

# THE IMPACTS OF MENU QUALITY ON CUSTOMER SATISFACTION: BASIS FOR A PROPOSED HEALTHY MENU OPTION FOR FOOD SQUARE CONCESSIONAIRES IN DE LA SALLE UNIVERSITY - DASMARIÑAS

Bianca C. Buenaventra<sup>1</sup>, Laika Mari C. Salvatus<sup>2</sup>, John Alecs G. Tuliao<sup>3</sup>,  
Ms. Anna-Liza A. Tibayan<sup>4</sup>

*Research Scholar<sup>1,2,3</sup>, Adviser<sup>4</sup>*

Bachelor of Science in Hotel and Restaurant Management  
DE LA SALLE UNIVERSITY – DASMARINAS  
College of Tourism and Hospitality Management

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**Abstract:** A concessionaire is one who has the authority to sell food and beverages in a designated area. One of the main objectives of a food concessionaire is to meet the expectations of his customers to be able to satisfy them. This research aimed to determine the impacts of menu quality on customer satisfaction in food square concessionaires. The study was conducted in De La Salle University-Dasmariñas, a private institution located in Dasmariñas City, Cavite because the researchers would want to investigate if the food concessionaires inside the university premises are able to provide the nutritional needs of the students as well as meet their satisfaction. The study made use of a researcher-made online survey questionnaire which was administered to 150 respondents. The study reached the following conclusion that the most important menu quality factor that customers consider when choosing the food/dishes to buy is the Food Quality which is composed of the following: overall food flavor, availability of delicious meals and tasty dishes, aroma/smell of the food, proper food temperature, and the method of cooking and preparation. Guided by the findings and conclusions of this study, food concessionaires must improve the quality of food by meeting the nutritional needs of each student on a regular basis. The final output of this study is a set of proposed healthy menu options for the food concessionaires in DLSU-Dasmariñas.

**Keywords:** Menu Quality, Customer Satisfaction, Healthy Menu, Food Concessionaire.

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## 1. INTRODUCTION

Food concessionaires take part in the daily sustenance of many people, including students, faculty, and school staff. A satisfying meal is significantly important to any college student especially dealing with their class schedules, extracurricular activities, learning environment, etc. Schools allow canteens and food concessionaires to continue its operation inside the school to meet the food and essential nutrients needed by its students for them to be able to maximize their energy and accomplish tasks and activities for the day.

The operation of school cafeterias, canteens, and food concessionaires is an important factor in developing among the students, faculty, and staff the interest in consuming nutritious and healthy foods. These food services can make consumers enjoy nutritious food and snacks at affordable prices inside the educational institution. The canteen should also provide the students with foods that are nutrient-rich and will enhance their skills and knowledge (DepEd Order No. 8 of 2007).

It is significant that menu offerings meet the nutritional standards for the school children (Encabo & Ventanilla, 2016). With all these in mind, the researchers conducted a study relating customer satisfaction with the quality of foods/dishes

offered by food concessionaires with the objective of proposing healthy menu options. In this study, the researchers analyzed the impacts of menu quality to customer satisfaction in Food Square Concessionaires in De La Salle University – Dasmariñas. Specifically, the researchers determined whether these food concessionaires can provide satisfaction to their consumers and contribute to their awareness on how they can improve their menu offerings particularly on the nutritional aspects of the food. The specific research locale was chosen mainly because the researchers belong to this community as they themselves are students of the said University. Furthermore, through the results of this study, the researchers would be able to contribute something valuable, such as that of proposing healthy menu options for the benefit of the DLSU-D Community.

**Background of the Study**

A concessionaire is one who has a right to sell food and drinks in an established area. And as a food concessionaire, one of his main objectives is to meet the expectations of his customers to be able to satisfy them. The satisfaction of consumers is mandatory for a business. Food and drinks that are available in school canteens, cafeterias, and food concessionaires affect the dietary behaviors of students and faculty members that will also influence them in the long run.

Being able to provide healthy foods and drinks to the people who consume it in school has a vital role to its students because this will help create a definite dietary norm and habits which will potentially affect an individual throughout their lives.

The study conducted by Reale & Flint (2016) showed that providing nutritional information on menus enhanced the visual attention of customers. Furthermore, based on the results of their study, colors or health logos play a substantial impact on food choice if included in nutritional information compared to when nutritional information is shown in black text alone on the menu itself.

