

# Favorable Conditions, Constraints and Countermeasures for the Development of Freshly Squeezed Juice Industry

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## Abstract

Freshly squeezed juice has been popular in China's star-rated hotels and hotels since the mid-90s of last century, and the current economy and society continue to develop, freshly squeezed juice has become more popular in the market, and has an important position in catering consumption as the "second vegetarian dish". With the rapid development of the national economy, the consumption concept of most adults has changed, and the concept of healthy eating has gradually spread in people's minds. Freshly squeezed juice uses healthy, fresh, non-rotten fruits, and through scientific sterilization operations and other treatments, the various vitamins and dietary fiber contained in the fruit can be retained to the greatest extent. Through the analysis of the favorable conditions for the development of China's freshly squeezed juice industry, and the current problems are discussed, countermeasures and suggestions conducive to the development of freshly squeezed juice industry are put forward for the problems.

## Keywords

Freshly Squeezed Juice; Beverage Market; Healthy Living.

## 1. Introduction

With the growing needs of people for a better life, the demand for all walks of life is shifting from quantitative demand to quality demand, especially in the beverage industry, with the increasing needs of the people, the freshly squeezed juice industry is also changing day by day, and various emerging manufacturers are also mushrooming, many franchised chain stores have begun to join freshly squeezed juice stores because of this market, so that the market competition is more fierce. Since freshly squeezed juice drinks have only entered the domestic consumer market in large quantities in recent years, the current industry market is still in the stage of vigorous development and still has huge room for development. From the perspective of market share, there is currently no brand that occupies an absolute dominant position, only the formation of a leading brand. In China's domestic catering industry market, which now has a scale of 700 billion yuan, a new product, freshly squeezed fruit (vegetable) juice, is quietly emerging. Since 2003, the industry's annual GDP has reached more than 10 billion yuan, and according to the statistics provided by Yu Ying, an analyst of Shenyin Wanguo, the sales revenue of China's freshly squeezed fruit (vegetable) juice industry increased by 12% in 2020, while the industrial profit margin increased by 100%. The average annual demand of China's juice market is only about one liter, which is one-seventh of the global market average and one-forty-fifth of the market average of developed countries, and the market potential is huge. The emergence of the freshly squeezed juice industry has not only opened up new application fields for the consumption and processing of fruits and vegetables in China, but also provided opportunities for many businesses. According to market research, nearly 20% of girls still like to drink freshly squeezed juice while choosing to eat fruit. Young people are also increasingly craving healthy, nutritious and hygienic beverages. Therefore, functional drinks are also

increasingly favored, and the market position of carbonated drinks is gradually weakening. According to the data of the "China Juice Industry Production and Marketing Demand and Investment Risk Analysis Report", from 2015 to 2019, the overall trend of the market size of China's juice industry showed a shock rise. In 2019, the total market size of China's juice industry was 121.97 billion yuan, an increase of 4.8% over the same period last year. In 2020, the total market size was 127.2 billion yuan, showing a steady growth trend on the basis of 2019, and China's freshly squeezed juice market showed continuous and stable growth in the three years from 2019 to 2021. Looking at the world juice market, low-concentration fruit juice drinks occupy the main force, and about 74.3% of sales volume comes from low-concentration beverages. In contrast, China's fruit juice beverage market has a large gap with other countries in terms of market share, and China only occupies 5.9% of the market share of the world fruit juice beverage market. Among them, China's pure fruit juice sales only account for about 5% of the total sales of fruit juice drinks in China, compared with most developed countries, the current domestic juice market is in a sluggish state. Taking European countries as an example, among them, Britain, France and Germany have a large market share, all exceeding 70%. 81.3%, 91.4% and 77%, respectively.

