



# ANALYSIS OF STUDENTS' UNHEALTHY EATING BEHAVIOR IN A VOCATIONAL COLLEGE IN SANYA

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**Abstract:** This study explores the correlation between dietary behavior and its influencing factors of higher vocational students in China, and the relationship between unhealthy dietary behavior and health. To explore the strategies and methods of cultivating scientific and healthy eating behavior of higher vocational students in China. The study sample is 1000 people.

The dietary behavior of higher vocational students is naturally influenced by demographic characteristics such as gender and age. Personal healthy eating knowledge literacy has an internal intervention effect on eating behavior. Environmental factors, such as economic level, cultural tradition and the influence of others, play a guiding role in personal eating behavior. Bad eating behaviors, such as skipping breakfast, drinking drinks, ordering takeout and eating supper, have an impact on BMI, oral health and gastrointestinal health.

Strategies for improving the healthy diet of higher vocational students: the school provides improved canteens, provides course guidance for scientific nutrition majors, and establishes and improves system supervision. Students' union should carry out more publicity work and activities to deal with students' emotional factors. Students actively learn the scientific knowledge of healthy eating and practice the scientific healthy eating behavior.

**Index Terms:** Dietary behavior, higher vocational students, health status.

## I. Introduction

The study found that many vocational college students did not have the habit of eating breakfast. Some students play games and mobile phones at night and don't go to bed until two or three in the morning. They can't get up for class the next day and have no time to eat breakfast. There are also some students who eat only one portion of meat and one portion of vegetables for each meal because of their poor families, resulting in a lack of nutrition in their meals. In order to stay slim, some girls don't eat meat and other staple foods, but only eat some fruits and vegetables or diet foods, which leads to malnutrition.

Therefore, it is very important to guide higher vocational students to master correct dietary nutrition knowledge and healthy dietary behavior. Higher vocational students are in the critical period of learning professional theoretical knowledge and practicing professional skills, and the age of 18 ~ 22 is the critical period of their physical and mental development. The physical and mental health of higher vocational students is directly related to the future of the country and personal career. Only with a healthy body and mind can we better repay the society we have learned.

China has a long history of dietary health care in ancient times. As early as the 5th century BC, in the Zhou Dynasty, dietetic doctors adjusted healthy diet to prevent diseases. During the Qin and Han Dynasties, the nutrition theory was initially formed. Huangdi Neijing, Shennong Herbal Classic, Qianjinfang, Drinking Water and Diet, and Compendium of Materia Medica all think that many chronic diseases are directly related to diet.

Dietary behavior refers to the eating activities of people who are dominated by related food and health concepts. It is the main factor that determines people's dietary structure, directly affects human nutritional status, and is also one of the key risk factors for important chronic diseases such as diabetes, hypertension and coronary heart disease (Viana,2008).

Higher vocational students, as a group who gradually leave home care and go to society independently, are in the stage of being curious about everything but not fully capable of calm, objective and rational judgment and analysis. If there is no professional health and nutrition knowledge guidance at this stage, it is easy to be tempted by low nutrition to stimulate diet, thus developing unhealthy eating behavior. For example, playing games and staying up late in the morning and getting up late in the morning, missing breakfast time, blindly losing weight and controlling weight without scientific diet, and overeating due to emotions and environment (Stassen,2020).

Adolescence is a critical period for the transition from children to adults. Reasonable nutrition plays an important role in ensuring their physical and mental health and promoting the healthy development of physical strength and intelligence (Guo Li, 2015).

The United States is the first country to study the influence of eating behavior on health. In 1946, the United States Congress passed the National School Lunch Act, which included the lunch of American primary and secondary school students in the scope of legal protection. The federal government has set up the American Food Service Association, the executive management organization for the nutritious meal plan. At the same time, the United States also takes nutrition education as a compulsory course in schools. The American Society of Nutrition Education was established in 1967, and different teaching plans were made from primary school to middle school according to the nutrition cognition of different grades. Let students develop healthy eating habits (GUNDERSON G W,2003).

After the First World War, the Japanese government provided free lunches for poor children in some areas. The Japanese government promulgated the School Feeding Law in 1954, which clearly stipulated the detailed rules of school feeding. In 2005, Japan promulgated the Basic Law on Food and Education to publicize the importance of healthy eating behavior, and the Ministry of Education and Science launched the plan to train primary school diet and nutrition and teachers (Nakamura T,2011).

In order to understand the dietary behavior of higher vocational students, a questionnaire survey was conducted in 2004 to investigate the types and drinking time of Japanese higher vocational students. The results show that girls prefer tea and juice, while boys prefer carbonated drinks and sports drinks. 60% of students have the habit of eating breakfast, while 25% of Japanese higher vocational students don't, mainly because they don't have time to get up late (Goto Y,2003).

Only by investigating the causes of unhealthy eating behavior from various influencing factors can we better intervene and correct bad eating behavior. Through the investigation on the correlation between food insecurity, eating behavior and health of adolescent students from 95 countries, it is found that adolescence is a sensitive period of human development, with complex and rapid changes in physical, neurological, psychological and social formation. In all countries, if adolescents eat unsafe food and poor nutrition during this period, they will consume soft drinks more frequently, have worse mental health, reduce physical activity and have a higher incidence of smoking and drug abuse (Maryah,2022).

