

# A Study on Emotional Design for Vitamin C Dietary Supplements (Chinese Market, Generation Z Consumers)

Suimeng Qin

Hanyang University ERICA, Ansan, South Korea

Albert Young Choi

Hanyang University ERICA, Ansan, South Korea

China, recognized as the world's largest developing nation, displays considerably lower per capita consumption of dietary supplements in comparison to Asian nations such as Japan and South Korea. However, in recent years, there has been a substantial surge in health consciousness among the Chinese populace. This trend is not confined to the middle-aged and elderly; even younger consumer demographics are exhibiting increased health awareness. Consequently, the target demographic for dietary supplements is transitioning towards a younger demographic. Within the Chinese dietary supplement industry, vitamin C has consistently held the largest market share, commanding a broad consumer base. This underscores the substantial role of vitamin C in the dietary supplement sector. In response to the trend towards a younger target demographic in the dietary supplement industry, adjustments are required to accommodate the preferences of this younger consumer group. This research, guided by Norman's emotional design framework, executed a survey of over 200 respondents to investigate the preferences of Generation Z consumers in China. The research encompassed packaging, product forms, and brand imagery, corresponding to the emotional design's visceral, behavioral, and reflective layers, with a primary focus on optimally meeting the emotional needs of Generation Z. The findings indicated that consumers favor products in capsule form, packaged in zip-lock. The predominant color scheme is clean white, accented by vibrant orange elements, while emphasizing the product's health and scientific attributes. This study offers valuable insights for the continued evolution of the vitamin C dietary supplement market in China.

*Keywords:* Generation Z consumers, vitamin C products, emotional design

## Introduction

### Research Background and Objectives

As the Chinese market evolves, particularly influenced by the recent COVID-19 pandemic, people's awareness of large-scale infectious diseases has deepened. They have gradually realized that strengthening their immune system is one of the most effective ways to prevent diseases. This heightened awareness has led to an increased focus on beneficial vitamins as a crucial factor in enhancing immunity. Consequently, the dietary supplement market for vitamins has been expanding. However, despite the continuous growth of the vitamin dietary supplement market in China, the overall consumption level of vitamins in China remains relatively low

compared to developed countries such as the United States, France, Japan, and South Korea. There is a significant room for improvement in per capita consumption of vitamin dietary supplements in China.

According to relevant data, the number of dietary supplement filings in the Chinese market reached nearly 10 thousand between 2017 and 2022. This indicates that the demand for dietary supplements among Chinese consumers is steadily increasing, and the industry's scale is gradually expanding. Especially after 2020, there has been a trend in diverse dietary supplement demands and regularized purchasing. The growing demand for these products not only presents opportunities for the dietary supplement industry but also pushes manufacturers to continually innovate.

Nutrient name	Number of filings	Proportion of a single vitamin
Vitamin C	1499	38.3%
Vitamin E	418	10.7%
Vitamin D	266	6.9%
Vitamin K	155	4.0%
Vitamin A	72	1.9%
Folic acid	71	1.8%
Biotin	32	0.8%
Vitamin B12	18	0.5%
Vitamin B1	9	0.2%
Vitamin B6	8	0.2%

Figure 1. Domestic health food record quantity statistics over the years.

Additionally, with the fast-paced and stressful lifestyle of the present, the health consciousness of young individuals in China is on the rise. More and more young people are gradually increasing their consumption of dietary supplements. Among various health products, vitamin C-related products are the most popular, and they also have the highest consumption levels. As of January 2023, monthly sales of vitamin C reached 267 million CNY, which is a 295% increase from January 2022. It's evident that within the evolving dietary supplement market, the market for individual vitamins is also diversifying, with noticeable differences in demand across various consumer segments. As the new generation in China, Generation Z (Z-Generation) has distinct consumer characteristics. They place a stronger emphasis on emotionally driven consumption. Designing products that align with the characteristics of this age group and cater to their emotional needs is a critical factor for brands to stand out in the competitive market. The purpose of this study is to analyze the emotional preferences of Generation Z consumers for vitamin C dietary supplements and provide insights into the development and recommendations for vitamin C dietary supplements in the Generation Z consumer market.

