Food Preference and Food Consumption of Junior High School Students

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Abstract

The purpose of this research was to determine the food preferences and consumption of junior high school students as well as the factors that influence them. This study utilized a descriptive research design. The 352 respondents were junior high school students from a national high school in Leyte, Philippines chosen using stratified random selection. The study utilized a 3-point hedonic food preference scale and a 3-point hedonic food consumption scale. The information gathered was tabulated and frequency counts were applied. The findings of the study revealed that rice, chicken, orange,malunggay, banana cue were most preferred food of Grade 7 and 8 students, rice, chicken, mangoes, pechay, chips for Grade 9, and rice, fish, rambutan, eggplant, chips for Grade 10 students. The most consumed food among 7th grade students were rice, chicken, bananas, malunggay, and kusinta and rice, fish, bananas, malunggay and pechay, and bread for Grade 8. On the other hand, the most consumed foods by grade 9 students were rice, chicken and fish, apples, malunggay, banana cue while rice, fish, bananas, eggplant, and bread for grade 10. The factors that mainly influenced the food preferences of the students include the food's appeal to their senses, choices made by their family or parents, and availability of food. Food preference and consumption are important to be given much attention for a person's health lies on them. A future study should include a wider scope and include more respondents.

Keywords: food consumption, food preference, junior high school students, factors influencing food consumption, factors influencing food preference

1. Introduction

Nutrients required for growth, development, and learning are found in healthy diets. Eating nutritious meals delivers both physical and mental health advantages, according to study, and it may be a long-term investment. in one's prospective happiness (Wahl et al., 2021). Nutrition is assumed to impact individual behavior, such as attentiveness and activity levels, according to Sorhaindo and Feinstein (2021). These behaviors have the potential to impede academic progress and peer relationships, as well as self-esteem. Students who are well fed may comprehend more effectively, and consuming nutritious meals has been related to increased grades, memory, attentiveness, and quicker information processing (Public Charter Schools, 2019).

Several studies suggest that well-fed students learn better. In connection to this, students may improve their thinking abilities, acquire, or earn great marks, and they will surely show an interest in listening, participating in various school activities, and, most importantly, studying more and absorbing knowledge more easily.

Food preference is described as choosing meals based on what a person loves the most, finds most gratifying, feels most comfortable eating with, and so on, based on the body's needs and desires (Collen et al., 2021). According to the Evolutionary Psychologist (2021), meal preference is when an individual shows a particular affection or dislike for a specific meal or food type (NCI Thesaurus). The phrase "food consumption" refers to an assessment of a person's nutritional intake. The amount and quality of food consumed, regardless of whether individuals "graze" or eat different items, are placed on various foods (or an ideal body shape associated with diet) and eating habits all change over

history and throughout cultures (Encyclopedia, 2022). Students' dietary habits and food consumption are influenced by a variety of circumstances. Eating preferences are determined by sensory reactions to food's taste, smell, and texture. Individual factors (cooking abilities, food taste, food taboos, and knowledge and views) influence student's food consumption, as do societal influences (peer influence and social standards), school variables (campus culture and examination frequency), and environmental determinants (availability of cooking supplies and facilities, as well as food pricing) (Kabir, Miah, & Islam, 2018). In this regard, the food that high school students consume is entirely dictated by their familiarity with it, which includes food color, form, and feel.

Food preferences and consumption are complicated human behaviors that are impacted by several interconnected factors. Students' dietary preferences and food intake have been pushed aside and not previously evaluated due to many new issues, as well as our society's rising complexity and variety (Order 13 of the Education Department). The Education Department announced Healthy food and beverage policy and guidelines alternatives in schools and Education Department workplaces in 2017. In accordance with the literature, there are just a few research from Region VIII on basic education students' food intake and dietary preferences. Researchers seek to be the first to investigate food preferences and consumption among Palo, Leyte junior high school pupils.

The purpose of this study was to look at the dietary choices and consumption of junior high school students who were formally enrolled in the S.Y. 2021-2022 in Palo, Leyte, at a junior high school. This study tried to answer the following questions in particular: (1) what foods are preferred by the junior high school students segmented by grade levels?; (2) what foods are consumed by the junior high school students segmented by grade levels?; (3) what factors influence the student's food preference and food consumption segmented by grade levels?

2. METHODS

Descriptive research design was utilized in the study. The total population of the junior high school students in Palo, Leyte, who were the respondents, was 3,691. In Krejcie and Morgan (1970) sample size table, the sample size of 3,691 population was 352. The researchers used a 3-point food preference hedonic scale and a 3-point food consumption scale validated by three experts in the field of education. The computation of the results was done using frequency count, percentage, and rank.

3. RESULTS AND DISCUSSION

Research Question 1: What foods are preferred by the junior high school students segmented by grade levels?

Tables 1-4 present the junior high school students' food preferences with their corresponding frequencies and percentages, as well as their rankings to determine the most preferred food.

Table 1 shows the food preferences of the Grade 7 students in a National High School in Palo, Leyte. Overall, the most preferred food was banana cue, followed by rice and pizza. Banana cue is one of the most common street snacks and is thought to be Filipinos' all-time favorite (Shaynne, 2019). According to Pelegrino (2020), rice is always a number one choice, especially for Asians and Filipinos. Even with the accessibility of other staple foods; for example, noodles, bread, and rice will be top among choices. Moreover, pizza is one of the most popular foods in the world and it is popular for a reason. People are attracted to food varieties that are greasy, sweet, rich, and complex, in which pizza has all these components (Miller, 2019). Meanwhile, the least preferred food was durian. Some people dislike durians primarily because of its strong smell, which attracts some people while it is disgusting for others (Le, 2021).