A survey by the Centers for Disease Control and Prevention in the United States found that obesity accounted for 20.6% among adolescents aged 12 -15, and 37.9% among adults over 20. The university stage is considered to be the most critical period for weight gain, and the main reason for weight gain during the university period is the change of eating behavior and physical activity habits related to adapting to the new environment and social pressure. Obesity-related diseases include stroke, heart disease, some cancers, diabetes and so on. College is a potential period to strengthen healthy and lifelong eating habits (Anna Barr,2020).

Healthy eating behavior emphasizes personal responsibility for health, which is mainly realized through living and eating habits. Mainly refers to health, physical fitness, exercise and dieting to shape many behaviors and practices. Healthy eating behavior is characterized by increasing the consumption of fruits or vegetables, increasing the choice of high-nutrient foods, or reducing the intake of low-nutrient and high-energy foods. When healthy eating behavior becomes disordered, it is anorexia nervosa. Polish researchers studied 229 men and women and found the relationship between psychological and emotional characteristics of eating disorders and perfectionism and weight maintenance (Anna Brytek-Matera ,2020).

Healthy social factors are the necessary living conditions to determine healthy eating behavior. A survey of dietary behaviors of adolescents from diverse families by Korean researchers found that the relationship among skipping breakfast, stress, depression and healthy behaviors affects the quality of life and health of adolescents (Youlim Kim ,2021).

Millennials in the United States refer to 8310 young people born between 1980 and 1996. By studying their diet knowledge, diet behavior, restaurant choice and the influence of stress on diet, it is found that millennials' diet behavior is very different from their parents', and their definition of healthy food is mostly limited to milkshakes, vegetables and fruits. The main factors that affect their daily eating behavior are: busy schedule, fast service, social media, different cultures, emotions and physical conditions, and food prices (Bendegul, 2021).

The research shows that the common unhealthy eating behaviors mainly include: not eating illegal packaged food, not drinking alcohol, not eating fried food, not eating snacks or snacks, not eating fat, choosing food according to food sensory characteristics, choosing food according to nutritional value, eating regularly and quantitatively for three meals, having a light taste and having a reasonable diet structure. Professional nutrition knowledge includes: eating more fruits and vegetables is good for health, food types should be diversified, eating more greasy food is bad for health, eating coarse cereals is good for health, milk is rich in calcium, calcium deficiency leads to osteoporosis, eating foods rich in dietary fiber, cancer is related to diet, hypertension is related to excessive salt intake, I have heard of dietary guidelines for China residents, and I know their contents. The researchers investigated the nutrition knowledge and dietary behavior of community residents over 15 years old in Shenzhen, which provided the basis for formulating and implementing community nutrition intervention (Zhang Danxia, 2009).

### Statement of the Problem

This study evaluates the influencing factors of students' dietary behavior in a higher vocational college in Sanya and the improvement measures. Focus on research and answer the following questions:

1. What harm does bad eating behavior have to health?
2. The current situation of unhealthy eating behavior
3. BMI oral health and gastrointestinal health
4. How to cultivate healthy and scientific eating behavior?
5. Government intervention strategy
6. School and individual intervention strategies
7. What are the implications of this study for public health management?

### Hypotheses

There is a significant correlation between the unhealthy eating behavior of higher vocational students in China and individual health status.

Bad dietary behaviors of vocational college students mainly include irregular eating, blind dieting, picky eaters and partial eclipse, frequent supper, and frequent take-out drinks. These unhealthy eating behaviors will lead to functional disorder of digestive organs, imbalance of metabolism, insufficient intake of various nutrients, which will affect the immune function of the body. Lack of protein will reduce resistance, unbalanced food choices, excessive intake of heat energy will easily lead to atherosclerosis, and excessive intake of sugar will lead to dental caries. Therefore, there is a significant correlation between individual bad eating behavior and individual health status.

## II. METHODOLOGY

According to the BMI standard of higher vocational students specified in the scoring rules of National Students' Physical Health Standard, the nutritional status was evaluated.

**Table. 1 Evaluation standard of BMI for higher vocational students**

gender	evaluation criterion	Low weight	normal	be overweight	fat
man		$\leq 17.8$	17.9-23.9	24.0-27.9	$\geq 28.0$
woman		$\leq 17.1$	17.2-23.9	24.0-27.9	$\geq 28.0$

Bad dietary behaviors of higher vocational college students mainly include: skipping breakfast, ordering takeout, eating midnight snack, being picky about food, drinking too much drinks, etc. Each dietary behavior is evaluated by three levels: frequent or serious, sometimes or slight, occasionally or almost.

