

AgeWise Kitchen: A Feasibility Study on Solving Nutritional and Health Issues for the Elderly Based on Personalized Nutrition Plans

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Abstract: With the acceleration of the aging process in China, the nutritional and health problems of the elderly have become increasingly prominent. This article focuses on the nutritional issues faced by the elderly, deeply analyzes the deficiencies of the current food supply in meeting the special dietary needs of the elderly, and then proposes the AgeWise kitchen, a personalized nutritional solution. Through the analysis of the target market and demand, competitors, sales and marketing strategies, as well as financial forecasts, etc., the feasibility and market potential of AgeWise kitchen in addressing the nutritional and health issues of the elderly were demonstrated, aiming to provide the elderly with higher-quality and more demand-oriented dietary services and promote their health and longevity.

Keywords: The Elderly; Nutrition and Health; AgeWise Kitchen; Personalized Nutrition

1. Introduction

Population aging has become a global social trend, and China is no exception. According to the data released by the National Bureau of Statistics of China [1], the number of elderly people in China is huge and keeps increasing. By the end of 2024, the population aged 60 and above in China reached 310 million, accounting for 22% of the total population, and this proportion is expected to rise further in the coming years. With the acceleration of the aging process, the health issues of the elderly have received increasing attention. Among numerous health issues, nutritional health is a fundamental and crucial link.

Many elderly people, despite suffering from chronic diseases such as hypertension and hyperglycemia, still have the habit of saving leftover food. This seemingly thrifty behavior

actually hides many hidden dangers. As time goes by, a large amount of nutrients in leftover food will be lost. Furthermore, food is prone to bacterial growth during storage, thereby increasing the risk of food poisoning [2]. More importantly, if the elderly consume such food for a long time, it is difficult to meet their body's demand for various nutrients, which can easily lead to malnutrition. Malnutrition in the elderly may lead to serious consequences, including weakened immunity, increased risk of infection, and elevated risk of complications from chronic diseases, etc. [3]

A reasonable diet is crucial for maintaining the physical health of the elderly and improving their quality of life. A balanced diet can provide the body with various nutrients it needs, support bodily functions, enhance the immune response, and reduce the risk of age-related diseases [4]. However, at present, the elderly are facing many difficulties in terms of diet, such as having difficulty obtaining meals that meet their own health needs. Against this backdrop, the proposal of the personalized nutrition solution-AgeWise Kitchen-holds significant practical significance.

2. Nutritional Issues of the Elderly

2.1 The Dietary Predicament of Elderly People Living Alone

According to the National Committee on Aging of the Ministry of Civil Affairs of China [5], more than 50 percent of China's population aged 60 and above live alone, and even higher in rural areas. Such a large group of elderly people living alone urgently needs to solve their dietary problems. Living alone brings unique challenges to the diet of the elderly. Due to their limited mobility, energy and lack of companionship, they all face difficulties in purchasing ingredients, cooking meals and cleaning up after meals. [6] Therefore, many elderly people living

alone often rely on simple, convenient and sometimes unhealthy food options, such as instant noodles, canned food or leftovers, which may not provide sufficient nutrition. In addition, the lack of social interaction during meals may also affect their appetite and overall dining experience, further increasing the risk of malnutrition [7].

2.2 Insufficiency of the Current Food Supply

Although there are currently food delivery services or catering plans for nursing homes, these services have obvious deficiencies in meeting the special dietary needs of the elderly. They mainly focus on providing "generally healthy meals, low-calorie or high-protein foods", but these options are not suitable for all elderly people. For instance, although spinach is rich in nutrients, it may pose a problem for patients with kidney diseases because its high oxalic acid content may increase the burden on the kidneys [8].

Furthermore, the current food supply lacks consideration of the dietary needs of the elderly resulting from changes in health conditions, goals or lifestyles, and there is no corresponding mechanism to track or adapt to these changes over time [9]. Chronic diseases are relatively common among the elderly, and different diseases often require specific dietary adjustments. For example, patients with diabetes need to control their carbohydrate intake, while patients with cardiovascular diseases may need to reduce their sodium intake [10]. However, the existing food supply services often fail to offer such personalized dietary solutions, which limits the elderly in choosing meals and may fail to meet their unique health needs.

