment, the overall positioning of the market still focuses on niche market. With the development of economy, it is possible for the industry positioning changing from niche market to mass market. Especially for middle aged and old people who do exercise frequently, they have a very strong awareness of health and often participate in the exercise. If complemented with sports nutrition food of protein type, it will increase their muscle strength and will avoid many chronic diseases such as multiple diabetes mellitus in middle and old age. For adolescents, they are facing the pressure of growth and learning and it will be very helpful for their growth and leaning effect if they can participate in the exercise actively and use sports nutrition foods at the same time. However, the sports nutrition food industry can make great achievements only by making strategic adjustment and transferring the target market positioning from professional athletes to mass consumers. In other words, the whole industry can only grow up by changing the sports nutrition food to mass consumer goods.

4. Conclusions

(1) In view of the market demand and supply of our sports nutrition food industry, first, the market demand of sports nutrition food industry can be divided into potential demand and effective demand. Changing from potential demand to effective demand is affected by economic factors and non-economic factors. The economic factors mainly include economic development and income level of residents, change of residents consumption structure, consumption concept and awareness, consumer preference, prices of related products, industrial structure and sports industry structure etc. Non-economic factors mainly include different consumer groups, number of sports population, knowledge, standards and safety of sports nutrition food, government policy and public

opinion etc. In general, the effective demand of our sports nutrition food is inadequate at the moment. The main reasons are that the consumption concept and awareness of residents does not change, the number of people participated in exercise does not increase obviously; the functional understanding of sports nutrition food is limited; the food safety supervision is not standardized. Second, main factors affecting the market supply of our sports nutrition food industry include cost and price, marketing channel and marketing method and investment of research and development. The subjects of market supply of our sports nutrition food industry are less and the size is relatively small; compared with developed countries, the category, quantity and quality of sports nutrition food need to be improved.

(2) In view of the market structure of our sports nutrition food industry, first, the market concentration degree of our sports nutrition food industry is high. In the sports nutrition food market of professional athletes, CPT, Vita, MET-Rx, EAS and other brands account for over 80% of market share. Second, certain entry barrier exists in our sports nutrition food industry. As technology-intensive industry, capital barrier, technology barrier and policies and regulations barrier exist. Third, product homogeneity is serious. There is small overall differentiation in our sports nutrition food and the homogeneity is very serious, which is mainly presented as functional repetition and prescription repetition. Forth, the above analysis has shown that the market structure of our sports nutrition food industry belongs to market structure of oligopoly. The future development tends to be a market structure of monopolistic competition, which should increase competition subjects, expand industry size and strengthen technological innovation.

(3) The related experience of Europe and America has important reference significance for the development of our sports nutrition food industry. First, adjust product structure and marketing method continuously based on the consumer demand and market change. Second, it needs to put emphasis on the improvement of the

core competitiveness of research and development ability. Third, the government should improve the laws and regulation system continuously for the supervision of sports nutrition food, establish comprehensive and strict industry standards and national standards.

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