### Emotional Design

Emotional design, rooted in Norman's "The Design of Everyday Things" (2004), encompasses three key levels of design: the visceral level, the behavioral level, and the reflective level. These three levels translate into three different kinds of design. Visceral design refers primarily to that initial impact, to its appearance. Behavioral design is about looking and feeling the total experience of using a product. And reflection is about one's thoughts afterwards, how it makes one feel, the image it portrays, the message it tells others about the owner's taste. Norman's theory of emotional design represents a significant trend in innovative product design. It plays a crucial

role in advancing the fields of visual packaging, structural packaging, product form, and branding. In the context of designing dietary supplements, these three levels of design influence user perception and emotional experiences. Product design needs to seamlessly align with the entire consumer usage process, requiring a deep understanding of the emotional framework that includes aspects such as visual packaging, structural packaging, and product form to cater to different emotional needs.

In emotional design, the visceral level has the earliest impact, occurring before consciousness and rational thought. It significantly influences the product's appearance, shaping the user's initial impression. In packaging design, visual aesthetics are paramount. Therefore, this study focuses on analyzing the visceral level concerning "visual packaging".

The behavioral level is associated with the product's use and user experience. In packaging design, a product's form not only dictates packaging structure but also profoundly impacts the user's experience. In the realm of dietary supplements, where products often share similar functionalities, product form and user interaction become crucial differentiation factors. Consequently, this study treats product form as a pivotal aspect of the behavioral level and analyzes "packaging form" and "consumption methods".

Emotional design theory underscores that products should fulfill emotional needs, particularly the need to establish self-image and social recognition. The reflective level is highly susceptible to one's cultural background, experiences, and education. It focuses on the product's intrinsic value, meaning, and brand image. Thus, the analysis at the reflective level primarily centers on the product's brand story.

Table 1

*The Relationship Between Emotional Design Levels and Design Expressions*

Emotional design	Design expressions	Consumer relationships
Visceral level	Visual packaging	Visual
Behavioral level	Packaging form and consumption	Experiential
Reflective level	Product's brand story	Psychological

In subsequent analyses, we will delve into these three levels: the visceral level (visual aesthetics analysis), the behavioral level (product functionality), and the reflective level (product brand story) to gain deeper insights into the design of dietary supplements.

### **Traits of Generation Z Consumer Behavior**

Generation Z, born between 1996 and 2010, comprises approximately 15% of China's total population. They are poised to be the next growth engine for domestic consumption. Influenced by the digital age and societal changes, Generation Z holds distinct values, consumer behaviors, and lifestyles compared to previous generations. They prioritize emotional consumption and experiences, seeking uniqueness. The consumption patterns of Generation Z are significantly shaped by emotional factors. Their purchasing decisions are heavily influenced by marketing strategies, brand image, and packaging design. They derive pleasure and satisfaction from their consumption experiences. According to a "Chinese Generation Z Consumer Survey", 61.91% of Chinese Generation Z respondents place importance on the satisfaction derived from their consumption experiences and are willing to pay for such experiences. According to Xinhua News Agency's "Generation Z Nutritional Consumption Trends Report", many in Generation Z are dissatisfied with their nutritional status and are willing to invest in their health. The most valued functions in nutritional products they purchase are vitamins and minerals. Their health-related consumption choices are becoming increasingly personalized, diversified, and segmented,

reflecting a strong trend towards self-indulgence. Over half of Generation Z individuals seek nutritional product information through health-related media and influencer recommendations, with over 58.94% making nutritional product purchases based on influencer endorsements. Additionally, in the era where aesthetics play a significant role, Generation Z generally prefers nutritional products that are visually appealing and feature innovative forms. While Generation Z's nutritional consumption is growing rapidly overall, 62.55% of them do not consistently consume nutritional products, leading to potential product wastage. In summary, Generation Z possesses substantial potential in nutritional consumption, but they are also a discerning generation with their personalized understanding of nutritional consumption.

### Methods

The primary scope of this study involves surveying eight dietary supplement products, encompassing the top four vitamin C dietary supplements in the Chinese market and the top four vitamin C dietary supplements in the Japanese and South Korean markets. In the Chinese market, these products include Tongren Tang Beijian VC Chewable Tablets, Kangenbei Vitamin C Chewable Tablets, Nuotelande Vitamin C Chewable Tablets, and Yangsheng Tang Vitamin C Chewable Tablets. In the Japanese and South Korean markets, the products encompass Vita 500, Korea Eundan Vitamin C 1000, DHC Vitamin C Capsules, and Asdhi Vitamin C Mix Capsules. Japan and South Korea were selected due to their higher per capita consumption of vitamin C dietary supplements, enabling meaningful product comparisons and enhancing the study's credibility. The research methodology initiates with a case analysis approach, evaluating these eight products within the framework of Norman's emotional design, covering three dimensions: visceral, behavioral, and reflective. This analysis aims to identify the unique attributes of each product within these dimensions. Subsequently, a questionnaire-based research method is employed, structuring questions based on the three dimensions of Norman's emotional design framework. A Likert scale is utilized to assess psychological indicators. The study explores how Generation Z consumers perceive and think about vitamin C products and further analyzes changes in their emotional responses. The ultimate goal is to provide recommendations for optimization within the three dimensions of emotional design.