De La Salle University-Dasmarinas permits several food concessionaires to operate inside the school premises to provide the needs of the students, faculty, and staff. Since the researchers are part of the DLSU-D community, their interest in the menu quality of these food concessionaires and how they meet and satisfy the needs of the customers, specifically the need for healthy, nutritional, and well-balanced meals, led them to conduct this study. Through this study, the researchers would like to contribute to the improvement of the menu quality offered by the food concessionaires as well as help them increase customer satisfaction by guiding them into creating healthy, affordable, and convenient choices for their consumers.

**Research Paradigm**

The research paradigm shows the relationship of menu quality to the level of customer satisfaction. By using the IPO model (Input – Process – Output), the researchers aimed to determine the impacts of menu quality on customer satisfaction specifically in De La Salle University-Dasmarinas. In this study, the Inputs included the demographic profile of the respondents (De La Salle University-Dasmarinas students) in terms of age, gender, college, year level, and average daily allowance. Another input is the menu quality in terms of the food’s nutritional value, appeal/presentation, overall quality, variety, and price. The Processes undertaken were data gathering through survey questionnaires and the statistical treatment and analysis of all data gathered from the respondents. Finally, the output is a Proposed Healthy Menu Option for the concessionaires in DLSU-D so that they can further improve customer satisfaction.

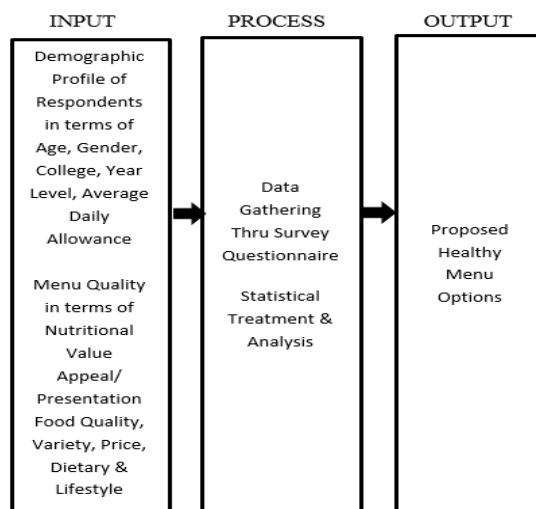


Figure 1. Conceptual Framework

### ***Statement of the Problem***

This study was conducted to determine the impacts of menu quality on customer satisfaction in food square concessionaires in De La Salle University-Dasmariñas.

Specifically, it aimed to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
  - 1.1 Age
  - 1.2 Gender
  - 1.3 College
  - 1.4 Year Level
  - 1.5 Average Daily Allowance
2. What is the impact of menu quality on customer satisfaction in terms of:
  - 2.1 Nutritional Value
  - 2.2 Appeal/Presentation
  - 2.3 Food Quality
  - 2.4 Variety
  - 2.5 Price
  - 2.6 Dietary & Lifestyle
3. In selecting the food/dishes to buy, what is the most important menu quality factor that customers consider?
4. Based on the results, what healthy menu options can be proposed to improve the menu quality offered by the food concessionaires?

Moreover, the researchers aimed to achieve the following objectives using this study:

To determine how customers select the food/dishes that they will buy from the concessionaires

1. To analyze how menu quality influence the buying decisions of customers
2. To measure the impacts of menu quality on customer satisfaction
3. To propose a healthy menu option to influence food choices of customers

## **2. LITERATURE REVIEW**

Dawes et al. (2020) described that customer satisfaction is a performance metric that is commonly used by different businesses. Individual's satisfaction scores cannot be fully determined regardless of the use of satisfaction surveys. There is a great involvement for market research design and managerial actions if the scores of individual customers show dissatisfaction. According to their study, they used to survey the same respondents 6 weeks apart, this method is called two-way satisfaction survey, to further investigate the stability of satisfaction scores.

Service and food quality positively influence customer satisfaction in the food service industry. That is why it is very important that food service establishments know how customer choose which products to buy. Based on the study of Jeong et al. (2019), the results identified the essentials or factors of individual customers' grounds in purchasing healthy foods. Customers also included how they are affected by the environmental elements of the restaurants.

In another study conducted by Reale and Flint (2016), consumers or customers were found more promoted and informed in choosing food if the menu includes nutritional labeling. Nutritional labeling reduces information asymmetry between manufacturers and consumers. However, the effectiveness of the method reduces because of lack of attention. The results of the study showed nutritional information on menus helped enhance visual attention to customers and as part of their conclusion, it was stated that colors or health logos play a large impact on food choice if included on nutritional information. Furthermore, nutritional labeling also helps to limit the calorie intake of an individual, as the population is increasingly

becoming reliant on convenient food and even dining out that causes excessive calorie intake. It is identified as a possible intercession to guide customers in food choices.