3. AgeWise Kitchen-Personalized Nutrition Solutions

3.1 Personalized Meal Planning

The core competitiveness of AgeWise Kitchen lies in its personalized meal planning system. This system fully recognizes the heterogeneity of the elderly group, and the physical condition and dietary needs of each elderly person are unique. Based on this, AgeWise Kitchen has established a precise matching mechanism based on users' health indicators and dietary preferences. For elderly people with chronic diseases such as diabetes and hypertension, as well as those with food allergies or special

dietary preferences, AgeWise Kitchen can tailor exclusive meal plans based on their individual characteristics.

During the meal design process, AgeWise Kitchen strictly adheres to nutritional principles, precisely controlling meal portions and scientifically blending nutritional components to support the specific health goals of the elderly. For instance, for diabetic patients, AgeWise kitchen strictly controls the carbohydrate intake of each meal and accordingly increases the ratio of vegetables to high-quality protein, thereby effectively maintaining stable blood sugar levels. This personalized meal planning not only meets the nutritional needs of the elderly, but also helps improve their health conditions and enhance their quality of life.

3.2 Transparency of Ingredients

Under the current social background where food safety issues have drawn much attention, the transparency of food ingredients has become an important indicator for measuring the quality of catering services. AgeWise Kitchen attaches great importance to the transparency of ingredients. By providing detailed procurement information and live-streaming the kitchen preparation process in real time, it ensures that users can have a comprehensive understanding of the source of ingredients and the production process.

Specifically, AgeWise Kitchen presents detailed information about each ingredient to users through its app, including the source, purchase date, and quality inspection report, etc. This measure not only enhances the confidence of elderly users and their families in the safety of food ingredients, but also helps to improve the brand image of AgeWise Kitchen. Meanwhile, AgeWise Kitchen also live-streams the kitchen preparation process in real time through an app, allowing users to have an intuitive understanding of the meal production process and thus ensuring the safety and quality of the food. This high level of transparency in ingredients not only builds users' trust in AgeWise kitchens but also significantly enhances their sense of security.

3.3 Convenient Technology Integration

To enhance user experience, AgeWise Kitchen actively integrates convenient technologies and has developed a user-friendly application. This application integrates the functions of placing orders, delivery tracking and feedback into one,

providing great convenience for family members. Family members can easily place orders for their elderly relatives through this application and track the delivery progress in real time. In addition, they can also provide feedback on behalf of the elderly through the application, so that AgeWise Kitchen can adjust the meal plan in a timely manner.

This function is particularly important for busy children. Even if they are not by the elderly's side, they can still keep track of the elderly's diet at any time through the application and adjust the meal plan according to the elderly's health condition and taste preferences. This comprehensive technological integration not only makes AgeWise Kitchen's services more convenient and efficient, but also makes it a reliable partner for promoting the long-term health of the elderly.

3.4 Examples of Meals Customized for Elderly People with Specific Health Conditions



Figure 1. Example of Customized Meals

A meal example for patients with hypertension (see Figure 1): Breakfast, oatmeal with low-sodium nuts and fruit salad. Oats are rich in dietary fiber and help lower cholesterol levels. Nuts provide high-quality fats and proteins to meet the body's energy needs. Fruit salad is rich in vitamins and minerals, which helps maintain the normal physiological functions of the body. For lunch, steamed fish is served with stir-fried seasonal vegetables and brown rice. Steamed fish is rich in high-quality protein and has a low fat content, making it suitable for people with hypertension to consume. Stir-fried seasonal vegetables provide rich vitamins and dietary fiber, which helps promote intestinal peristalsis. Brown rice increases the feeling of fullness and reduces the intake of other high-calorie foods. For dinner, there was vegetable and tofu soup with sweet potatoes and cold cucumber salad. Vegetable and tofu soup is light and delicious,

rich in various vitamins and minerals. Sweet potatoes are rich in dietary fiber and vitamins, which help maintain intestinal health. Cold cucumber salad is refreshing and non-greasy, making it suitable for dinner.

A meal example for diabetic patients: Breakfast, whole wheat bread with low-fat milk and boiled eggs. Whole wheat bread is rich in dietary fiber and has a low glycemic index, which helps control blood sugar levels. Low-fat milk provides high-quality protein and calcium, meeting the body's nutritional needs. Boiled eggs are a good source of high-quality protein and help maintain muscle mass. For lunch, there is tomato chicken meatball soup with broccoli and buckwheat noodles. Tomato and chicken meatball soup is rich in nutrition and has a delicious taste. Broccoli is rich in vitamins and minerals, which helps enhance immunity. Buckwheat noodles, as a coarse grain, help control blood sugar fluctuations. For dinner, winter melon and kelp soup with corn and stir-fried bean sprouts. Winter melon and kelp soup is light and diuretic, which helps to eliminate excess water in the body. Corn is rich in dietary fiber, which helps promote intestinal peristalsis. Stir-fried bean sprouts are refreshing and delicious, making them perfect for dinner.

