

Analysis of the Reasons of Obstacles to the Development of Prepared Dishes in Chinese Market

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Abstract:

Since January 8, 2024, China has implemented the policy to treat COVID-19 as “Category B infectious diseases and subject to class B control measures”, a measure that marks China officially entering into the post-pandemic era. With the change of life pace and consumption concepts, a new economic phenomenon has been derived and strengthened, which is called the “The lazy Economy”. This paper explores the reasons why the development of prepared dishes is hindered in China against the background of the post epidemic era and the lazy economy in the country. This paper sorts out and summarizes the category classification of prepared dishes and finds that the categories of prepared dishes are mainly classified according to the degree of processing depth in Chinese market. By analyzing the advantages of prepared dishes, this paper further finds that prepared dishes have great potential for market development in the future; on the other hand, this paper summarizes in depth the factors that hinder the development of prepared dishes in the Chinese market, which is conducive to helping the industry to develop healthily and helping prepared dish enterprises to find the bottleneck to break through.

Keywords: Prepared Dishes, Market Status, Influential Factors, Product Categories

1. Introduction

Prepared dishes, i.e. pre-made dishes, in a broad sense, refers to finished or semi-finished products made from such raw material as agricultural, livestock, poultry and aquatic products with various auxiliary materials and pre-processed (e.g. slitting, mixing, marinating, tumbling, molding and seasoning), and in a narrower sense, the current market focuses on pre-made dishes mainly in the form of semi-finished materials that are deep-processed by addition of ripening or shallow frying for refrigeration or ambient temperature preservation[1].

Prepared dishes have a long history and have been appeared since ancient Greece and Rome. At that time, people stored and reprocessed ingredients in a number of rudimentary vessels. Research shows that in the 1960s, with the spread of supermarket and terminal freezers, the U.S. Sysco served as the world’s largest food supply chain company. In the 1990s, KFC, McDonald’s and other similar brands entered into the domestic market, and the distribution and processing of fresh-cut dishes appeared accordingly[2]. In 2000, deep-processed semi-finished pre-prepared dishes enterprises began to emerge in China.

With the development of cold chain technology and logistics industry, the prepared vegetable industry developed rapidly. In 2020, the outbreak of epidemic made the demand for prepared dishes increased greatly. Zhao Lianglin (2021) suggested that the development of prepared dishes became a sunrise industry in the future food industry, promoted by the lazy economy[3].

So we decided to research and analyze the development of prepared dishes in Chinese market, through which we can more clearly summarize the reasons for the development obstacles, help the government to better formulate policies, help the industry to develop in a healthy way, and help prepared vegetable companies to find bottlenecks and breakthroughs.

Research Framework: The rest of this paper is organized as follows: Section 2 is the categories of prepared dishes, Section 3 is the advantages of prepared dishes, Section 4 are the factors hindering the development of prepared dishes in China, and at the end is the conclusion of this paper.

2. Categories of Prepared Dishes

Prepared dishes are rapidly developing in China, and their

product categories are numerous, according to the literature, there are four existing classification methods. First, according to the type of raw materials, they can be classified into livestock and poultry meat prepared dishes, such as smoked ham, instant chicken feet, meatballs, etc.; vegetable prepared dishes, such as frozen vegetables, seasoned dishes, pickled dishes, kimchi, edible fungi dishes, etc.; and aquatic prepared dishes, such as ready-to-eat salmon, seasoned fish fillets, aquatic cooking packs, etc. [4]. Secondly, according to the degree of cooking is divided into Raw Prepared Dishes, Cooked Prepared Dishes and Mixed Raw and Cooked Prepared Dishes. Also, according to the storage conditions, they are categorized into room temperature storage prepared dishes, refrigerated storage prepared dishes and frozen storage prepared dishes. The most commonly used classification is „Ready-To-Eat