#### Current Status and Analysis of Vitamin C Dietary Supplements

According to the "China Internet Dietary Supplement Consumption Report", the top four best-selling brands in the Chinese market are:

- 养生堂维生素C咀嚼片—Yangsheng Tang Vitamin C Chewable Tablets;
- 汤臣倍健VC咀嚼片—By-Health VC Chewable Tablets;
- 诺特兰德维生素C咀嚼片—Nordic Naturals Vitamin C Chewable Tablets;
- 康恩贝维生素C咀嚼片—Konka Aucma Vitamin C Chewable Tablets.

For a comprehensive analysis, we have also included high vitamin C consumption countries in Asia, Japan, and South Korea, as a point of comparison. Based on internet reports, the two best-selling vitamin C dietary supplements in South Korea are:

- Korea Eundan Vitamin C 1000;
- Kwangdong Vita 500 Liquid.






In Japan, the two best-selling vitamin C dietary supplements are:  
DHC Vitamin C Capsules;




Asdhi Vitamin C Mix Capsules.

We will analyze these eight vitamin C dietary supplement products in terms of the three dimensions of emotional design: the visceral level, the behavioral level, and the reflective level. At the visceral level, we will focus on the visual elements of packaging, including color, graphics, and typography. At the behavioral level, we will evaluate the consumption experience, packaging structure, and opening methods. Lastly, at the reflective level, we will analyze the product’s initial impression and brand story:

Table 2

*Emotional Design Analysis of Existing Vitamin C Supplements in 2023 (Serial Number = SN)*

SN	Product image	Visceral level analysis	Behavioral level analysis	Reflective level analysis
C1		<p>Color—White, orange</p> <p>Graphics—The combination of the letter “C” and an orange</p> <p>Fonts—Rounded and bold, with clear distinctions between primary and secondary text</p>	<p>Method of consumption—Chewable tablets</p> <p>Packaging structure—Can-style packaging with a small lid and a large bottle body</p> <p>Opening method—Flip-top</p>	<p>First impression—Scientific and healthy product</p> <p>Brand story—Scientific vitamin C supplementation, great taste, provides daily vitamin C needs</p>
C2		<p>Color—White, orange</p> <p>Graphics—The letter “C”, an orange, and orange-colored squares</p> <p>Fonts—Formal and consistent in size</p>	<p>Method of consumption—Chewable tablets</p> <p>Packaging structure—Can-style packaging, similar to a regular pill bottle</p> <p>Opening method—Screw cap</p>	<p>First impression—Product with a pleasant taste</p> <p>Brand story—Sweet and nutritious, promotes a sunny lifestyle</p>
C3		<p>Color—Gray, white, orange</p> <p>Graphics—The letter “C”, abstract geometric shapes</p> <p>Fonts—Slanted title text, clear hierarchy</p>	<p>Method of consumption—Chewable tablets</p> <p>Packaging structure—Can-style packaging, a slightly taller pill bottle</p> <p>Opening method—Screw cap</p>	<p>First impression—Energetic and positive product</p> <p>Brand story—Abundant in vitamin C and nutrients, promotes a vibrant and sunny lifestyle</p>
C4		<p>Color—White, orange-red</p> <p>Graphics—The letter “C”, sprouting seeds</p> <p>Fonts—Modular layout, clear hierarchy</p>	<p>Method of consumption—Chewable tablets</p> <p>Packaging structure—Can-style packaging, slightly wider pill bottle</p> <p>Opening method—Screw cap</p>	<p>First impression—Natural product</p> <p>Brand story—100% sourced from Brazilian Acerola cherries</p>
J1		<p>Color—White, orange, red, gold, and more</p> <p>Graphics—Detailed character illustrations, text layout</p> <p>Fonts—Rich content with clear hierarchy</p>	<p>Method of consumption—Capsules</p> <p>Packaging structure—Zipper bag</p> <p>Opening method—Tear open</p>	<p>First impression—Convenient product</p> <p>Brand story—Daily beneficial vitamins, one capsule a day</p>