Moreover, based on the study made by Jawabreh et.al (2018), the menu has a significant role to customer satisfaction, if the menu is noticeable and includes meal-full food, the lack of assortment choices does not represent a rational reason to exit the restaurant.

Based on the study of Al-Aklabi et.al, (2016) Food service prices outside the campuses are often much lower than those of the University's restaurants, given that most students come from moderate or low-income families, price is a determining factor in their meal choices.

In the school setting, it is important to know how students choose the food that they will buy from the canteen or cafeteria. And in an article written by Gelinder (2020), the number one factor that affects students on deciding what food to consume is the taste of the food itself. It is important to focus on the needs of the consumer in the present time rather than meeting the needs of the future. It is also concluded in the article that it is compound to teach sustainable food consumption and further modify the food to enhance its taste.

It is imperative in the food industry to aim for customer satisfaction and turn it to customer retention. And according to the study of Dastane and Fazlin (2017), there are six factors for customer satisfaction, mainly product quality, service quality, prices, facility, and emotional factor are selected as factors of customer satisfaction (independent variables). Furthermore, it is identified in the study that the most significant key factor for customer satisfaction is the emotional factor followed by the facility, service quality, prices and lastly, product quality.

Based on the study of Putra et al., (2020), appearance of food has been an important factor that influences customer satisfaction. The aspect of depicting the look of food should be matched by great food quality in the restaurant, and food quality has three major factors, which are: flavor, menu variety, and nutritional value of food.

In the study conducted by Kim et al., (2016). The findings shows a good effect on academic performance when an individual consumes breakfast and healthy food choices which is often associated with a better intake of nutrients and lifestyle. Consuming undesirable food options and sugary drinks showed correlations with poor academic performance.

According to Asigbee et al., (2018), there is a correlation between nourishment and physical activity in enriching educational achievement and a sense of accomplishment. Students with a low overall diet standard were significantly more likely to fail the assessment. As a result, the active, healthy nutrition group performed better on standardized reading, math, and science achievement tests.

The number of enrollees in Private Higher Education Institution in AY 2019-2020 reached 1.83 million. 53.3% of these enrollees were female and 46.7% were males. ("Higher Education," 2020).

According to Al-Aklabi et al., (2016), variables like income, globalization, nutritional behavior shifts, and market prices influence food choice. Food prices fluctuate greatly over time. According to health economists, people prefer the cheapest foods and services. Many things influence human behavior, especially finances. Price directly affects food quality. For example, people will pick the cheapest item above the healthy. Several studies suggest that healthy food is more expensive, leading to increased consumption of less nutritious goods.

In the study conducted by McCubbin (2018), there were 11.8 million college and university students under the age of 25 in 2015, with 8.1 million students aged 25 and up. While students aged 18 to 21 make up a major portion of the student population, they nevertheless account for less than half of all students (42.15 percent). Historically, men have been significantly more likely than women to attend college. A substantial change in the opposite direction has occurred in recent years. According to the United States Department of Education, women now make up 56 percent of students on college campuses. In terms of total enrolment, this year, there are 2.2 million fewer males than women enrolled in college.

According to Ismail et al., (2019), menu variety was discovered to be a significant aspect in attracting and reflecting the needs, expectations, and satisfaction of cafeteria customers. It has an impact on the foodservice industry's performance. Students can get an assortment of nutrients for their bodies to function and perform properly and have the option to choose according to their preferences because of the menu diversity.

Promoting better diets in schools and providing pleasurable, safe, and healthy meals accompanied by a healthy food environment is vital. Encouraging healthy school food settings and meals around the world begins with the implementation of standards and policies and the development of school communities' capacities ("Healthy Food," 2021).

In the light of the many studies conducted on customer satisfaction related to menu and food quality, the researchers' interest on this topic led them to do a similar study focused on the food concessionaires inside the school setting. The researchers determined how students choose the foods that they buy and whether these foods were able to satisfy them..

### **3. METHODOLOGY**

This chapter presents the research design of the study. It consists of the research design that includes - population and samples, research instruments as well as the tools and techniques used for the data collection, the research locale, and participants of the study.

#### ***Research Design***

This is a quantitative research design that explained the phenomena relating menu quality to customer satisfaction. Furthermore, this study employed a descriptive survey method that involves the description, recording, analysis, and understanding of the present nature, arrangement, or processes of phenomena to describe what is in existence.

#### ***Research Locale***

The study was conducted in De La Salle University-Dasmariñas, a private institution located in Dasmariñas City, Cavite. One of the reasons why the researchers chose this research setting is because there is a big number of food service concessionaires located inside the University Food Square. Secondly, the researchers are students of DLSU-Dasmariñas, thus there is a great interest to conduct the study. And lastly, the researchers would be sharing the results and findings of the study to these food concessionaires with the objective of helping them improve their menu quality as well as increase customer satisfaction.