4.Target Market and Demand Analysis

4.1 Theoretical Mapping between the Takeout Market and the Growth in Demand for Healthy Food

From the perspective of macro consumption trends, the prosperity of the takeout market and the rising demand for healthy food are not isolated phenomena, but rather concentrated manifestations of the transformation of consumer behavior patterns. In the fast-paced modern life, consumers' demand for convenient food continues to rise. As a typical representative of convenient food, the expansion of the market size of takeout services reflects consumers' dual pursuit of time efficiency and food convenience. Meanwhile, with the awakening of health awareness, consumers' demands for food are no longer limited to meeting basic food and clothing needs, but they pay more attention to the nutritional value and health attributes of food.

From a theoretical perspective, this change in consumption trend is in line with Maslow's hierarchy of needs theory. After meeting

physiological and safety needs, consumers begin to pursue higher-level needs, such as health needs and self-actualization needs. The sharp increase in the demand for healthy food precisely reflects consumers' pursuit of a healthy lifestyle after meeting their basic dietary needs. Against this backdrop, the high-quality and personalized nutritious meals provided by AgeWise Kitchen precisely meet consumers' dual demands for convenience and health, offering it a broad space to secure a place in the market (see Figure 2).



Figure 2. Overview of the Target Market

4.2 Market Opportunities Brought by the Trend of "Precision Nutrition"

The rise of the "precision nutrition" trend is a product of the cross-integration of modern nutrition and medicine, reflecting the deepening of people's understanding of health and the awakening of personalized demands. From the perspective of nutritional theory, the nutritional requirements of different individuals vary significantly due to genetic factors, physiological states, lifestyles and environmental factors, etc. The traditional "one-size-fits-all" nutritional advice has been unable to meet the refined demands of modern people for health management.

The advocacy of personalized nutrition in the 2022 Chinese Dietary Guidelines for Residents is a theoretical response to this trend. AgeWise Kitchen follows this trend and, guided by the concept of precision nutrition, provides personalized nutritional solutions for the elderly. This strategy not only conforms to the development direction of modern nutrition, but also meets the market's urgent demand for personalized nutrition services, opening up a differentiated development path for AgeWise Kitchen in the highly competitive market.

4.3 Theoretical Correlation between the Nutritional Needs of the Elderly and Population Structure Characteristics

The continuous growth of the elderly population in China and the deepening of the aging degree are notable features of the transformation of the population structure. From the perspectives of sociological and demographic theories, the increase in the elderly population not only implies a rise in the social dependency ratio, but also poses severe challenges to the social elderly care service system and health security system.

The high incidence of chronic diseases among the elderly population and the increase in the disabled population further highlight the urgent demand of the elderly for nutrition and health services. The management and rehabilitation of chronic diseases cannot do without reasonable dietary support. However, elderly people with disabilities may face more severe dietary difficulties due to factors such as limited mobility. Furthermore, the increasing proportion of empty-nest elders has led to a lack of necessary family support and supervision in terms of diet for the elderly. These demographic characteristics are closely linked to the nutritional needs of the elderly, jointly forming the target market basis of AgeWise kitchen services, emphasizing the necessity and urgency of providing professional nutrition plans for the elderly.

4.4 Theoretical Interpretation of the Preferences of the Elderly

The dietary preferences of the elderly are influenced by multiple factors, including health conditions, life experiences, cultural backgrounds, etc. From the perspective of health behavior theory, the elderly's concern for health and nutrition stems from their emphasis on their own health and pursuit of improving the quality of life. As people age, their physical functions gradually decline and the risk of chronic diseases increases. Therefore, they pay more attention to controlling their conditions and enhancing their body's resistance through a reasonable diet.

In terms of convenience, the decline in physical functions of the elderly leads to limited mobility and energy, making it impossible for them to engage in activities such as cooking and shopping as freely as young people. Therefore, they have a strong demand for convenient dietary solutions to alleviate the burden of life. From the perspective of self-actualization theory, the elderly hope to maintain their physical functions through a reasonable diet, keep their ability to live independently, avoid becoming a

burden to their families, and thereby realize their self-worth and dignity. The food delivery service and personalized meal design of AgeWise Kitchen precisely meet the multiple needs of the elderly in terms of health, convenience and emotional security.