Prepared Dishes, Ready-To-Heat Prepared Dishes, Ready-To-Cook Prepared Dishes and Ready-To-Serve Prepared Dishes“(Table 1). Ready-To-Eat Prepared Dishes include ready-to-eat canned food, jerky, soaked chicken feet, chicken legs, ham sausages, ready-to-eat salads, etc[4-6]. Ready-To-Heat Prepared Dishes include instant frozen crayfish, self-heating hot pot, instant frozen fast food, fast food cooking packages, and other cooked foods[4-6]. Ready-To-Cook Prepared Dishes include marinated steak, frozen steak, frozen dumplings, French fries and other non-ready-to-eat raw products[5-6]. Ready-To-Cook Prepared Dishes include raw shredded meat, raw sliced meat, small pieces of meat, raw shrimp, raw fresh-cut dishes, stir-fry combination packs, and other primarily processed products[4-6].

Table 1. Category of Prepared Dishes

Classification of Chinese Prepared Dishes	Contents	Literature sources
According to its main raw material	Prepared vegetable products, prepared aquatic products, prepared livestock products, etc.	Zhao Chaofan, et. al. (2023)
Depending on their degree of rawness and processing	Raw Prepared Dishes, Cooked Prepared Dishes, Mixed Raw and Cooked Prepared Dishes	Zhang Miao (2023)
Depending on their mode of preservation and transportation	Prepared dishes for ambient storage, prepared dishes for refrigerated storage, prepared dishes for frozen storage	Zhao Chaofan, et. al. (2023)
Depending on their degree of processing	Ready-to-eat prepared dishes, ready-to-heat prepared dishes, ready-to-cook prepared dishes, ready-to-serve prepared dishes	Zhang Miao (2023); Ma Linlin et al. (2022); Kuang Hongyun et al. (2023); Zhao Chaofan, et. al (2023);

3. Advantages of Prepared Dishes

3.1 For end consumers

Prepared dishes can satisfy the „lazy man effect“ and „cooking freshman“ ideas popular in today’s society[6], It caters to the need for „fast and accurate“ in the rapid development of the times, which is not only fast, resistant to storage and delicious [7].

Moreover, prepared dishes to a certain extent retain the nutrients contained in fresh food. The quality of traditional dishes is affected by the chef’s skills, the variety of ingredients, cooking methods and other factors, and the nutrition they contain is not guaranteed to be presented in a standardized way. Prepared dishes, the standardization of the processing chain has made it possible to maximize the retention of the nutritional value of the raw material itself after processing and to further provide nutrients that natural ingredients are unable to provide to the human

body[8].

In addition to bringing convenience to consumers, prepared dishes can also meet diversified consumer needs as well as emotional needs. China is a vast country, and different provinces have different culinary characteristics. Domestic prepared dishes combine China’s deep-rooted food culture, enabling consumers to experience the cuisine of other provinces in their place of residence[8]. Prepared dishes also lower the threshold of cooking, enabling more ordinary consumers to have a better cooking experience[8]. Imagine that for a novice cook who wants to eat delicious, safe and nutritious meals without spending a lot of money on eating out or a lot of time and energy on practicing cooking skills, prepared dishes become the right choice.

3.2 Impact to the Upstream and Downstream Supply Chain

The development of prepared dishes has also had a posi-

tive impact on the upstream and downstream of its supply chain. For the producers of prepared dishes, the standardized production of prepared dishes has allowed many companies to reduce costs and improve efficiency[7].

For organizational users of prepared dishes, prepared dishes can also meet the catering requirements of large commercial complexes. Catering outlets in shopping malls are subject to the „Rules for Fire Safety Management of Large Commercial Complexes (Trial)“, which clearly stipulates that catering establishments set up on the ground floor and with a floor area of more than 150 square meters or a seating capacity of more than 75 seats are not allowed to use gas and cannot use open flames, and therefore most of the dishes also belong to prefabricated dishes heated up and then delivered to the hands of the customers by the deliveryman.