**Table. 2 Evaluation grade of bad eating behavior**

Bad eating behavior	Evaluation grade (times)
Do not eat breakfast	Often (no breakfast $\geq 4$ a week)
	Sometimes (no breakfast for 2-3 weeks)
	Occasionally (no breakfast per week $\leq 1$ )
Eat supper	Frequently (the number of midnight snacks per week $\geq 4$ )
	Sometimes (2-3 times a week)
	Occasionally (the number of times to eat supper a week is $\leq 1$ )
refresh	Often (number of drinks per week $\geq 7$ )
	Sometimes (drink drinks 3-6 times a week)
	Occasionally (number of drinks per week $\leq 2$ )
Order takeout	Frequently (the number of takeout orders within 30 days is $\geq 15$ )
	Sometimes (6-14 takeout times in 30 days)
	Occasionally (the number of takeout orders within 30 days $\leq 5$ )
Partial eclipse and picky eater	Serious (picky about many foods during the diet, only eating a few foods that you like)
	Slight (picky about several kinds of food in the process of eating)
	Hardly (picky about some foods during the diet)

Study on the relationship between unhealthy eating behavior and health; The oral health and gastrointestinal health of vocational college students are taken as the evaluation indexes of physical health.

**Table. 3 Physical health evaluation grade**

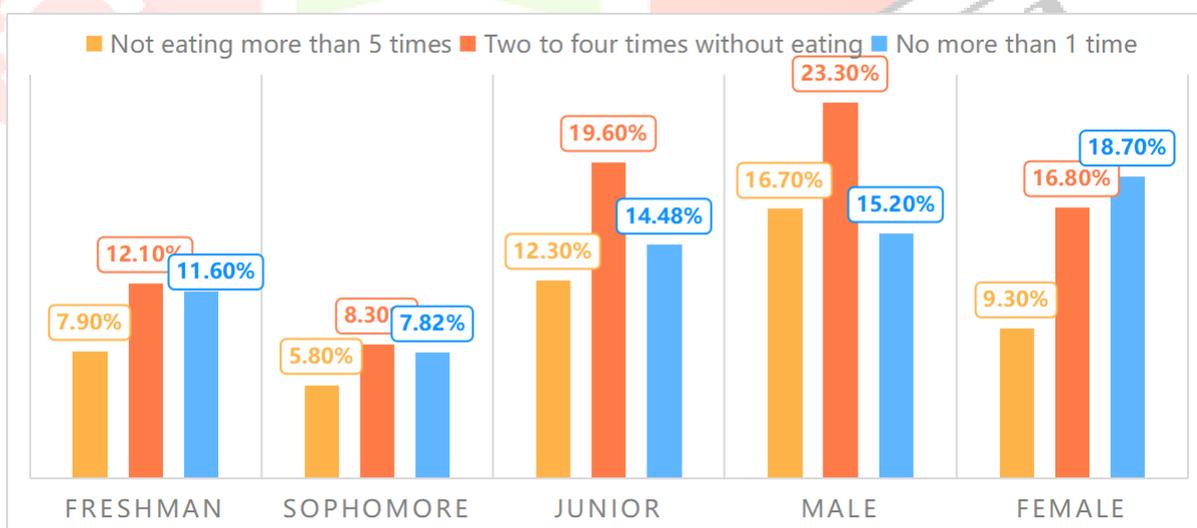
Physical health index	Evaluation grade (times)
Oral health	Frequently (the number of oral problems in one semester $\geq 4$ )
	Sometimes (the number of oral problems in a semester is 2-3)
	Occasionally (the number of oral problems per semester $\leq 1$ )
Gastrointestinal health	Frequently (the number of gastrointestinal problems in one semester $\geq 4$ )
	Sometimes (the number of gastrointestinal problems in a semester is 2-3)
	Occasionally (the number of gastrointestinal problems in one semester $\leq 1$ )

**III. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

**1. Bad diet status of vocational students**

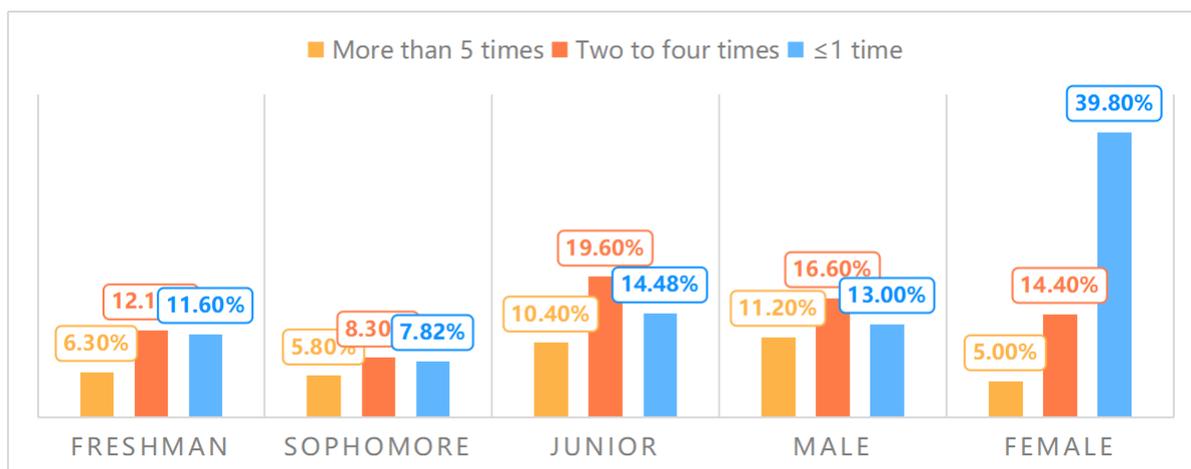
The situation of higher vocational students skipping breakfast was quite common, and the proportion of male and female students who often skip breakfast was 16.7% and 9.3%, respectively. The proportion of male students skipping breakfast was significantly higher than that of female students. The proportion of people who ate two to four times a week was 23.3% and 16.8%, respectively, which was also significantly different. Only 33.9% of the respondents ate breakfast every day of the week. Among the three grades, the situation of junior students not eating breakfast was the most serious, accounting for 12.3%.