4.5 Theoretical Analysis of Family Preferences (Caregivers)

Family members, as the main caregivers of the elderly, their preferences have an important influence on the dietary choices of the elderly. From the perspective of family system theory, family members pay attention to the dietary health of elderly relatives, aiming to maintain the overall balance and stability of the family system. They hope to ensure that the elderly have safe, nutritious and high-quality meals to meet their health needs, which reflects the high sense of responsibility of family members towards the health of the elderly.

In terms of transparency, family members attach great importance to information such as the source of ingredients, the process of meal preparation and delivery tracking, which reflects their concerns about food safety and quality, as well as their need for responsibility traceability. From the perspective of social exchange theory, family members, in their busy lives, expect to balance the responsibilities of work and family care and reduce daily troubles by choosing services with simple ordering or management options. AgeWise Kitchen has won the trust and recognition of the household market by meeting the needs of family members in terms of peace of mind, transparency and convenience through strict ingredient procurement management, standardized kitchen operation procedures, transparent information display and user-friendly applications.

5. Competitor Analysis-Porter's Five Forces Analysis

5.1 Threats from Existing Competitors

At present, there are some companies providing catering delivery services in the market, and some of them have also launched some meal packages for the elderly market. However, most of these competitors lack personalized nutrition customization services and are unable to meet the diverse health needs of the elderly. AgeWise Kitchen

has a distinct competitive edge through precise personalized services (see Table 1).

5.2 Threats from New Entrants

As the potential of the elderly nutrition and health market gradually emerges, new enterprises may enter this field. However, AgeWise Kitchen has established a complete supply chain system, a technical research and development team, and a customer service system, thus enjoying certain first-mover advantages. At the same time, the formation of brand awareness and user word-of-mouth also requires a certain amount of time and resource investment, which to some extent increases the threshold for potential entrants.

5.3 The Bargaining Power of the Purchaser

Buyers have multiple choices, and price sensitivity and convenience are important factors. However, for nutrition and health services for the elderly, more attention is paid to the quality and effectiveness of the services. AgeWise Kitchen meets the core needs of consumers by providing personalized nutrition plans, transparency of ingredients and convenient technical services, thereby reducing the bargaining power of buyers.

5.4 Bargaining Power of Suppliers

AgeWise Kitchen has established long-term and stable cooperative relationships with high-quality food ingredient suppliers. It is necessary to ensure a large purchase volume, pay attention to the quality and safety of the ingredients, and have a certain bargaining power in the procurement negotiation. Meanwhile, continuously expand the supplier channels, reduce the reliance on a single supplier, and further enhance the bargaining power.

5.5 Threat of Substitutes

Cooking by the elderly themselves, having their children or relatives take care of their meals, and the catering services provided by nursing homes are all alternatives to AgeWise kitchens. However, when the elderly cook by themselves, there may be problems such as unbalanced nutrition and food safety. Children or relatives taking care of food may be limited by time and energy. The catering services in nursing homes often lack personalization. In contrast, the personalized, convenient and safe nutritious meal service provided by AgeWise Kitchen is

more attractive (see Table 2).

Table 1. AgeWise Kitchen Business Plan

	AgeWise (Expected)	Food preparation catering services	Healthy catering service	Nursing home/caregivers
Transportation speed	Fast(within 30-60minutes), through AI optimization, local center	Moderate (Planned delivery, usually on a daily/weekly basis)	Medium (planned delivery, not immediate)	Slow (The service is not designed for real-time delivery)
Transportation cost	Low to medium, depending on customization	Moderate to high (based on the dietary plan and service level)	Medium to high (Premium services for healthy meals)	High (including bundled services other than meals)
Quality control	The high-end and centralized kitchen offers a menu focused on the elderly and health standards	Moderate and general dietary preparation, usually limited options specifically for the elderly	High quality usually refers to premium ingredients, but it is not specifically targeted at the elderly	It is high, suitable for elderly care, but has limited dietary diversity
Distribution scope	The city center and surrounding areas	Limited to nearby cities and suburbs	Regional distribution, with a relatively low degree of localization	Single location, limited to facilities

Table 2. Porter's Five Forces Analysis

Threat	Intensity	Drivers	Impact
Competitive Confrontation	Moderate to Severe	Many competitors in the healthy meal delivery market; differentiation is key.	Innovation (such as personalization, technology integration) is needed to stand out.
Threat of New Entrants	Moderate	Low barriers to entry, but personalization requires professional knowledge and resources.	Professional knowledge in health indicators and trust-building will create barriers.
Bargaining Power of Buyers	High	Buyers have multiple choices; price sensitivity and convenience are important factors.	Providers must focus on affordability, transparency, and excellent user experience.
Bargaining Power of Suppliers	Moderate	High-quality, traceable raw materials are needed; bulk purchasing can reduce dependence.	Strong supplier relationships and diversification ensure consistent quality.
Threat of Substitutes	Moderate	Substitutes include self-cooking, family meals, or general delivery services, which often lack specificity.	Personalized health benefits and convenience reduce the threat of substitutes.