## **2. Favorable Conditions for the Development of China's Freshly Squeezed Juice Industry**

### **2.1. The Concept of Healthy Living is Deeply Rooted in People's Hearts**

Since the reform and opening up, China's economy and society have continued to develop, and people's needs for life have gradually changed from "eating enough" to "eating well", and paying more and more attention to the quality and health requirements of diet. In terms of diet, fast food accounts for as much as seventy percent, but mostly greasy and spicy food, high-fat polysaccharides are not healthy, contrary to the healthy diet advocated today, light and low-sugar foods are rare, but people's demand for them is huge, so the market for such goods is very broad. Pure freshly squeezed juice can improve resistance, reduce disease, and delay aging. It has also been proved that through the perennial oral intake of freshly squeezed juice, the risk of tumors in the digestive system, bladder and respiratory tract is reduced by 15%, and it can also effectively prevent diseases such as atherosclerosis, which is very consistent with the needs of consumers to eat healthy diets and has considerable market prospects. All kinds of freshly squeezed juices not only meet people's taste needs, but also bring fructose, enzymes, organic acids, minerals and vitamins and other basic nutrients necessary for the human body, and are high-quality products that supplement the basic nutrients of the human body. In recent years, China has strongly advocated "three minus three health" (salt reduction, oil reduction, sugar reduction), (healthy mouth, healthy weight, healthy bones) [2], and improved the good living habits of thousands of households through scientific and reasonable dietary actions. The 19th National Congress of the Communist Party of China put forward the Healthy China Strategy, emphasizing adherence to prevention first, advocating a lifestyle of healthy and civilized development, and actively preventing and controlling serious chronic diseases [3]. The "Health China Development Action (2019-2030)" clearly puts forward 15 major special actions to be carried out, and there is a clear route for the construction of a health country. The country pays more and more attention to hygiene and health, and to realize the health China strategy, the focus of work has changed from the previous "cure" to "health care prevention", which has raised the requirements of food quality and health to a higher level, which also provides opportunities for the rise of the freshly squeezed juice industry.

## 2.2. Development of Fruit Preservation Technology

Due to the improvement of science and technology and the development of the national economy, human demand for food is getting higher and higher, human dietary structure has transitioned from subsistence to nutrition, and the demand for food not only pursues quantity, but also pays attention to quality and variety. Economical, affordable and convenient food will also become the main object of consumer purchase. Fresh fruits and vegetables are the basic necessities of people's lives, it is high in water, and rich in vitamins, minerals and dietary fiber that our body needs. Based on the characteristics of soft and tender organization and high moisture content of fruits and vegetables themselves, they are easy to rot and deteriorate, difficult to store for a long time, and have extremely high requirements for storage and transportation conditions, and if they are not used in time after harvest, it is easy to lose taste and flavor and their own nutritional value, so that product quality declines and commercial value is lost. Therefore, the low-temperature storage and preservation of fruits and vegetables is an important part of fruit and vegetable industrial production, the main guarantee for the development of sustainable fruit and vegetable industry, and the most important development industry in China's current agricultural industrial restructuring. Modern high-temperature storage technology is mainly divided into mechanical freezing, mechanical modified atmosphere freezing, mechanical pressure relief freezing and mechanical wet cold refrigeration technology. Among them, mechanical refrigeration accounts for about one-third of the total stored fruit output, but it can still use mechanical adjustment of temperature and relative humidity for manual adjustment and management, and has achieved good storage. China's air conditioning storage technology started late, at present, there are four types of air conditioning preservation methods that are more common: the first is the air conditioning of the plastic composite film tent, the second is the mixed oxygen reduction method, the third is the automatic natural oxygen reduction method, and the fourth is the artificial improvement of indoor air composition method. Due to the rapid progress in the research and development and application of chemical anti-corrosion preservatives, they are widely used in practice, and many chemical anti-corrosion preservatives such as chemical bactericides, biological activity regulating factors and biological coating films are being applied in storage and preservation, which has a significant auxiliary and role in improving storage efficiency. [4] Some advanced technologies, such as chitosan and its derivatives, have good antibacterial properties, can effectively prevent fruit decay during storage and maintain its quality, and are an ideal green antibacterial material. [5].

## 2.3. China has a Vast Territory and Rich Fruit Varieties

China's territory has a large latitude and longitude span from north to south, and most places are located in the middle and low longitude and latitude areas, mostly subtropical and temperate regions, and a small part of the area is located in the high tropics, and only in the alpine areas with year-round ice belts. The low latitude status makes most parts of China relatively warm and heat-rich, so that crops can be ripened twice or even three times a year, which is very conducive to fruit cultivation and can provide high-quality raw materials for the freshly squeezed juice market. China occupies most of the northern temperate zone of East Asian countries, which is the global rice and wheat production area, and has an important strategic position in the global national economy. Due to the latitude region and the different weather in the north and south, the weather in China is complex and changeable, and many animals and plants in the world can find a place to live in China. China's changeable weather has also created favorable conditions for the development of a variety of crops in China, and also provided conditions for the cultivation of fruits. Delicious coconuts, betel nuts, coffee, etc. come from China's Leizhou Peninsula, Hainan Island and a few places in southern Yunnan, which are the home of tropical fruits. Citrus, Tong, bamboo, bananas, pineapples, lychees,

longans, olives and other cash crops are produced in the Qinling Mountains, south of the Huai River, and east of the Qinghai-Tibet Plateau, which is the home of subtropical plants. From south to north, in the vast area south of the Great Wall and north of the Qinling Mountains and the Huai River, the eyes full of apples, pears, persimmons, grapes and other fruits will make your mouth water. The rich variety of fruits also provides conditions for the development of the freshly squeezed juice industry.