The emergence of prepared dishes also promotes the joint development of primary, secondary and tertiary industries, cuts the distance from raw materials to finished products, shortens the distance from final consumer products to the so-called „ready-to-eat“, and provides a broader space for the development of primary industry as well as related industries[8].

4. Factors hindering the development of prepared dishes in China

4.1 Industry factors

First of all, there is a lack of compound talents in the prepared vegetable industry. Up till now, colleges, universities and vocational schools have not yet generally discussed the program of specialized training of compound talents in prepared dishes, and thus there is a great lack of professional compound talents who can master the theoretical knowledge and skills of the processing of prepared dishes in the society. At present, the front-line personnel in the prepared food production enterprises are mainly traditional culinary food production and processing technicians, but because of the differences in production and processing technology between prepared food and traditional culinary food, many problems often occur in practice[6].

Secondly, since China has not yet introduced national safety standards in the field of prefabricated vegetable production and processing, the field is still in a vacuum status. The lack of policy has led to the lowering of the industry threshold and the influx of capital has triggered the problems of scattered layout and duplicated construction in the industry[9].

Finally, the prepared vegetable industry also lacks policy support, and the input of capital, land and other resources is obviously insufficient, so the industry has a low

degree of large-scale production. And due to the lack of high-quality supply sources, food safety is also difficult to be guaranteed[9].

4.2 Technical factors

4.2.1 Limitations of cold chain technology

First of all, the pre-cooling step in the cold chain technology of prepared dishes is one of the most neglected and difficult to solve steps in food safety. Pre-cooling ensures the quality and safety of prepared dishes and has a crucial impact on the effective development and fine management of subsequent cold chain links. China's rural areas lag behind in the development of cold chain and the lack of market factor allocation has led to the lack of pre-cooling at the place of production. Currently, 70% of farmers are still not actively involved in the pre-cooling process[5].

Secondly, the phenomena of „broken chain“ and „defrost“ often occur in the „last one kilometer“ of domestic cold chain distribution. At the macro level, there is a lack of unified planning in the logistics industry, and the powers and responsibilities of various departments are not the same, which leads to many restrictions on the transportation and distribution of cold chain vehicles in urban areas. At the operational level, cold chain distribution has strict requirements on time, but problems such as insufficient equipment and traffic congestion have increased the risk of cargo damage.

Finally, the thawing treatment of prepared dishes after distribution also needs to be finely managed, otherwise the safety and quality of the food will be seriously degraded[5].

4.2.2 Technical bottlenecks in production

First, as the production scale and development level of prepared vegetable enterprises show significant variability, this leads to significant differences in the quality of prepared dishes in several aspects. The production environment and premises of prepared dishes, if not properly managed, are very likely to lead to contamination or cross-contamination, thus jeopardizing the safety and hygienic quality of food[7]. In addition, some companies, while pursuing the flavor and texture of their products, sometimes choose not to use heat sterilization or only low-intensity heat sterilization after processing, followed by refrigerated storage. This will not be able to destroy pathogenic bacteria and parasites, making the food a safety hazard [10].

Secondly, at present, not all dishes are suitable for pre-preparation, especially dishes like stir-fried Kung Pao Chicken and Shredded Pork with Fish, for which the pre-preparation method is unable to restore their characteristic flavors.

Thirdly, the level of independent innovation in the production of the prepared vegetable industry is still insufficient, which is particularly prominent in the process of industrialization development, especially in the improvement of technological research and development capabilities there is still a large space. It is difficult to achieve standardized processing of various types of prepared dishes, due to the fact that their materials are of various shapes and sizes[2]. Finally, in the current market, there is still a lack of supporting equipment specifically designed for the processing of Chinese prepared dishes, and the equipment introduced from other countries is incompetent due to the difficulty of adapting to the unique and complex processing technology of Chinese prepared dishes, which undoubtedly poses a considerable challenge to the development of the industry [6].