#### ***Participants of the Study and Research Sampling***

The respondents were limited only to college students who purchase and/or dine in the different food concessionaires located inside the University premises. Why the students? Basically, the students make up the biggest part of the population inside the University as compared to the employees. For the sample size, a total of 150 respondents who are students officially enrolled in DLSU-Dasmariñas was selected. The researchers used the Krejcie and Morgan's (1970) recommended sample size based on the total population of students in DLSU-Dasmariñas during the Academic Year 2020-2021.

Convenience sampling was used in this study. It is a sampling technique that will help easily determine the members of the target population because of the proximity. Moreover, this is a type of sampling method where a sample is taken from a group that is easy to approach or reach.

#### ***Research Instrument & Data Gathering Procedures***

The researchers made use of both primary and secondary sources of data. The researchers developed a survey questionnaire that is commonly used in a quantitative study. The survey questionnaire was tested for validity and checked for reliability. Once the questionnaire has been checked and approved by the adviser, panel members, and statistician, they were distributed to the respondents on-line via google form and they were given ample time to answer.

The researchers conducted an online survey among the 150 participants since doing the process personally and on a face-to-face modality is still not allowed due to the pandemic.

#### ***Data Treatment and Analysis***

After all the data has been gathered, they were properly tallied, treated, and analyzed with the help of a statistician, using the appropriate statistical tools. Descriptive statistics such as frequencies, weighted mean, and ranking and standard deviation were used.

The primary sources of data in this study were the questionnaire made by the researcher. The data were summarized and analyzed by the researchers using the following statistical tools:

Weighted Mean. This was used to determine The Impacts of Menu on Customer Satisfaction as perceived by the selected respondents from De La Salle University – Dasmariñas. The acquisition of the Weighted mean value is given by:

$\Sigma wx/\Sigma w$

Wherein

$\Sigma$  = the sum of frequencies

w = the weights.

x = the value.

**Ranking.** Through the acquisition of data and application of the weighted mean, the researchers were able to rank the impacts experienced by the selected respondents of De La Salle University – Dasmariñas from highest to lowest.

**Standard deviation.** It is a metric for determining how far each observed value differs from the mean, which helped the researchers indicate a trend to determine the population of interest with regards to the survey questionnaire conducted.

#### 4. RESULTS AND DISCUSSION

After the gathering of data and statistical treatment, the researchers interpreted the results of each table and they are as follows:

##### I. Demographic Profile

**Table 1.1 Age**

CHOICE	Frequency	Percentage	Rank
1. 16 years old and below	1	0.7%	5
2. 17-18	8	5.3%	3
3. 19-20	49	32.7%	2
4. 21-22	86	57.3%	1
5. 23-24	6	4.0%	4

The table shows the age of the respondents. Furthermore, the table reveals that majority of the answered questionnaire are from the age group of 21-22 years old having a percentage of 57.3%. Next is from 19-20 years old having a percentage of 32.7%, followed by the age group from 17-18 years old having a percentage of 5.3%. Following that is 23-24 years old having a percentage of 4.0% and the least is from the age group of 16 years and below having a percentage of 0.7%.

McCubbin (2018), reveals that there were 11.8 million college and university students under the age of 25 in 2015, and 8.1 million students aged 25 and up. While students aged 18 to 21 make up a major portion of the student population, they nevertheless account for less than half of all students (42.15 percent).

**Table 1.2 Gender**

CHOICE	Frequency	Percentage	Rank
1. Female	91	60.7%	1
2. Male	59	39.3%	2

The table shows the gender of the respondents. The table reveals that the majority of the respondents are female, having a percentage of 60.7%. Followed by the number of male respondents with a percentage of 39.3%.

The number of enrollees in Private Higher Education Institution in the Philippines in AY 2019-2020 reached 1.83 million. 53.3% of these enrollees were female and 46.7% were males (“Higher Education,” 2020). This indicates that women are more likely to participate and respond to our online survey questionnaire than men.



**Table 1.3 College**

CHOICE	Frequency	Percentage	Rank
1. CBAA	18	12.0%	2
2. CCJE	1	0.7%	6
3. CEAT	15	10.0%	3
4. CLAC	15	10.0%	3
5. COED	5	3.3%	5
6. CSCS	9	6.0%	4
7. CTHM	87	58.0%	1

The table shows the respective college departments of the respondents. Furthermore, the table reveals that majority of the answered questionnaire are from the college of CTHM, having a percentage of 58.0%. Followed by the college of CBAA, having a percentage of 12.0%. Next is from the college of CEAT and CLAC having a percentage of 10.0%. Following that is from the college of CSCS having a percentage of 6.0%, followed by college of COED having a percentage of 3.3%. Last is from the college of CCJE having a percentage of 0.7%.