**Figure 1. Distribution of skipping breakfast**



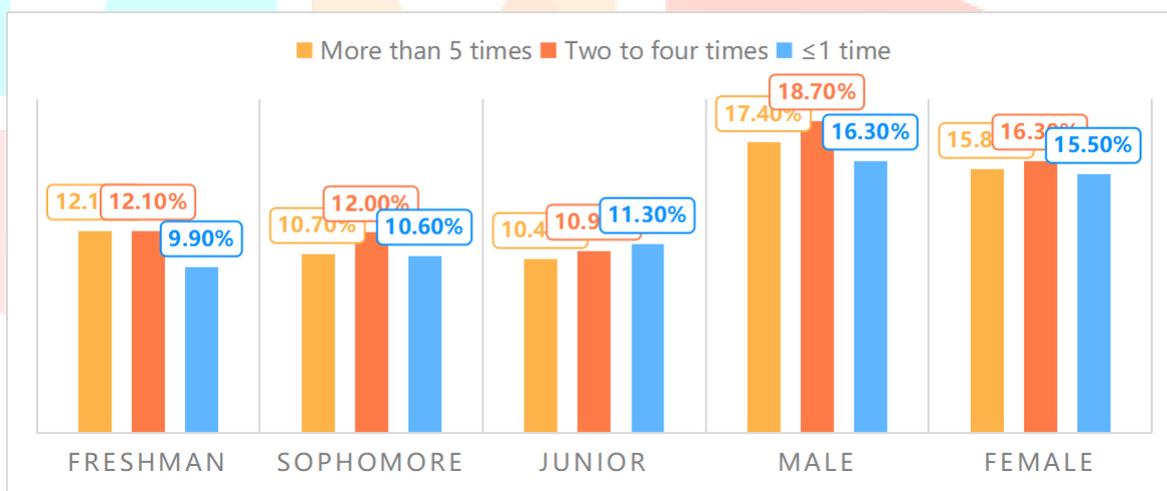
High vocational students are very fond of barbecue and fried food, which account for 61%. Secondly, malatang and other rinse food is also preferred by vocational students, and students who choose it as a midnight snack account for more than 20%. However, the proportion of pasta or other types of dinner for late-night snacks is rarely less than 10%.

**Figure 2. The frequency of night snacks of vocational students**



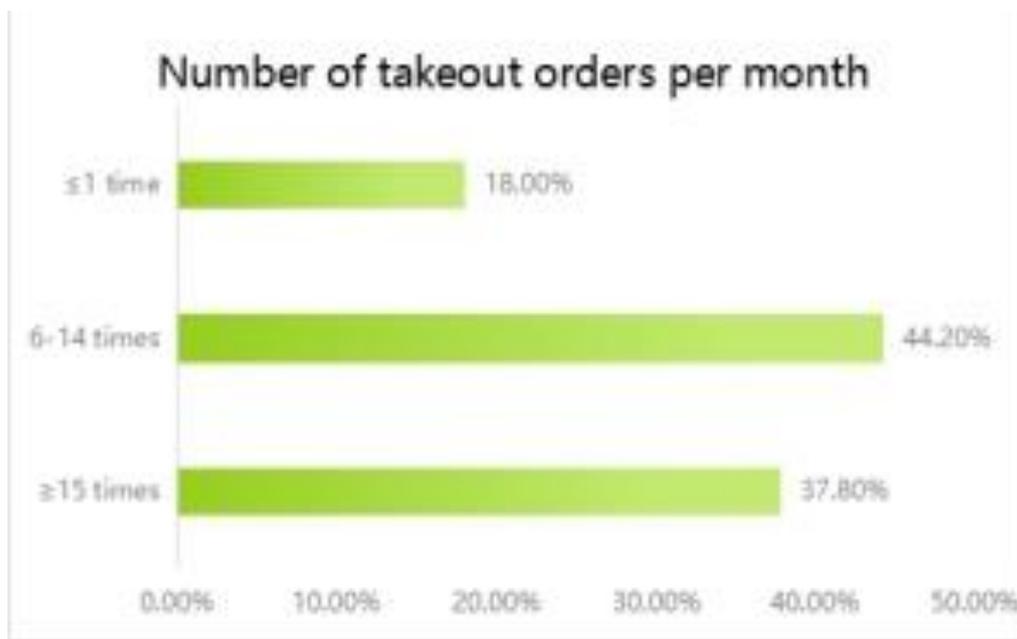
Data analysis found that the higher vocational students preferred carbonated drinks, accounting for 41%, followed by fruit juice drinks, accounting for 27%. And for pure water, yogurt and other healthier drinks to choose less, accounting for a total of 26.7%, and these students are more like fitness and have been trained in dietary nutrition courses of professional students. 74.1% of the students chose to drink at cold temperature, and only 25.9% of the students chose to drink at room temperature. The main reason for vocational students to choose beverages was that they were thirsty after exercise and needed a lot of water, which accounted for 34.5%. 31.7% of the students chose to drink with the meal for better taste.