4.3 Policy factors

At present, China has not issued national and industry standards related to prepared dishes. Seen locally, many cities in China have introduced relevant locally adapted laws. Nanning City and Baoding City have formulated the “Terminology of Prepared Dishes” and “Classification of Prepared Dishes”. Ningde City and Weifang City have formulated “Technical Specifications for the Processing of Prepared Dishes”, etc[11]. Shijiazhuang City has formulated Specifications for the Operation and Service of Prefabricated Vegetable Distribution Centers and so on. However, the development of policies cannot keep up with the speed of industry development, and the following problems exist:

First of all, the legal norms of China’s prepared dishes are not perfect, the current regulation of prepared dishes in the country mainly comes from the people’s governments at all levels around the relevant normative documents, as well as a series of industry standards or group standards formed spontaneously by the prepared dish enterprises, the lack of laws and regulations on prepared dishes has hindered the development of the prepared dish industry.

Second, the safety supervision of the prepared vegetable industry is insufficient, with missing policies and inconsistent standards increasing the difficulty of supervision, and inadequate food safety supervision of enterprises leading to uneven product quality[12]. Although the China Prepared Vegetable Industry Federation promotes the development of the industry, national food safety standards are still absent, which affects the high-quality development of the food industry.

4.4 Corporate factors

The prefabricated vegetable industry is immature and the size of the companies varies, however, different compa-

nies face different challenges.

First of all, China’s prefabricated dishes of large enterprises have not yet formed a leading enterprise. At present, the domestic prefabricated vegetable industry is scattered, large enterprises, although the degree of mechanical automation is high, but the research and development of innovation ability is insufficient, and most of them do not have industry appeal and leadership, cannot produce a benchmark effect of the leading enterprises, is not conducive to the overall sound development of the industry.

Secondly, the automation level of small and medium-sized enterprises in China’s prepared food is low and competitive, while the investment risk is high. At present, most domestic prepared food processing enterprises are workshops, small scale, scattered, standardized production is difficult, and the waste of resources is serious. Cold storage technology requirements are high, the distribution radius is limited, and cross-regional operation is difficult[13], so the cold chain logistics capacity restricts the development of SMEs. At the same time, multiple product lines require high-cost operation, and the risk of capital chain breakage is high, resulting in SMEs being subject to obvious financial constraints.

Finally, enterprises have concerns about investing in the prepared vegetable industry. Investment is all about timing, location and people, and at present, the prefabricated vegetable industry has imperfect policies, gaps in technology, large customers’ complaints, and more negative social opinions. All of these lead to enterprises dare not to easily invest, while the prefabricated vegetable industry chain is long, the supply chain collaboration requirements are high, and the difficulty of enterprise operation increases. The epidemic has accelerated the development of prepared dishes, and upstream and downstream enterprises have rushed in, further intensifying market competition. Price wars may lead to increased competitive pressure, and enterprises with backward management face the risk of being eliminated [14].

4.5 Sociocultural factors

The development of prepared dishes in Europe, America and Japan far exceeds that of China, which is closely related to the social culture of Chinese characteristics.

First of all, there are obvious differences between Chinese and Western dietary concepts. Chinese food culture emphasizes sensibility and pursues taste and food art; Western food culture is rational and focus on nutrition and science. Although influenced by the West, China still emphasizes the artistry of food, while the West emphasizes nutritional matching. Therefore, the production of Chinese prepared dishes should integrate nutrition and deliciousness. Also shows the unique flavor and artistry of Chinese

diet, so as to be more in line with the dietary concepts of Chinese people.

Secondly, there is a certain difference in the way of thinking between Chinese and Western diets. Chinese food focuses on the overall taste, such as dumplings, mooncakes, etc., the material is integrated into one for tasting slowly; the Western food is divided into categories, focusing on individual characteristics of the material and nutritional analysis. Chinese prepared dishes cannot copy the simple list of the West and Japan, should be made to pay more attention to the restoration of taste, to maintain the same flavor with the traditional diet so that diners in the taste of identity.