Majority of the respondents are from the College of Tourism and Hospitality Management since the researchers are from this college and used the convenience sampling method, majority of the respondents were taken from a group of people easy to contact or to reach within CTHM.

**Table 1.4 Year Level**

CHOICE	Frequency	Percentage	Rank
1. 1 <sup>st</sup> year	17	11.3%	3
2. 2 <sup>nd</sup> year	23	15.3%	2
3. 3 <sup>rd</sup> year	103	68.7%	1
4. 4 <sup>th</sup> year	6	4.0%	4
5. 5 <sup>th</sup> year	1	0.7%	5

The table shows the respective year level of the respondents. Furthermore, the table reveals that majority of the answered questionnaire are from the 3<sup>rd</sup> year level, having a percentage of 68.7%. Followed by the 2<sup>nd</sup> year level, having a percentage of 15.3%. Next is from the 1<sup>st</sup> year level having a percentage of 11.3%. Following that is from the 4<sup>th</sup> year level having a percentage of 4.0%, followed by the 5<sup>th</sup> year level having a percentage of 0.7%.

Majority of the respondents are from the 3<sup>rd</sup> year level for the researchers belong to this year level and majority of their contact respondents are from this year level. Because the researchers were from this year level and utilized the convenience sample method, most of the responses were from this subgroup.

**Table 1.5 Average Daily Allowance**

CHOICE	Frequency	Percentage	Rank
1. Php 300 and below	114	76.0%	1
2. Php 301-400	20	13.3%	2
3. Php 401-500	4	2.7%	4
4. Php 501 and above	12	8.0%	3

The table shows the average daily allowance of the respondents. Furthermore, the table reveals that majority of the answered questionnaire are from respondents with the average daily allowance amounting to Php 300 and below, having a percentage of 76.0%. Followed by the average amounting to Php 301-400, having a percentage of 13.3%. Next is from the average of

Php 501 and above having a percentage of 8.0%. Lastly is the average daily allowance amounting to Php 401-500 having a percentage of 2.7%

Based on the article written by Canlas, M. (2015) College students often receive P150 to P250 per day (without transportation allowance). Students from prestigious schools such as Ateneo and De La Salle University, whose nearby restaurants are more expensive, earn a greater allowance.

## II. Impacts of Menu Quality to Customer Satisfaction

**Table 2.1: Nutritional Value**

CHOICE	Mean	Verbal Interpretation	Rank
1. Availability of healthy and nutritious main dishes and snacks	2.9667	Neutral	3
2. Availability of meals rich in carbohydrates, proteins, fats	3.3800	Very Satisfied	1
3. Availability of vegetable dishes	3.0467	Satisfied	2
4. Availability of fresh fruits and other healthy desserts	2.5867	Dissatisfied	4
5. Availability of meals which are not too oily, sugary, or salty	2.6400	Very dissatisfied	5

The table shows descriptive statistics in terms of nutritional value. Furthermore, the table indicates that availability of meals rich in carbohydrates, proteins, and fats affects more respondents, having a mean of 3.3800. Availability of vegetable dishes is subsequently shown with a mean of 3.0467. Next is the availability of healthy and nutritious main dishes and snacks having a mean of 2.9667. Next is the availability of meals which are not too oily, sugary, or salty, having a mean of 2.6400. Lastly is the availability of fresh fruits and other healthy desserts with a mean of 2.5867.

Promoting better diets in schools and providing comforting, satisfying, clean and nutritious food accompanied by a healthy environment is critical. Facilitating healthy school food settings and meals begins with the implementation of standards and policies and the development of school communities' capacities ("Healthy Food," 2021).

**Table 2.2: Appeal/Presentation**

CHOICE	Mean	Verbal Interpretation	Rank
1. A display of colorful and attractive dishes in food warmers	3.0333	Dissatisfied	4
2. Appetizing, enticing, and inviting dishes on display	3.1133	Very Satisfied	1
3. Visibility of the label or name of each dish to the customer	2.7800	Very Dissatisfied	5
4. General appearance of the food served on individual plates	3.0667	Satisfied	2
5. Adequate portion/size of the food served on individual plates	3.0533	Neutral	3

The table shows descriptive statistics in terms of appeal/presentation. Furthermore, the table indicates that appetizing, enticing, and inviting dishes on display affects more respondents, having a mean of 3.1133. General appearance of the food served on individual plates is subsequently shown with a mean of 3.0667. Next is the Adequate portion/size of the food served on individual plates having a mean of 3.0533. Next is display of colorful and attractive dishes in food warmers, having a mean of 3.0333. Lastly is the visibility of the label or name of each dish to the customer, with a mean of 2.7800.