**Figure 3. The distribution of drinking beverages of vocational students**



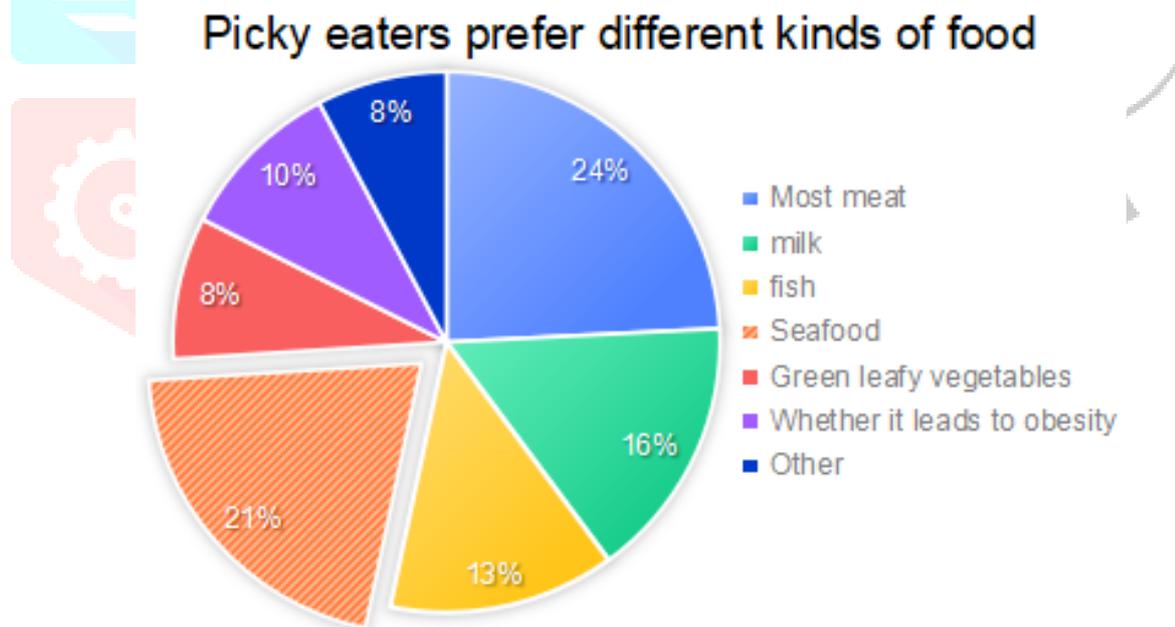
There is no significant difference in the monthly takeout frequency of higher vocational students in different grades and genders. 37.8% of the students order takeout more than 15 times per month, 44.2% of the students order takeout 6-14 times per month, and 18% of the students order takeout less than once per month.

Figure 4. Monthly takeout orders



Picky food types of vocational students were not significantly correlated with gender and grade, but closely related to living place. Fish and seafood were the most preferred food among local students in Hainan province, accounting for 34.1%. The picky food preference of students living in mainland China was milk (15.7%) and meat (24.2%). Green vegetables were less preferred by students, accounting for only 8.5%.

Figure 5. Picky food preferences



## 2. To analyze the correlation between bad eating behavior and body mass index (BMI) and common health problems in higher vocational students

The correlation between bad dietary behavior and BMI of higher vocational students was analyzed, and the content of each bad dietary behavior was assigned.

**Table. 4 Logistic regression was used to analyze the independent variable assignment**

Variables	Assignment of value		
Skipping breakfast	Occasionally 1	sometimes 2	often 3
Have a midnight snack	Occasionally 1	sometimes 2	often 3
Have a drink	Occasionally 1	sometimes 2	often 3
Order takeout	Occasionally 1	sometimes 2	often 3
Picky eaters	Occasionally 1	sometimes 2	often 3

Through data analysis, excessive frequency of skipping breakfast was a dietary factor promoting overweight/obesity in vocational students, that is, the more times of skipping breakfast per week, the more difficult it was to control. The frequency of eating at night and drinking drinks frequently were also the dietary factors promoting overweight/obesity in vocational students. Picky eating affects the normal BMI development of vocational students. The more serious picky eating is, the more likely it is to have a low BMI.

Through the data analysis, the more vocational college students do not eat breakfast, the more likely it is to cause gastrointestinal problems. In addition, frequent eating at night will also have an impact on the gastrointestinal tract. Often drinking cold drinks, it is also easy to cause gastrointestinal problems.