Finally, Chinese and Western diets are prepared differently. Chinese food culture is colorful, satisfying both survival and spiritual needs. The same dish has different effects under different regions and producers, and the Chinese people pursue „harmony and difference“. Western food emphasizes the need for survival, preserving the original flavor and nutrition of the ingredients, with a single method of preparation and greater attention to efficiency. As a result, the demand for prepared dishes in China is diverse, and there is room for the same dish to grow in different ways[4].

4.6 Consumer factor

First, some consumers in China are skeptical about the safety of prepared dishes, and the general recognition is not high[15]. The relevant report of AiMedia Consulting 2023 shows that more than half of consumers are concerned about illegal additives in prepared dishes[15].

Second, the development of prepared food in China is short, and consumers have not established the habit of using it. The Five-Year Plan of the China Culinary Association shows that the penetration rate of prepared food in China is currently low, with a large gap compared to the high penetration rate of pre-packaged food in Japan. It will take a long time for prepared foods to become popular in Chinese households. Currently, prepared foods have few varieties and poor taste, and are not highly rated by consumers[13]. Moreover, the cooking process of ready-to-cook and ready-to-prepare „prepared dishes“ has specified heating steps and requirements, which are different from the cooking process of traditional dishes, and consumers need to spend time and energy to learn them. Failure to follow the prescribed heating times and temperatures may lead to potential food safety hazards[10].

Finally, consumers are sensitive to the price of prepared dishes, which directly affects their purchase intention. Different consumer groups have different levels of price sensitivity, and many people believe that prepared dishes should be cheaper than traditional foods, and therefore ex-

pect lower prices for prepared dishes[16].

5. Conclusion

At present, few scholars in the existing literature have researched on the problem of impediments to the development of domestic prepared dishes, and few have received the attention of domestic scholars, so this paper sorts out the literature related to domestic prepared dishes, with the aim of stimulating domestic and foreign scholars to further research on prepared dishes.

This paper firstly gives the definition of prepared dishes and briefly introduces the development history of prepared dishes at home and abroad. It also finds that the development speed of prepared dishes abroad is much faster than that of prepared dishes in China, and with the outbreak of epidemic, people's demand for prepared dishes is getting bigger and bigger.

Secondly, this paper collects the categories of prepared dishes, organizes and summarizes them and divides them into four major categories.

Thirdly, a search of the literature reveals that many scholars believe that prepared dishes can benefit a variety of fields and analyze the advantages of prepared dishes from the perspectives of consumers and the supply chain in depth. Finally, our scholars believe that although prepared dishes are very popular in the market with a large number of consumers, the development of prepared dishes in China has been stagnant due to factors such as technology, policy, industry, enterprises, social culture, and consumers. The obstacles to the development of prepared dishes in China have remained unsolved for a long time.

In response to these shortcomings, this paper argues that future research can advance in the following areas.

First, the development of uniform industry standards. At present, China's prepared vegetable industry is in the development stage, the lack of industry standards has led to the uneven quality of prepared vegetable food. In the face of this situation, we should promote the development of unified industry standards and norms to promote the prosperous development of the prepared vegetable industry.

Second, strengthen the research and development and innovation of technology. China's prepared dishes food homogenization is serious, cold chain transportation management is poor, we must increase technological innovation and product research and development efforts to break through the existing technological barriers, to further enrich the variety of prepared dishes and to ensure that the product safety of prepared dishes.

Third, the formulation of relevant legal policies. The imperfections in the relevant policies of our country's prepared dishes have led to problems such as food super-

vision. Therefore, we need to formulate detailed laws and regulations to clarify the specific requirements of the production, processing, sales and other aspects of prepared dishes, so as to protect the rights and interests of consumers.

Fourthly, consumer education should be strengthened. Food safety of prepared dishes is not only the responsibility of merchants, but consumers may also cause food safety problems. By popularizing the knowledge of prepared dishes, we can help consumers better understand the characteristics of prepared dishes, how to make them, and so on, so as to ensure that consumers use the products correctly and promote the healthy development of the prepared vegetable market.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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