J2		<p>Color—White, yellow, blue          Graphics—Circular patterns, letter C, detailed illustrations          Fonts—Bold headings, lively typography</p>	<p>Method of consumption—Capsules          Packaging Structure—Zipper bag          Opening method—Tear open</p>	<p>First impression—High vitamin C content product          Brand story—Vitamin C equivalent to the intake of 50 lemons</p>
K1		<p>Color—Yellow, blue, green, etc.          Graphics—Geometric fruit illustrations          Fonts—Bold headings, simple product information</p>	<p>Method of consumption—Liquid beverage          Packaging structure—Glass bottle, 200 ml          Opening method—Screw cap</p>	<p>First impression—Hassle-free product          Brand story—Suitable for all ages, vitamin supplement</p>
K2		<p>Color—Silver, orange          Graphics—Geometric orange illustrations          Fonts—Bold headings, stamp-like product features</p>	<p>Method of Consumption—Capsules          Packaging structure—Metal box, capsule blister pack          Opening method—Push open</p>	<p>First impression—Widely accepted product          Brand story—Made in the UK, corn extract/best-selling product</p>

In the subsequent research, specific products will be represented in code form. For example, the first product in China will be denoted as C1, and the second product in South Korea will be represented as K2. In these codes, C, J, and K are abbreviations for the respective country names, where C stands for China, J for Japan, and K for South Korea.

### Questionnaire Setup

**Part 1.** The basic information survey includes gender, habits of consuming dietary supplements, and habits of purchasing dietary supplements. Based on this basic information, we can analyze the fundamental awareness of dietary supplements among most of China's Generation Z consumers, which is beneficial for building an understanding of the dietary supplement category in the later stages.

**Part 2.** Based on the collected data for the eight dietary supplement products containing vitamin C, a comprehensive evaluation will be conducted. The evaluation will focus on the three dimensions of emotional design. In the visceral level, the assessment will revolve around consumers' initial impressions of the products, addressing visual aspects such as color, typography, and graphics. At the behavioral level, the evaluation will center on the consumer experience when using the products, encompassing consumption methods and the perceived experience of vitamin C content. The reflective level will involve an analysis of the product's brand story to infer the cognitive preferences of Generation Z consumers.

Table 3

#### *Emotional Design Section Questionnaire Content*

Visceral level	
1	Very satisfied with the product's patterns and graphics.
2	Very satisfied with the product's font and form.
3	Very satisfied with the product's color coordination.
Behavioral level	
1	Very satisfied with the product's ease of consumption.
2	Very satisfied with the product's form (capsules, chewable tablets, etc.).
3	Very satisfied with the product's portability.

Table 3 to be continued

Reflective level	
1	This vitamin C product resembles medicine.
2	The brand story of this product resonates with me.
3	This product aligns well with my emotional needs for vitamin C.

## Results

### Analysis of Basic Information

The online survey was conducted over a period of 14 days, from October 15, 2023, to October 29, 2023. A total of 215 questionnaires were collected, with 207 of them being considered valid. Eight questionnaires with consistent response options were deemed invalid and excluded.

Among the 207 survey respondents, there were a total of 100 males and 107 females. Among them, 59 individuals (28.5%) were aged 13-17, 78 individuals (37.68%) were aged 18-22, and 70 individuals (33.82%) were aged 22-27. Out of the 207 survey participants, 95 individuals (45.89%) had a habit of taking dietary supplements, 66 (31.88%) occasionally took dietary supplements, and 46 (22.22%) had never taken dietary supplements. When it comes to purchasing dietary supplements, the most important factors considered were the mode of consumption, product information, and the brand. In terms of user perceptions of dietary supplements, 61 respondents (29.47%) considered dietary supplements as medicinal products.

In this survey, both males and females were evenly represented, and various age groups within Generation Z were covered. Based on the basic information, it can be observed that a portion of Generation Z individuals in China have yet to develop a habit of taking dietary supplements. This suggests the potential for further market expansion among Generation Z consumers. When purchasing dietary supplements, this group places a strong emphasis on the product's mode of consumption, product information, and the brand, aligning with the three aspects of emotional design: behavioral, instinctual, and reflective levels. Further detailed product analysis will be conducted in the following sections.