6. Sales and Marketing

6.1 Theoretical Logic of Key Marketing Information Construction

The construction of marketing information needs to closely align with the psychological needs and behavioral characteristics of the target group, and achieve precise reach based on theory.

For the elderly group, according to Maslow's hierarchy of needs, after their physiological needs are met, they pay more and more attention

to the needs of safety, social interaction and self-actualization. AgeWise Kitchen's marketing message of "Enjoying the ultimate taste, Nourishing Health" not only emphasizes the deliciousness and healthiness of the meals, which aligns with its pursuit of quality of life, but also ensures the safety of its actions and independent dignity through home delivery, meeting the needs of safety and self-actualization. Meanwhile, based on the social cognitive theory, the decision-making of the elderly relies on intuitive feelings and

experiences. Highlighting the convenience and deliciousness of meals can reduce their psychological resistance to trying new services and stimulate their willingness to consume.

For family groups (caregivers), the social exchange theory can explain their consumption motives. When family members take care of their parents, they expect to exchange reasonable efforts for their parents' health security and their own psychological comfort. The message of "Customizing a personalized nutrition diet blueprint for beloved Parents" highlights AgeWise Kitchen's deep care and personalized services for the health of the elderly, providing family members with emotional support and a way to fulfill their responsibilities, achieving a dual exchange of emotions and material, and encouraging them to choose services for their parents.

6.2 Theoretical Basis for Sales and Marketing Strategies and Channel Planning

The promotion of the elderly group is in line with the social embedding theory. Local community centers and other places are the core nodes for the elderly's social interaction and information acquisition, featuring high aggregation and a foundation of trust. Promoting here can quickly spread information and build trust through word-of-mouth communication and social influence. The theory of experiential marketing also supports holding meal demonstration and tasting events, allowing the elderly to directly experience the cooking and taste of meals, enhance cognitive trust, reduce purchase risks, and promote decision-making.

Family group promotion follows the theory of use and satisfaction. Wechat Mini Programs meet their needs for information acquisition, order management and social sharing, achieving seamless service access and personalized customization. Big data-targeted social media advertising placement is based on the theory of precise marketing, precisely targeting the target customers and improving the conversion rate. Content marketing, based on the knowledge gap theory, provides valuable information, enhances the professionalism and credibility of the brand, and guides the audience to recognize the value of the service.

The theory of customer relationship management emphasizes the importance of long-term and stable customer relationships. The customer subscription model helps AgeWise Kitchen gain

a deeper understanding of customer needs, provide personalized services, and enhance satisfaction and loyalty. The transaction cost theory indicates that long-term subscriptions can reduce the costs of customer acquisition and churn and improve economic benefits. Real-time family management and transparent food sources, based on trust theory, enhance customers' trust and dependence, form a virtuous interaction and trust cycle, and lay a solid foundation for long-term retention and enterprise development.

7. Financial Forecast-First Year Cash Flow

Table 1 is the cash flow analysis for the first year:

Table 1. Cash Flow Statements

Category/Income Stream	Estimated Amount (RMB)
Startup Costs	
Kitchen setup, including initial food inventory	200,000
App development and launch	80,000
Marketing and advertising	30,000
Employee recruitment and training	50,000
Legal and licensing fees	20,000
Total Startup Costs	380,000
First-Year Revenue (Annual)	
Meal subscriptions (monthly packages)	2,400,000
One-time meal orders	600,000
Additional services (e.g., customization, delivery fees)	300,000
Estimated Total First-Year Revenue	3,300,000

8. Conclusion

This study focuses on the nutritional and health issues of the elderly, deeply analyzes the deficiencies of the current food supply in meeting the special dietary needs of the elderly, and then proposes the innovative solution of AgeWise Kitchen. Through multi-dimensional analysis, its feasibility and market potential have been fully demonstrated.

