Research on the Project of Canteen Fat Reduction Window

Wenxiao Yin¹, Xiaojie Zhao¹, Lijun Zhang¹, Ruixuan Chen¹, Yahui Chen¹ and Yang Lu¹*

¹Logistics Engineering Department, Shandong Jiaotong University, Jinan, Shandong Province, 250000, China¹
* 1120527441@qq.com

Abstract. The physical health of students in our country is decreasing year by year, and the decline of college students is particularly prominent. Based on the student's perspective, the campus canteen is taken as the research object, and a canteen window dedicated to the college students' diet needs is opened for the college students. It can not only define the daily calorie intake to achieve the purpose of weight loss or control, but also consider the nutritional requirements. Aiming at the current status of the development of Internet catering, this article combines the traditional campus canteen with weight loss and the Internet to establish a canteen takeaway, combining our traditional takeaway concept with the canteen to create a unique takeaway system on campus.

1. Introduction
Diet (also known as "meal") refers to the food and drinks we usually eat. People get all kinds of nutrients and energy they need through diet to maintain their own health. With the development of social production, people's living standards have been generally improved, but the problems of undernutrition and overnutrition caused by the evolution of dietary structure are becoming increasingly prominent. This phenomenon is most prominent among contemporary college students, obesity has become one of the important factors affecting the health of College Students. [2] [5] Based on this phenomenon, combined with the daily life and behavior habits of contemporary college students, a canteen window dedicated to meet the dietary needs of college students is opened. The characteristic of the canteen fat reduction window is that on the basis of strictly controlling the total daily calories intake of weight loss people, to ensure the nutrition and deliciousness of the fat-reducing meal, making weight loss not only the painful practice of hungry stomach.

2. Gently window market analysis

2.1. Market status analysis
In our country, the takeaway industry system has gradually developed and perfected, forming a three-legged form of Are you hungry, Meituan takeaway, Baidu takeaway. There are several mainstream profit models for takeaway platforms today, For example, Are you hungry mainly charges profit models such as service fees, running water, and takeaway surcharges from some merchants. As a canteen window that focuses on reducing fat, our customers are from a small group of people. According to the three-month weight loss cycle, the source of customers is still objective. And we also launched other diet packages: health packages, beauty packages, etc., in order to achieve the role of stabilizing the customer source in the later period.
2.2. Customer analysis
We use the online questionnaire to collect questionnaires among college students. Based on the results we summarize: Weight loss seems to have become a part of everyday life for all women.

(1) Talk about how the college students interviewed lose weight Figure 1.

(2) Views on weight loss in Figure 2.

(3) Weight loss attitude among interviewed girls in Figure 3.

(4) The impact of female college students' weight loss on their weight in Figure 4.

In summary, we can learn part of the reason why many college students are not obese but insist on losing weight. The first is that the outside world only makes some female college students feel dissatisfied and choose to lose weight. The second is to gain recognition and self-improvement in the external environment. Through the inspection of relevant materials, we understand that improper use of weight loss methods will cause many hazards. [3] As college students, students should selectively do
more meaningful things, correct their weight loss attitudes and methods, and not let weight loss affect the normal course of other lives.

3. Gently window management analysis

3.1. Business philosophy
The core technology required is mainly the specific content of the diet meal, and our business method mainly adopts the form of a set meal. Each meal provides multiple package types for college students to choose. The type of set meal should not only have different flavors, but also provide different nutritional supplements from the perspective of technological weight loss. Is to keep everyone away from the temptation of fried food, Customers can always visit our window during weight loss to reduce food temptation, at the same time, it also creates continuous income for the window.

3.2. Menu design
When losing weight, the first step is to adjust the diet. Fat loss does not mean dieting, weight loss first requires a balanced diet, a reasonable diet. A reasonable diet is to achieve comprehensive nutrition, acid-base balance, proper hunger and satiety, and to adapt food intake to physical activity. A variety of nutrients must be provided within a day. Staple food, protein, fat, vegetables, vegetables and meat, egg and milk are all indispensable, so as not to lack a certain nutrition in the long-term weight loss, thus laying the foundation for healthy fat loss. [4] According to the above standards, in accordance with the two principles of "food diversification" and "nutrition comprehensive", we have formulated the following reasonable fat reduction package. As shown in the table below: (Since the restaurant ingredients follow the unified purchase principle, we are not flexible enough in the selection of ingredients, for example, most seafood cannot be included in the fat reduction package.)

Female: about 450 kcal for breakfast, about 550 kcal for lunch, about 300 kcal for dinner

| All day | Girls | Breakfast | Lunch | Dinner |
|---------|-------|-----------|-------|--------|
|         |       | One cup of eight-treasure porridge, one egg and a cup of vegetable soup | A tortilla, half a steamed fish and stir-fried agaric broccoli | One sweet potato, one cup of green bean curd soup, half dragon fruit |

Table 1. Recipes for girls.