Through data analysis, the more vocational students drink beverages and order take-out, the more likely it is to cause oral problems. Therefore, the main factors affecting the oral health of vocational students are drinking beverages and ordering take-out behaviors.

According to the data analysis, the more times vocational students drink beverages and order takeaway, the more likely they are to lead to oral problems. Therefore, the main factors affecting the oral health of vocational students are drinking beverages and ordering takeaway. Bad diet behavior not only affects the BMI of vocational students, but also has adverse effects on health, even serious harm. The results of the survey showed that the gastrointestinal and oral diseases of vocational students were related to their bad eating habits. These bad eating habits were concentrated in the behavior of skipping breakfast, late-night snack, drink behavior and takeaway behavior.

Do not eat breakfast will affect gastric acid secretion and bile discharge, thus weakening the function of the elimination system, at the same time, do not eat breakfast lunch will increase, causing excessive burden of the gastrointestinal tract, these will induce gastric ulcer, gastritis, dyspepsia and other digestive system diseases. Eating late-night snacks can also have a bad effect on human health. Often eating late-night snacks can lead to excessive intake of oil and protein, which may lead to indigestibility and increase the risk of gastrointestinal diseases.

Higher vocational students who often order takeout and drink drinks have more gastrointestinal discomfort. The proportion of students with oral problems was higher among students who regularly drank carbonated beverages than among those who drank other beverages. In addition, the behavior of ordering takeout often also has an impact on oral health. The survey results show that the students who often order takeout are much higher than those who occasionally or never order takeout. Further analysis shows that vocational students who often order takeout are prone to oral ulcers.

## 3. The harm caused by bad eating behavior to the body

This survey found that unhealthy eating behaviors are widespread among higher vocational students, which may be due to the lack of appetite in the morning or getting up late in the morning, which leads to the habit of skipping breakfast. There are also some differences in dietary behavior among students with different personalities and grades.

The bad eating behaviors that have a significant impact on the BMI of higher vocational students mainly include skipping breakfast, taking supper, drinking food and being picky about food. Among them, secondary vocational school students who have serious picky eaters and partial eaters have a significantly higher incidence of malnutrition. Because most vocational college students are still in the stage of growth and development, picky eaters and partial eaters will inevitably lead to the imbalance of energy and nutrition, which will further affect their growth and development. Compared with boys, the proportion of thin girls is higher because of picky eaters, which is not only related to girls' taste in food, but also because some women deliberately avoid eating certain foods in order to keep fit or factors.

Overweight/obesity of vocational college students is related to their frequent skipping breakfast, long-term eating supper, drinking drinks and ordering takeout. Among them, the behavior of often skipping breakfast has a particularly obvious impact on the situation. Regardless of boys or girls, the proportion of overweight/obese secondary vocational school students who often skip breakfast is much higher than that of normal BMI. The distribution of overweight/obese students in higher vocational colleges and those with normal BMI who often choose not to eat breakfast is statistically significant. Skipping breakfast is more likely to be overweight/obese. The reason is that higher vocational students who skip breakfast overeat because of hunger, especially when they eat high-energy food at lunch or dinner as psychological compensation, and because of too much concentrated eating, energy accumulates, which leads to overweight/obesity. In addition, from the medical point of view, bad eating behavior may lead to abnormal secretion of endocrine hormones.

Eating supper regularly is also one of the main factors leading to overweight/obesity. The survey results show that the proportion of overweight/obese higher vocational students who choose to eat supper regularly is significantly higher than that of students with normal BMI, and the difference between them is significant. Barbecue and fried food are supper foods that vocational college students often eat, and these foods have the characteristics of high calorie and high fat, and the metabolism of human body decreases at night, which causes excess energy to be stored in the body, thus leading to obesity. Therefore, the proportion of overweight/obese secondary vocational students who often eat supper will increase significantly.

Boys usually like to drink carbonated drinks and functional drinks, and the main components of these two kinds of drinks contain sugar, so drinking high-sugar drinks for a long time will easily lead to overweight/obesity. In addition, from the energy point of view, drinking a small amount of high-energy drinks will not cause obesity, but drinking too much or lack of exercise after drinking is also very likely to cause obesity. For girls, freshly squeezed juice and milk are the most common drinks, and these drinks are generally low in calories and belong to relatively healthy drinks, so they are not easy to cause overweight/obesity.

#### **4. Measures to improve bad eating behavior**

Most students in higher vocational colleges don't know enough about food health, and even some students don't eat breakfast and other bad eating behaviors will not affect their health, so it is necessary to carry out various forms of food health education activities. Make slogans or posters on healthy diet on campus, and deepen students' understanding of healthy diet in vivid, vivid and intuitive forms of activities. Hold some lectures on food culture and nutrition in the school, and also carry out some food-related activities that students can participate in, such as food knowledge contests. Through extensive publicity and popularization of healthy eating culture, secondary vocational school students can develop good eating habits.