At the theoretical level, the construction of the AgeWise kitchen is supported by solid theories. Starting from Maslow's hierarchy of needs theory, accurately grasp the needs of the elderly group for safety, social interaction and self-actualization, and design marketing information and service contents that fit their psychology; According to the social cognitive

theory, reduce the psychological resistance of the elderly to try new services; With the aid of the social exchange theory, the dual emotional and material needs of family groups (caregivers) are met; Meanwhile, by following theories such as social embedding theory, use and satisfaction theory, and precision marketing theory, effective sales and marketing strategies are formulated.

At the practical level, AgeWise Kitchen centers on personalized meal planning, providing exclusive solutions for the elderly with different health conditions. It strictly adheres to nutritional principles to meet their nutritional needs and improve their health status. We attach great importance to the transparency of food ingredients and build user trust through detailed procurement information and real-time live streaming. Actively integrate convenient technologies, develop user-friendly applications, and enhance user experience. In the market competition, AgeWise Kitchen has demonstrated strong competitiveness in the face of existing competitors, new entrants, purchasers, suppliers and substitutes, thanks to its advantages such as personalized customization, strict quality control and convenient service. Financial forecasts indicate that AgeWise kitchens have a promising profit outlook. Although the start-up cost is relatively high, the total revenue in the first year is expected to be considerable. AgeWise kitchen offers practical and feasible solutions to the nutritional and health issues of the elderly, with broad market prospects and social value. It is expected to contribute to the health and longevity of the elderly and promote the development of the elderly care service industry towards personalization and professionalization.

References

- [1] Zhao, Y. X. (2025, April 1). From "Providing for the Elderly" to "Enjoying Old Age": Social Organizations Help Unlock the Happiness Code for the "Golden Years"-A Story About a Group of "Old Kids" Online: The Elderly-Assisting Endeavors of the Shanghai Science and Technology Assistance for the Elderly Service Center. China Social News. <https://www.mca.gov.cn/n2623/n2684/n2703/c1662004999980004303/content.html>.
- [2] Smith, J. D., Hou, T., Ludwig, D. S., Rimm, E. B., Willett, W., Hu, F. B., & Mozaffarian, D. (2015). Changes in intake of protein foods, carbohydrate amount and quality, and long-term weight change: results from 3 prospective cohorts. *The American journal of clinical nutrition*, 101(6), 1216-1224.
- [3] Skully, R. (2014). Essential nutrient requirements of the elderly. *Nutrition and Dietary Supplements*, 59-68.
- [4] Volkert, D., Beck, A. M., Cederholm, T., Cruz-Jentoft, A., Goisser, S., Hooper, L., ... & Bischoff, S. C. (2019). ESPEN guideline on clinical nutrition and hydration in geriatrics. *Clinical nutrition*, 38(1), 10-47.
- [5] Ministry of Civil Affairs & National Working Commission on Aging. (2023). 2023 Annual Report on the Development of National Undertakings for the Aged. <https://www.mca.gov.cn/n152/n165/c1662004999980001752/content.html>.
- [6] Leung, C. W., & Wolfson, J. A. (2021). Food insecurity among older adults: 10-year national trends and associations with diet quality. *Journal of the American Geriatrics Society*, 69(4), 964-971.
- [7] Vesnaver, E., & Keller, H. H. (2011). Social influences and eating behavior in later life: a review. *Journal of Nutrition in Gerontology and Geriatrics*, 30(1), 2-23.
- [8] Nazzari, L., Puri, S., & Goldfarb, D. S. (2016). Enteric hyperoxaluria: an important cause of end-stage kidney disease. *Nephrology Dialysis Transplantation*, 31(3), 375-382.
- [9] Lengyel, C. O., Smith, J. T., Whiting, S. J., & Zello, G. A. (2004). A questionnaire to examine food service satisfaction of elderly residents in long-term care facilities. *Journal of Nutrition for the Elderly*, 24(2), 5-18.
- [10] Lichtenstein, A. H., Appel, L. J., Vadiveloo, M., Hu, F. B., Kris-Etherton, P. M., Rebholz, C. M., ... & American Heart Association Council on Lifestyle and Cardiometabolic Health; Council on Arteriosclerosis, Thrombosis and Vascular Biology; Council on Cardiovascular Radiology and Intervention; Council on Clinical Cardiology; and Stroke Council. (2021). 2021 dietary guidance to improve cardiovascular health: a scientific statement from the American Heart Association. *Circulation*, 144(23), e472-e487.