Male: 550 kcal for breakfast, 650 kcal for lunch, and 400 kcal for dinner

| All day | Boys | Breakfast | Lunch | Dinner |
|---------|------|-----------|-------|--------|
|         |      | Steamed egg with shrimp, two slices of whole wheat bread, a cup of millet porridge with pumpkin, wolf berry and millet | Multigrain rice, fried chicken breast mushrooms, a handful of nuts | Vegetable and fruit salad, a cup of sugar-free black coffee |

Table 2. Recipes for boys.

Here we want to remind everyone that on the one hand, if you want to lose weight, you need to control your diet, and on the other hand, you need to exercise in moderation, because this can not only make the body thin, but also enhance the functions of various organs of the body. [4]
3.3. Business model
Although the window focuses on weight loss, of course, other products can be launched to meet the needs of consumers. Vegetable and fruit porridge, vegetable and fruit drinks, we can also provide personalized services for college students to achieve the effect of facilitating customers and stabilizing customers.

We can also provide personalized services for college students to achieve the effect of facilitating customers and stabilizing customers, receive the order number. The service staff at the reservation window, according to the order of ordering, put the dishes ordered in advance into the tray, paste the reservation order number, and arrange them in order, so that students can come to take the meal after class, and the student brushes the order number when taking the meal.

3.4. Business strategy
Of course, the biggest impact on the campus cafeteria business is takeaway. However, we must know that in the delivery process of takeaway, there are many factors that cause food to be contaminated or spoiled. Our consumers not only enjoy the convenience brought about by technological progress, but also bear the "food safety bomb" that may happen at any time. [1] The launch of campus takeaway is not only to broaden our sales channels, but also to implement the needs of students to "eat weight and eat well", scientifically and reasonably match them with a nutritious diet, control calories, and ultimately lose weight.

4. Financial plan analysis

4.1. Project cost
(1) Start-up capital
   Venue leasing fee: 50,000¥ / year.
   The cost of applying for catering sanitation permits and other documents: 2,000¥.
   Site decoration costs: 1,000 ¥.
   Kitchen utensils and facilities costs: 10,000 ¥.
   The cost of early publicity: 500¥.

(2) Main expenses during operation
   Employee salary: 5000+3000*2+300¥.
   Utilities: 700¥.

4.2. Financial budget
We calculate according to the consumption of three meals per person per day in our window, the daily profit of each person is about, the first three months are the cost recovery stage, and the later will be a considerable profit. The following is the detailed calculation process:

A boy’s total income for three days is 70 ¥, and the cost is about 45 ¥; a girl’s total income for three days is 69 ¥, and the cost is about 37 ¥. According to the 3:1 ratio of male to female in the Chang qing Campus of Shandong Jiao tong University, the daily passenger flow is divided into 83 boys and 249 girls. Therefore, the total sales profit for three days is about 10043 ¥, and the sales profit for one month is about 70301 ¥. The start-up investment is 63,500 ¥, and the monthly operating cost is 12,000 ¥.

![Figure 5. Cash flow chart.](image)

After calculation: NPV = 138516 > 0, the project is feasible, and the investment recovery period is about 1.089 months.
4.3. Risk Analysis
In general, the catering industry is particularly dependent on its chefs. Because the quality of a restaurant's operation is closely related to the taste of the products it provides, and this is mainly controlled by the chef. The chef as a key person in the restaurant may be too dependent on them. If a chef leaves, he may face certain risks. At the same time, due to the existence of competitors, it may lead to insufficient sales, which will lead to a decline in sales revenue; the catering industry mainly only has sales revenue, but no other income, so the impact of material prices on costs will lead to the impact of net profit.

5. Conclusion
Losing is a long-term engineering, remember that it is not easy to do. It is undoubtedly the most healthy, scientific and effective way to lose weight by improving diet to control body weight to achieve weight loss. Under the premise of ensuring fat loss, the Fat Loss Window provides students with delicious and nutritious fat-reducing meals, allowing them to lose weight while enjoying delicious food. Let weight loss people get rid of the misunderstandings of dieting and fat loss and weight loss drugs, and let weight loss become a process of enjoyment.

References
[1] Xia Yunjian. Chen Songe School of Hygiene and Nutrition [M]. Guilin: Guangxi Normal University Press, 2000.
[2] Liu Guanghong. Causes, harms and countermeasures of obesity [J]. Hubei Sports Science and Technology, 2000 (4): 60-62.
[3] Wang Liyong. Briefly on several misunderstandings and reasonable weight loss [J]. Journal of Xihua University (Philosophy and Social Sciences Edition), 2004: 140-14
[4] Wang Weiping. Physiological basis of exercise and nutrition weight loss [J]. Journal of Fuzhou University (Natural Science Edition), 2001, (2): 82-83.
[5] Huang Xiaomin. Causes, harms and weight loss measures of obesity [J]. Hubei Sports Science and Technology, 2000, (4): 57-59.