Table 4

### *Basic Information Content for the Questionnaire Respondents*

Gender		
Male	Female	Total
100 (48.31%)	107 (51.69%)	207 (100%)
Age		
13-17	18-22	23-27
59 (28.5%)	78 (37.68%)	70 (33.82%)
Vitamin C taking habits		
Take it regularly	Take occasionally	Not taking it
95 (45.89%)	66 (31.88%)	46 (22.22%)
Factors of concern when purchasing		
Mode of consumption	Product information	Brand
70 (33.82%)	59 (28.50%)	47 (22.71%)

### Analysis of Likert Scale Questionnaire Results

According to the Likert scale, with five choices representing strongly disagree (1 point), disagree (2 points),

neutral (3 points), agree (4 points), and strongly agree (5 points), scores were assigned to the nine questions related to the three levels of the eight products. Subsequently, the scores were averaged to compare the average scores at each level and derive the following insights.

Table 5

*Chart of Scoring Emotional Design at Various Levels Using the Likert Scale*

Product	Visceral level	Behavioral level	Reflective level	Total
C1	3.70	3.53	3.73	10.96
C2	3.45	3.56	3.59	10.60
C3	3.60	3.54	3.65	10.79
C4	3.69	3.55	2.95	10.19
J1	3.42	3.65	2.89	9.96
J2	3.50	3.69	2.92	10.11
K1	3.61	3.32	3.21	10.54
K2	3.67	3.61	3.69	10.49

**Emotional Design Analysis**

Based on the analysis of the above results, we can see that at the visceral level, C1 and C4 products are favored by Z-Generation consumers. Through the color descriptions in the designs of these two products, we can understand that Z-Generation consumers prefer a clean and simple white background, coupled with warm colors such as orange-red and orange-yellow, creating a vivid contrast with the white background. Based on the analysis of the questionnaire and existing product research, we can conclude that both orange-red and orange-yellow are among the colors that can quickly evoke associations with vitamin C, and they fall into the warm color category. In terms of graphic design, both of these products emphasize the key letter “C”, which is a crucial element for consumers to quickly grasp the basic product information. Additionally, they have added concrete graphic elements based on the product characteristics, guiding users to understand the main features of the product. For example, C1 features elements of oranges, representing both the product’s flavor and linking oranges to vitamin C, giving consumers a sense of a more natural and healthy vitamin C product. Typography is also crucial. Both of these products include their product characteristics in the title. C1 is an orange-flavored product, and C4 is a natural product. They both use a more dynamic round font as the title, enhancing visual impact, which is more in line with the emotional needs of Z-Generation consumers.

At the behavioral level, two Japanese products, J2 and J-1, received the highest scores. These two products have almost identical ways of usage, packaging structure, and opening methods. This analysis clearly demonstrates that Z-Generation consumers prefer vitamin C products in capsule form, with a zip-lock packaging structure. This packaging is easier for carrying and storing, and the opening method is relatively convenient compared to other products.

At the reflective level, C1 and K2 products scored higher. C1’s product emphasizes scientific health, while K2 focuses on high-quality ingredients and sales volume. According to the descriptions of these two products in their respective brands, we can infer that Z-Generation consumers place a higher emphasis on basic health and scientific factors when purchasing vitamin C products, rather than blindly pursuing high vitamin C content. Even though Z-Generation consumers have their own distinctive traits in their consumption areas, in less familiar areas, they are more inclined to accept the choices of the majority, showing a degree of conformity.



## Discussion

In today's era of emotional consumption, consumers' emotional needs for products are increasing, making it essential for every brand to closely consider these emotional needs in order to enhance their market competitiveness. This study aims to understand how vitamin C products in the Chinese market meet the emotional needs of Generation Z consumers, with the goal of better capturing this potential consumer market. Through an analysis of emotional design at three levels and a questionnaire survey, we have identified the product types that Generation Z consumers tend to prefer.

At the visceral level, Generation Z consumers lean toward simple and clean designs and prefer warm colors such as orange-red and orange-yellow to evoke positive emotional experiences related to vitamin C products. Design should emphasize the product's vitality as much as possible. At the behavioral level, we found that Generation Z consumers favor capsule-type vitamin supplements and tend to prefer packaging structures such as zipper bags. At the reflective level, health and scientific aspects are more appealing than high vitamin C content in comparison to other products. In the era of digital media, Generation Z consumers are more influenced by internet influencer, especially in domains they are less familiar with.