The survey found that the poor food and dining environment in the school canteen are also one of the reasons that lead to the bad eating behavior of higher vocational students. Some students don't want to eat in the canteen because of monotonous breakfast, hard rice for lunch and dinner, few varieties of pasta and improper combination of meat and vegetables, so they often order takeout. In addition, most school canteens are not equipped with air conditioning due to large space and poor airtightness, which leads to unsatisfactory dining environment, especially in summer, like a steamer. Therefore, it is necessary for relevant departments to improve the quality of food in student canteens, provide food standards, and develop more new dishes on the basis of ensuring food safety, so that students have a sense of freshness and appetite. At the same time, improve the dining environment and enhance students' dining happiness index.

The investigation found that some students didn't eat breakfast because they didn't have morning classes, classes and morning exercises. Therefore, it is suggested to strengthen student management, especially the early reading system, and strictly call the roll to avoid the absence of students, which will also reduce the situation of students not eating breakfast because of staying in bed. In addition, further strengthening the safety and civilized management of dormitory, turning off the lights and closing the dormitory door on time, while protecting students, also reduced the behavior of students going out to eat supper because of staying up late. In addition, strengthening the construction of spiritual civilization in dormitories and guiding students not to eat takeout in dormitories as much as possible can reduce and avoid students' frequent ordering of takeout while maintaining a good sanitary environment in dormitories.

Improve the quality of drinking water for higher vocational students in school and advocate drinking boiled water. Some students buy drinks because of the trouble of fetching water, which is one of the reasons why students often drink drinks. Insufficient drinking water for a long time will lead to the decline of students' physique. Therefore, schools should pay attention to the quality of students' drinking water during school and actively promote drinking more boiled water. Promote the school drinking water project, install drinking water equipment in crowded places such as school teaching buildings, dormitories and librari and provide students with 24-hour uninterrupted drinking water service.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

##### Conclusions

The following conclusions were based on the findings presented:

1. The factors influencing dietary behavior are diverse, and demographic characteristics have a natural potential impact on individual dietary behavior. Individual dietary knowledge literacy has an internal intervention effect on individual dietary behavior. Environmental factors such as economic level, cultural traditions and other people's influence are important interventions for individual dietary behaviors.

2. Current status of bad eating behavior of vocational students: the proportion of male students who do not eat breakfast is higher than that of female students, 27.5% of the students habitually stay up late for late-night snacks, 35% of the students often drink drinks, 37.8% of the students order takeaway more than 15 times per month, and the girls are more pick-to-eat than the boys.

3. The health effects of unhealthy eating behaviors were mainly on BMI, oral health and gastrointestinal health. The proportion of overweight/obese students who often skipped breakfast was higher than that of students with normal BMI, and the difference was statistically significant. Late-night snacks and beverages were associated with overweight/obesity. Ordering takeaway had impacts on oral and gastrointestinal health. Unhealthy eating behaviors are common in vocational college students, and the proportion of male students is higher than that of female students. There is a correlation between unhealthy eating behaviors and health status.

4. Vocational students should abide by the "Guidelines for Balanced Diet for Chinese Residents" in their usual meal matching and dietary behavior norms. The state has issued a series of laws and regulations such as the Regulations on School Food Safety and Nutrition and Health Management, the Food Safety Law of the People's Republic of China and so on to ensure the scientific dietary behavior and physical safety and health of higher vocational students.

5. The standardization and scientific nature of diet behavior of vocational students needs the cooperation of the school, the student union and the students themselves. The school strengthens the hardware support, system supervision, education and guidance of the canteen, and the student union is responsible for the flexible auxiliary role of the organization, propaganda and psychological counseling. The students themselves should identify with the scientific eating behavior from the consciousness and carry out practice.

6. This study is based on the analysis of bad diet behavior and health regulation strategies of higher vocational students, to study the causes of bad diet behavior of higher vocational students, and the correlation between bad diet behavior and physical health. To provide a scientific theoretical basis for reducing the bad dietary behavior habits of higher vocational students and establishing good dietary strategies. To provide strong data support for the government and follow-up related research.

##### Recommendations

1. It was common for vocational students to have bad eating behaviors such as breakfast, take-out, drinking drinks and late-night snacks. There were also some differences in unhealthy eating behaviors between different genders and grades. The proportion of bad eating behavior was higher in boys than in girls, and higher in senior students than in junior students. There is a certain correlation between bad dietary behavior and health status of students.

2. The standardization and scientific optimization of dietary behavior of higher vocational students also need the synergistic effect of multiple subjects. Hardware supporting, system construction and discipline setting at the school level can provide authoritative norms for the optimization of dietary behavior of higher vocational students. The organization and publicity of activities in the student union can provide a more flexible auxiliary role for the optimization of dietary behavior. The awareness and practice of students at the individual level is also an important part of dietary behavior