### **3. Constraints on the Development of China's Freshly Squeezed Juice Industry**

#### **3.1. Food Hygiene Problems are Serious**

There are two common health problems in the freshly squeezed juice industry: one is the problem of site hygiene. Some fruit and vegetable juice operation sites can not meet health and hygiene standards, some businesses in the open public space for fruit juice operations, dense flow of people, it is easy to make the juice squeezed, raw materials are contaminated by bacteria. In addition, the cross-application of extractive utensils, such as fruit knives, cutting boards, juicers and other tools, is also easy to make the juice contaminated and the product quality deteriorate. Irregular disinfection of appliances is more likely to aggravate a series of pollution incidents. The second is the hygiene of the operation process. Some workers who carry out fruit juicing operations are very lacking in basic hygiene common sense, and some food processing plants have a lax awareness of hygiene management, and fruit raw materials purchased in the market can be directly processed without strict washing and sterilization. Even some fruits are directly squeezed without peeling, and some fruits themselves have peculiar smell or rotten deterioration, and the staff does not select, so that the bacteria on the fruit skin are directly brought into the juice after being squeezed, causing serious pollution and product quality decline. In addition, the failure to disinfect the hands of the staff, resulting in serious external contamination of the fruit in the extraction process, is also the key reason for the decline in product quality.

#### **3.2. Counterfeit Products are Prevalent in the Market**

Freshly squeezed juice products take health as the basic concept, which is very consistent with the current food market demand and has good market prospects. With the rise of per capita income, people's concept change from eating enough to eating well has made the freshly squeezed juice industry have a good and broad market prospect. Moreover, the entry threshold of this industry is relatively low, the prospect of profits and other favorable factors have led many illegal and unscrupulous businessmen to covet this market that has not yet been fully developed. Even some hotels and restaurants for the sake of greater interests, adopt the method of mixing juice with water, while using various flavor dyes to produce freshly squeezed juice that goes against the concept of freshly squeezed, and even worse, directly use fruit flavor agents and other chemicals with water. This undesirable phenomenon has seriously hit the already weak freshly squeezed juice market, and the occurrence of such phenomena can be severely punished and eliminated in order to make the freshly squeezed juice market develop well.

#### **3.3. The Juice Market Lacks Market Competitiveness**

Although freshly squeezed juice once had a brilliant time, it did not become a rigid demand for consumption. Mintel data shows that as of November 2020, US juice companies only ranked fifth in the frequency of consumption of domestic non-alcoholic beverages, followed by animal milk, yogurt lactic acid bacteria drinks, milk tea and coffee. In the juice market, due to the low threshold leading to competition saturation, a variety of juice brands and juice products are increasing, resulting in a slowdown in market growth. China's domestic juice market has a

compound growth rate of only 2.5%. In addition, more and more new competitors have emerged in the beverage market, such as carbonated drinks, tea drinks, and now sparkling drinks, sugar-free drinks, etc., which are constantly squeezing the presence of juice. Juice products are becoming less and less favored, but they are also driving the shift of juice products to low-sugar and sugar-free. In fact, today's consumers do not like to drink juice, just take the juice products sold in major tea stores, there is still a large consumer market. And in the summer, many tea brands, new are fruit drinks, such as coconut, oil orange, yellow peel, etc., all of which are related to fruits. In general, the common feature of these fruit drinks is that they are healthy, fresh, natural and so on, and they also cater to the current consumer demand. It has to be admitted that the emergence of new beverage categories and new tea drinks has had a certain impact on the sales of packaged juice. Although consumers have more choices, juice products are more unpopular in contrast.