The results are strengthened by the study of Jawabreh et.al (2018), where it was concluded that the menu significantly influences consumer happiness, especially if it is appealing and includes substantial meals.

Furthermore, the study of Reale & Flint (2016), stated that if the menu incorporates nutritional information, consumers or customers were more promoted and educated when making meal choices. The asymmetry of information between manufacturers and customers is reduced by nutritional labeling. However, due to a lack of attention, the method's efficiency decreases.



**Table 2.3: Food Quality**

CHOICE	Mean	Verbal Interpretation	Rank
1. Overall food flavor (e.g., not bland, not too salty nor too sweet)	3.1667	Dissatisfied	4
2. Availability of delicious meals and tasty dishes	3.2400	Satisfied	2
3. Aroma/smell of the food	3.2800	Very Satisfied	1
4. Proper food temperature (e.g., hot foods served hot; cold foods served cold)	3.1533	Very Dissatisfied	5
5. Method of cooking & preparation (e.g., foods are not under or over cooked)	3.2133	Neutral	3

The table shows what are the qualities of food the respondents prefer. Furthermore, the table shows that Aroma/smell of the food affects more respondents, having a mean of 3.2800. Followed by availability of delicious meals and tasty dishes with a mean of 3.2400. Next is the Method of cooking & preparation (e.g., foods are not under or over cooked), having a mean of 3.2133. Next is Overall food flavor (e.g., not bland, not too salty nor too sweet), having a mean of 3.1667. Lastly is the Proper food temperature (e.g., hot foods served hot; cold foods served cold), with a mean of 3.1533.

Based on the study of Putra et al. (2020), appearance of food has been an important factor that influences customer satisfaction. The aspect of depicting the look of food should be matched by great food quality in the restaurant, and food quality has three major factors, which are: flavor, menu variety, and nutritional value of food.

**Table 2.4: Variety**

CHOICE	Mean	Verbal Interpretation	Rank
1. Availability of healthy and nutritious foods	2.8533	Very Dissatisfied	5
2. Availability of a wide selection of viands (“ulam”)	3.3133	Satisfied	2
3. Availability of meat (beef or pork), poultry and fish on a daily basis	3.4400	Very Satisfied	1
4. Combination of fried, boiled, and stewed dishes in a daily basis	3.1733	Neutral	3
5. Choices of meals/dishes/viands differ on a daily basis	3.0933	Dissatisfied	4

The table shows descriptive statistics in terms of variety. Furthermore, the table indicates that Availability of meat (beef or pork), poultry and fish on a daily basis affects more respondents, having a mean of 3.4400. Availability of a wide selection of viands (“ulam”) is subsequently shown with a mean of 3.3133. Next is the combination of fried, boiled, and stewed dishes available on a daily basis having a mean of 3.1733. Next is choices of meals/dishes/viands differ on a daily basis, having a mean of 3.0933. Lastly is the availability of healthy and nutritious foods, with a mean of 2.8533.

According to Ismail et al., (2019), menu variety was discovered to be a significant aspect in attracting and reflecting the needs, expectations, and satisfaction of cafeteria customers. It has an impact on the foodservice industry's performance. Learners can get various nutrients for their bodies to function correctly and choose according to their preferences because of the menu diversity.

**Table 2.5 : Price**

CHOICE	Mean	Verbal Interpretation	Rank
1. Reasonable & affordable meals	2.8400	Dissatisfied	4
2. Meal prices are within my budget	3.1533	Very Satisfied	1
3. Meals are worth the money I spent/paid for	2.8800	Neutral	3
4. Meal prices complement the portion size and food quantity	2.9667	Satisfied	2
5. Availability of cheaper meals compared to food establishments outside the school	2.6600	Very Dissatisfied	5

The table shows descriptive statistics in terms of price. The table indicates that Meal prices are within my budget affects more respondents, having a mean of 3.1533. Meal prices complement the portion size and food quantity is subsequently shown with a mean of 2.9667. Next is the meals are worth the money I spent/paid for having a mean of 2.8800. Next is reasonable & affordable meals, having a mean of 2.8400. Lastly is the Availability of cheaper meals compared to food establishments outside the school, with a mean of 2.6600.