## V. BIBLIOGRAPHY

1. Anna Brytek-Matera, Anna Staniszewska, Souheil Hallit (2020). Identifying the Profile of Orthorexic Behavior and "Normal" Eating Behavior with Cluster Analysis: A Cross-Sectional Study among Polish Adults. *Nutrients*, 12: 1-2. <https://doi.org/10.3390/nu12113490>.
2. Maryah Stella Fram, Hoa T Nguyen, Edward A Frongillo (2022). Food Insecurity among Adolescent Students from 95 Countries Is Associated with Diet, Behavior, and Health, and Associations Differ by Student Age and Sex. *Currently developing nutrition*, 2022; 6 (3). <https://doi.org/10.1093/cdn/nzac024>.
3. Shameena Gill, Adli Ali, Alia Maisara Adenan, Shameena Gill (2022). Living through the COVID-19 Pandemic: Impact and Lesson on Dietary Behavior and Physical Well-Being. *International Journal of Environmental Research and Public Health*, 2022; 19(2):642. <https://doi.org/10.3390/ijerph19020642>.
4. Bendegul Okumus (2021). A qualitative investigation of Millennials' healthy eating behavior, food choices, and restaurant selection. *Food, Culture & Society*, 509-524. <https://doi.org/10.1080/15528014.2021.1882168>.
5. Laura Eickman, Jessica Betts, Lauren Pollack, Lauren Pollack, Frances Bozsik (2017). Randomized controlled trial of REBEL: A peer education program to promote positive body image, healthy eating behavior, and empowerment in teens. *Eating Disorders*, 2018; 26(2):127-142. <https://doi.org/10.1080/10640266.2017.1349005>.
6. Emily P, Bouwman, Maleen C (2020). Brief self-efficacy interventions to increase healthy dietary. *British food magazine*, 122(11):3297-3311. <https://doi.org/10.1108/BFJ-07-2019-0529>.
7. Helena Cui, Eleanor Bryant (2019). Burnout, Characteristics of Dietary Behavior and Dietary Patterns. *British food magazine*, 122(12):0-43. <https://doi.org/10.1108/BFJ-07-2019-0529>.
8. Hannah Andrews, Terrence D Hill, William C Cockrum (2017). Education level and diet lifestyle. *Food system and health*, 18(101-120). <https://doi.org/10.1108/S1057-629020170000018005>.
9. Shi Kaili, Liu Yuxin, Liu Ya (2022). Study on KAP Status of Korean People's Dietary Behavior in Yanbian, China [C] Proceedings of the 15th National Nutrition Science Conference of the Chinese Nutrition Society: 100. DOI : 10.26914/c.cnkihy.2022.033667.
10. Wang Jing, Gong Yu, Zhang Qian (2022). Correlation between healthy eating behavior and risk of gallstone in young and middle-aged people. *Journal of Nursing* 37 (10): 6-10. [https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7iJTKGjg9uTdeTsOI\\_r a5\\_Xb\\_I0B6FK-5JxpULNczVeGRMKE7tZqnhGzEcKDQoHPzz&uniplatform=NZKPT](https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7iJTKGjg9uTdeTsOI_r a5_Xb_I0B6FK-5JxpULNczVeGRMKE7tZqnhGzEcKDQoHPzz&uniplatform=NZKPT).
11. Viana V. (2008). Children's eating behaviour questionnaire: associations with BMI in Portuguese children. *BJNut*, 2008, 100(2):445-450. [https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7iJTKGjg9uTdeTsOI\\_r a5\\_Xb\\_I0B6FK-5JxpULNczVeGRMKE7tZqnhGzEcKDQoHPzz&uniplatform=NZKPT](https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7iJTKGjg9uTdeTsOI_r a5_Xb_I0B6FK-5JxpULNczVeGRMKE7tZqnhGzEcKDQoHPzz&uniplatform=NZKPT).
12. Li Ying (2022). Study on the correlation between health literacy and unhealthy eating behavior of middle school students in a school. *Food Safety Guide*. 160-162. DOI : 10.16043/j.cnki.cfs.2022.02.038.
13. Li Ying, Xia Xiaona (2022). Analysis of dietary behavior of middle school students in Nanjing. *Jiangsu Health Administration*. 841-844. DOI : 10.16043/j.cnki.cfs.2022.02.038.
14. Ju Peifeng, Zhou Xiaoyi, Huang Jianping (2022). Investigation on unhealthy eating behaviors and influencing factors of adolescent students in Nantong City. *Traffic medicine* 36(1): 100-103. [https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7i8oRR1PAr7RxjuAJ k4dHXoruTWkWM0Ybcong87\\_ijbS-qt\\_1kleykmNXoKJmtGyj1&uniplatform=NZKPT](https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7i8oRR1PAr7RxjuAJ k4dHXoruTWkWM0Ybcong87_ijbS-qt_1kleykmNXoKJmtGyj1&uniplatform=NZKPT).
15. Zhang Danxia, Li Yanni (2009). Investigation on nutritional knowledge and healthy eating behavior of community residents in Shenzhen. *Tropical Medicine in China* 9(8): 635-1636. [https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7i8oRR1PAr7RxjuAJ k4dHXoruTWkWM0Ybcong87\\_ijbS-qt\\_1kleykmNXoKJmtGyj1&uniplatform=NZKPT](https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C44YLTlOAIrKibYIV5Vjs7i8oRR1PAr7RxjuAJ k4dHXoruTWkWM0Ybcong87_ijbS-qt_1kleykmNXoKJmtGyj1&uniplatform=NZKPT).