### **3.4. Lack of Own Brands**

Nowadays, there are many freshly squeezed juice brands imported from abroad in China's domestic market. For example, originated in the UK, VQ freshly squeezed juice introduced by Mr. Yang Yuqing absorbs the advanced technology of European and American freshly squeezed juice, and integrates the color, taste and nutrients of the product more completely through scientific and reasonable cooperation with senior nutrient experts. His business philosophy of "no water, no ice, no sugar" and "100% freshly squeezed" has long become an important criterion for industry personnel to judge the authenticity of freshly squeezed juice. In addition, innocent, a health juice drink brand popular in Europe and the United States, has been sold in high-end hypermarkets such as Hema Xiansheng, Ole, Super Species, and G-Super Greenland Preferred in Jiangsu, Zhejiang and Shanghai with its Chinese name "naïve"[6]. There are also foreign companies such as Coca-Cola and PepsiCo that are accelerating their transformation to win the market. For example, PepsiCo acquired the world's No. 1 juice brand "Pure Fruit", and Coca-Cola Company acquired part of the stake in juice manufacturer Suja Life. The main factor is that due to the huge population base in China, the consumption of fruit juice is relatively huge, consumers especially prefer delicious and nutrient-rich fruit juice drinks, and consumers' lifestyles are constantly changing, showing a trend of diversification. Based on the survey data of "China Fresh Juice Industry Development Dynamic Monitoring Analysis and Trend Forecast Report (2019-2025)", it is not difficult to find that in recent years, the fresh juice market has gradually blossomed everywhere in the beverage market, and the market penetration in important large and medium-sized cities in China has approached 50%, and is expanding at a rate of more than 4% per year [7]. At present, the main domestic juice beverage enterprises include Coca-Cola (China), Master Kong, Weiquan Foods, Unity, Huiyuan Juice, Nongfu Spring, Minute Maid and other enterprises, of which Coca-Cola (China) occupies 14.6% of China's juice beverage market, ranking first, while Weiquan Foods and Huiyuan Juice rank second and third in China with 11.6% and 11% respectively. Beverage brands from abroad (such as Coca-Cola and PepsiCo Beverage Company) have occupied most of the market share of China's juice diet, which has brought great challenges to the development of domestic juice brands.

## **4. Countermeasures and Suggestions to Promote the Development of the Freshly Squeezed Juice Industry**

### **4.1. Establish Hygienic Standards and Standardize Production Processes**

At present, although the freshly squeezed juice industry is booming, it lacks clear industry standards, and the entire freshly squeezed juice market is in a chaotic and disorderly state. It is necessary to set up an insurance in the processing process to ensure the freshness of raw fruits and vegetables, and at the same time identify and eliminate bad fruits to ensure that raw

materials and products do not rot. And it must also be clearly stipulated that the use of ingredients such as coloring, flavors and fragrances and fruity additives in freshly squeezed juice products must be clearly stipulated to ensure that the pure natural freshly squeezed juice is hygienic and pollution-free. Moreover, workers are required to be equipped with sanitary appliances when working, and the amount of human pollution must be minimized. In addition, industry associations and food regulatory authorities need to establish clear and feasible hygiene standards for freshly squeezed juices and manage the hygiene of the entire production process by monitoring the quality of the final product.

#### **4.2. Standardize Production Processes and Improve Hygiene Awareness**

The quality competition of freshly squeezed juice is essentially a competition of the quality of employees. At present, the entry threshold for freshly squeezed juice in China is too low, allowing those lawbreakers to take advantage. In addition, the product hygiene and quality management methods in large juice processing companies are still a little simple, and there is no corresponding awareness of food safety protection. Hygiene measures are not yet perfect, and the extraction process can even be modified at any time. This allows contamination to enter the mouth of consumers along with the product. Therefore, strive to popularize so that it can achieve the unity of commodity quality, and can imitate the operation mode of successful enterprises, from raw materials to technology to production of each link in accordance with the standards of strict implementation, the production process drawing, so that workers understand, understand each process technology and strictly follow the implementation.

#### **4.3. Build Your Own Brand and Establish Brand Awareness**

The disorderly market calls for leading companies, but the single terminal marketing channel and brand advantage of freshly squeezed juice cannot establish constraints, which hinders the formation of brand advantages. In the case of market fickleness, capable large-scale companies need to start from the development, design and manufacturing services, gradually establish a complete industrial chain focusing on multiple product lines and multiple marketing channels, take product quality as the core competitiveness, ensure quality with refined management, build famous brands with high quality, and continuously expand market share. After-sales service for customers is also essential, good after-sales service can get rid of the price war between enterprises. Perfect service can maintain consumers' confidence and loyalty to the brand, and improving the self-brand image itself is also a profit point. In the short term, no gains are seen. However, under long-term accumulation, a good brand image and after-sales service can bring high benefits to the brand.

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