Based on the study of Al-Aklabi et.al, (2016) Food service prices outside the campuses are often much lower than those of the University's restaurants, given that most students come from moderate or low-income families, price is a determining factor in their meal choices.

**Table 2.6: Dietary & Lifestyle**

CHOICE	Mean	Verbal Interpretation	Rank
1. Food choices complement your attempt to eat a healthy diet	2.7267	Neutral	3
2. Convenience and ease in buying healthy and nutritious meals	2.7800	Satisfied	2
3. Evidence of healthy menu initiatives among the concessionaires (e.g., provides nutritional information)	2.5333	Very Dissatisfied	5
4. Availability of food choices that create an opportunity for a healthy diet	2.7133	Dissatisfied	4
5. Availability of food choices that entice wellness over convenience	2.8133	Very Satisfied	1

The table shows that Availability of food choices that entice wellness over convenience affects more respondents, having a mean of 32.8133. Followed by convenience and ease in buying healthy and nutritious meals with a mean of 2.7800. Next is the food choices complement your attempt to eat a healthy diet, having a mean of 2.7267. Next is Availability of food choices that create an opportunity for a healthy diet, having a mean of 2.7133. Lastly is the evidence of healthy menu initiatives among the concessionaires, with a mean of 2.5333.

In the study conducted by Kim et al., (2016). The findings shows a good effect on academic performance when an individual consumes breakfast and healthy food choices which is often associated with a better intake of nutrients and lifestyle. Consuming undesirable food options and sugary drinks showed correlations with poor academic performance.

**Table 3: Menu Quality Factors in Selecting Food/Dishes**

Descriptive Statistics			
	N	Mean	Standard Deviation
1. Nutritional Value	150	2.9240	0.55836
2. Appeal/Presentation	150	3.0093	0.60527
3. Food Quality	150	3.2107	0.56368
4. Variety	150	3.1747	0.54848
5. Price	150	2.9000	0.69039
6. Dietary & Lifestyle	150	2.7133	0.75669
Valid N (listwise)	150		

The table shows that the most important menu quality factor that customers consider is the food quality with a mean of 3.2107. Followed by variety, having a mean of 3.1747. Next is appeal/presentation with a mean of 3.0093. Next is nutritional value having a mean of 2.9240. Price with a mean of 2.9000. Lastly, dietary & lifestyle having a mean of 2.7133.

Based on the study of Dastane & Fazlin (2017) Customer happiness is determined by six factors: product quality, service quality, prices, facility, and emotional aspect (independent variables). Furthermore, the survey found that the emotional aspect is the most important critical factor for customer happiness, followed by the facility, service quality, costs, and product quality.

## **5. CONCLUSION**

In light of the above-cited findings, the following conclusions were drawn.

1. Majority of the students who responded were female from the age group 21-22 years old that were in the 3rd year level coming from the College of Tourism and Hospitality Management with a daily allowance of Php 300 and below. Female students of DLSUD ages 21-22 years old are more likely to be conscious of food in terms of its nutritional value (meals rich in carbohydrates, proteins, fats) and food that is reasonable for their price.
2. Based on the results, the impact of menu quality on customer satisfaction shows that in terms of nutritional value, the availability of meals rich in carbohydrates, proteins, and fats greatly affects majority of the respondents. In terms of appeal/presentation, having appetizing, enticing, and inviting dishes on display affects more respondents. In food quality, the aroma/smell of the food has the greatest impact. In the aspect of food variety, the availability of meat poultry and fish on a daily basis has the highest impact. In terms of pricing, majority of the respondents answered that meal prices are within their budget. Lastly, in the aspect of dietary & lifestyle, availability of food choices that entice wellness over convenience has the greatest effect to the respondents. Customer satisfaction among the respondents can be attained on the condition that shows meals containing proteins, rich in carbohydrates, fats, an appetizing display, inviting aroma, and is within their budget. This shows the definition of quality food among food concessionaires in DLSUD.
3. The most important menu quality factor that customers consider when choosing the food/dishes to buy is the Food Quality which is composed of the following: overall food flavor, availability of delicious meals and tasty dishes, aroma/smell of the food, proper food temperature, and the method of cooking and preparation

## **6. RECOMMENDATIONS**

Guided by the findings and conclusions in this study, the following recommendations are proposed:

1. Food concessionaires should practice reducing the number of fried dishes. Instead of deep frying, do pan fry to lessen greasy and foods.
2. Create new layout for the menu. Make sure that images, letters/names, and photos are visible and attractive.
3. The food concessionaires should make use of food warmers and chillers to maintain proper temperature and freshness of the food
4. Consider other dishes with health value so that they can offer wide variety of food.
5. Availability of “competitive foods” means food concessionaire having cheaper and wide variety meals compared to food establishments outside the school.
7. Food Concessionaires should try to provide more of these foods: fruits and vegetables, whole wheat, healthy fats, and low-fat dairy items. They should try to make these the basis of their food menu rather than meat products and other high-fat, nutrient-depleted foods.
8. Plate the customers' meals in an appetizing way because most students care about appearance in choosing the food that they will get to eat, and this also includes the portion sizing.
9. Food Concessionaires must improve the quality of food by providing the nutritional needs of every individual student in order to get through the daily basis, such as having enough energy for their daily classes and other activities.
10. Think of ways to introduce meals that are fit for every type of student. More variety or food options and coordination between food concessionaires to avoid menu repetition in the same day.
11. Food Concessionaires should use accurate labeling and pricing. Choose appropriate colors that will highlight their best-selling product/item/food. Provide more information about the food and include the ingredients used so that customers with food allergies will be able to be informed ahead of time.
12. Food concessionaires should offer a wider variety of food. There should also be more "on-the-go" food, but still healthy and appetizing. Improve the availability of nutritious and balanced food in their menu.
13. Food concessionaires can do a simple survey among the students, faculty, and staff of De La Salle University – Dasmariñas. The results of this survey would be a source of valuable information because the food concessionaires would

be able to know what their customers really want. Also, they would be able to improve their existing menu offerings. Moreover, they could develop new menu which are more healthy, well-balanced, and with high nutritional value for their customers who are seeking for these types of food.

14. Lastly, as part of the recommendations, the researchers came up with the following food menu layouts to provide more nutritional information as well as make the presentation more attractive to the customers:

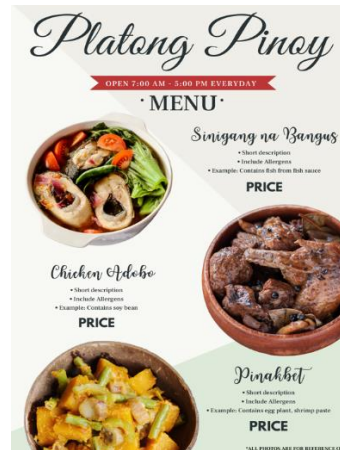


Figure 2: Sample Food Menu Layout

A menu, in its most basic form, is a list of food and drink items that are available for purchase or will be served. Customers' eyes are pulled to specific areas on your menu when they look at it, therefore this is where you want to put your most popular menu items, and remember, less is more.

- Sinigang can strengthen your immune system by providing Vitamin C from the tamarind, reduce constipation, and provide energy from the protein of the fish.
- In Adobo, chicken is a good alternative for red meats and a great protein source, which has been associated to a number of health benefits. Soy sauce contains niacin, which aids in lowering of fats in the blood.
- Pinakbet is high in fiber, which means it can help keep the digestive system in check. Moreover, it can help to lower blood pressure.



Figure 3: Sample Food Menu Layout

Photos on your menu will allow you to promote your dishes in a variety of ways. You have the option of displaying a real photo of each meal, or you can highlight your most popular dishes using your own images.

- Fish Tokwa Menudo with Fish is a high-protein dish which can help in your body's growth and development and it is also high in vitamin A which will give you a healthy skin and vision. It is a healthier version of the usual pork menudo.
- Bistek Tagalog is a protein-packed dish. It's also high in nutrients, which are essential for our bodies.

- Pancit is a dish with the majority of its calories coming from carbohydrates and proteins, making it a great meal to eat when dieting.
- Fish Fillet is high in omega-3 fatty acids and vitamins D and B2 but its health benefits are entirely dependent on how it is prepared.

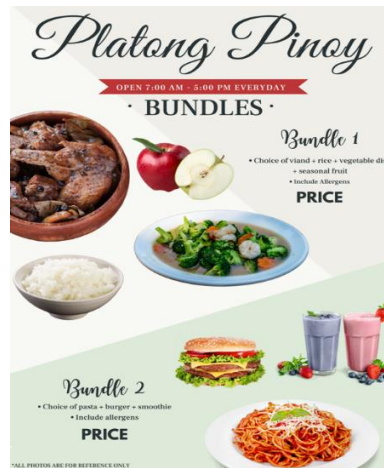


Figure 4: Sample Food Menu Layout

Meal bundling is available in this section of the menu. Usually, when you group menu items together, people will have the impression to order more. This type of bundling will also help you upsell and provide customers with more of what they want.

Another benefit of bundling for food concessionaire menus is that it makes the preparation easier. The best way to this kind of offering work is to give your customers the idea that you are providing them service and food that will be worth its value.

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