These research findings can provide valuable insights for the design of vitamin C dietary supplements tailored to Generation Z consumers, thereby enhancing product market competitiveness. However, it is important to note that this study primarily explores the general direction of emotional needs among Generation Z consumers. Specific details will still need validation through market testing.

## Notes

1. This study conducted research on Generation Z consumers; however, it's worth noting that due to the lack of well-developed consumption awareness among consumers aged 18 and below in most Chinese households, some survey findings may be less accurate.

2. In the analysis of existing vitamin C products, the examination of deeper visual elements can be influenced by variations in consumer culture, education, and thinking processes. Consequently, different consumers may have diverse cognitive approaches. Therefore, the analysis was conducted in a more fundamental manner.

## References

- Adelson, B. (2010). The emotional design of everyday things: The 2006 Benjamin Franklin Medal in computer and cognitive science presented to Donald A. Norman. *Journal of the Franklin Institute-Engineering and Applied Mathematics*, 347(4), 681-687.
- Chapman, J. (2009). Design for (emotional) durability. *Design Issues*, 25(4), 29-35.
- Chaney, D., Touzani, M., & Ben Slimane, K. (2017). Marketing to the (new) generations: Summary and perspectives. *Journal of Strategic Marketing*, 25(3), 179-189.
- Chang, L.-H., & Yen, C.-J. (2023). Discussion on the composition principles of packaging design. *Art Vision Journal*, 25(4), 95-103.
- Chen, M.-L., & Kao, H.-C. (2011). The preliminary study on visual design of domestic dietary supplement. *The Journal of Commercial Design*, 15(1), 215-234.
- Desmet, P. M. A., & Hekkert, P. (2009). Special issue editorial: Design & emotion. *International Journal of Design*, 3(2), 1-6.
- Desmet, P. M. A. (2003). A multilayered model of product emotions. *The Design Journal*, 6(2), 4-13.
- Dong, J. (2017). Interdisciplinary cross cultural research of packaging design. *Design*, 30(7), 46-47.
- Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1984). *Consumer behavior*. New York: Dryden Press.
- Gollo, S., Silva, A., Rosa, K., & Bottoni, J. (2019). Comportamento de compra e consumo de produtos de moda da geração Z. *Brazilian Journal of Development*, 5(9), 382-399.

- Huang, M. J., & Hong, M. H. (2022). This paper discusses the effect of festival packaging on consumers' purchasing intention from the perspective of emotional design—Take the packaging of Christmas snacks for example. *Journal of Cagst*, 2022(5), 383-395.
- Liang, H. Y., & Zhuang, Y. B. (2019). Product packaging design based on emotional experience. *Design*, 32(15), 93-95.
- Norman, D. A. (2004). *Emotional design: Why we love (or hate) everyday things*. New York: Basic Books.
- Norman, D. A. (2005). *Emotional design: People and things*. Retrieved from <https://jnd.org/emotional-design-people-and-things/>
- Ren, Z. Y. (2022). Research on brand experience design based on the consumer behavior of "Generation Z". Jiangnan University. Retrieved from <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202301&filename=1022729715.nh>
- Sabir, S. S. (2020). Does product design stimulate customer satisfaction? Mediating role of affect. *Asia Pacific Journal of Marketing and Logistics*, 32(6), 1255-1268.
- Schiffman, L. G., & Kanuk, L. L. (2000). *Consumer behavior*. Hoboken: Prentice-Hall.
- Wang, X. (2022). A report on nutritional consumption trends of Generation Z is released. Through the report, we can look at the nutritional consumption concepts of the post-95s generation. *Xinhua*. Retrieved from <https://www.xinhuanet.com/food/20220518/11f1c9de889e419db4fb40165b0761d0/c.html>
- Zhou, J., Pu, R. W., Zhang, Y., & Zipser, D. (2022). China's Gen Z are coming of age: Here's what marketers need to know. In *Mckinsey China consumer report 2021* (pp. 139-147).
- Zhao, X. Y., Yang, Y. Q., Wang, X., Chen, Y. X., & Ma, J. S. (2023). Statistical analysis and reflection of health food has been recorded in China from 2017 to 2022. *Chinese Journal of Food Hygiene*, 35(6), 884-891.