Chicken was the most preferred meat among the Grade 7 students, while the beef was the least preferred. Eating chicken can reduce the risk of injuries and diseases like osteoporosis by strengthening muscles and improving bone health (WebMD Editorial Contributors, 2020). According to Flowers et al. (2019), even though beef is a food that is high in protein, vitamins, and minerals, there is a debate about whether eating beef is healthy.

Orange was the most preferred fruit while durian was the least preferred. Orange is a tasty combination of aromatically pleasant zest and spiritually stimulating tang (Dichter, 2016). Durian contains a variety of active compounds that each person's sense of smell is different (Le, 2021). Malunggay was the most preferred vegetable, while ampalaya was the least preferred. According to Gopalakrishnan et al. (2016), there are a lot of minerals in malunggay leaves that are important for growth and development, including calcium, which is one of the most important components. On the other hand, vegetables such as bitter gourd have a high concentration of calcium and

other healthy elements such as phenols and flavonoids and are classified as bitter meals, which is not loved by some (Ndiwa, 2022).

Banana cue was the most preferred snack, while peanuts were the least preferred. Banana cue is sweet, very nutritious, digestible, and very affordable (Shaynne, 2019). Peanuts are among the most common causes of food allergies, and they often find their way into unexpected food items (Hirsch, 2023). Milk was the most preferred drink, while soft drinks were the least preferred. Not only is milk an excellent source of vegan protein, but it is also packed with calcium and vitamin D, two essential nutrients for bone health (Rd, J. B. M., 2023). In addition, obesity, diabetes, dental and bone disorders, among others, are all linked to soft drink intake, particularly among children and adolescents (Karishma et al., 2018).

Table 1

Food Preference of the Grade 7 respondents

Food Preference, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	78 (90.7)	8 (9.3)	-	2.5
Meat				
Chicken	73 (84.9)	13 (15.1)	-	12
Fish	47 (54.7)	37 (43)	2 (2.3)	50
Pork	65 (75.6)	18 (20.9)	3 (3.5)	32.5
Beef	46 (53.5)	34 (39.5)	5 (7)	51
Fruits				
Apple	72 (83.7)	10 (11.6	4 (4.7	15.5
Banana	72 (83.7)	14 (16.3	-	15.5
Mangoes	75(87.2)	9(10.5)	2 (2.3)	7.5
Orange	76(88.4)	10(11.6)	-	6
Rambutan	75(87.2)	11(12.8)	-	7.5
Vegetables				
Malunggay	69(80.2)	16 (18.6)	1 (1.2)	21
Monggo	50(58.1)	27(31.4)	9 (10.5)	46
Pechay	70(81.4)	7(8.1)	9(10.5)	19.5
Sayote	57(66.3)	23(26.7)	6(7)	43
Eggplant	65(75.6)	16(18.6)	5(5.8)	32.5
Snacks				
Bananacue	80(93)	6(7)	-	1
Cake	75(87.2)	10(11.6)	1(1.2)	7.5
Ice Cream	77(89.5)	9(10.5)	-	4.5
Lumpia	77(89.5)	9 (10.5)	-	4.5
Pizza	78(90.7)	6(7)	2(2.3)	2.5

Table 2 shows the food preferences of the Grade 8 students in a National High School in Palo, Leyte. The most preferred, overall, was water followed by rice. Meanwhile, the least preferred food was Ampalaya. Moreover, chicken was the most preferred meat among the Grade 8 students, while beef was the least preferred. According to Jayaraman et al. (2012), the most prevalent and well-liked species of poultry in the world is chicken. Orange and Papaya were the most preferred fruit while durian was the least preferred fruit. Oranges are well-liked because of their inherent sweetness, the abundance of various varieties, and the variety of uses (Butler,2019). In addition, papaya was the most preferred fruits, according to Sachdev (2022), it demonstrates that many people enjoy the sweet flavor and soft texture of papaya.

Malunggay was the most preferred vegetable, while ampalaya was the least preferred. On the study of Palada (2017), it shows that one of the most beneficial trees on earth, moringa, is utilized nearly exclusively for food and traditional medicine in the Philippines. Banana cue and ice cream was the most preferred snack, while siomai was the least preferred. According to Shaynne (2019), the banana cue is an affordable snack that has a lot of nutritional content, and you can find it on practically every street corner. Water was the most preferred drink, while coffee was the least preferred. Water has numerous bodily processes, including lubricating the joints, distributing oxygen throughout the body, preventing kidney damage, and more (Mclntosh, 2018).

Table 2

Food Preference of the Grade 8 Respondents

Food Preference, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	68(79.1)	18(20.9)	-	2
Meat				
Chicken	62(72.1)	23(26.7)	1(1.2)	5
Fish	50(58.1)	35(40.7)	1(1.2)	26.5
Pork	47(40.7)	35(40.7)	4(4.7)	34
Beef	36(41.9)	43(50)	7(8.1)	52
Fruits				
Apple	58(67.4)	28(32.6)	8.(9.3)	13.5
Banana	55(64)	30(34.9)	1(1.2)	20
Lanzones	57(66.3)	21(24.4)	2 (2.3)	17.5
Orange	59(68.6)	24(27.9)	3(3.5)	9
Rambutan	59(68.6)	22(25.6)	22(25.6)	9
Vegetables				
Squash	43(50)	30(34.9)	13(15.1)	40.5
Malunggay	63(73.3)	18(20.9)	5(5.8)	4
Pechay	58(67.4)	18(20.9)	10(11.6)	13.5
Sayote	47(54.7)	34(39.5)	5(5.8)	34
Eggplant	46(53.5	29(33.7)	11(12.8)	37.5
Snacks				
Bananacue	60(69.8)	26(30.2)	-	6.5
Chips	58(67.4)	25(29.1)	3(3.5)	13.5
Chocolate	59(68.6)	24(27.9)	3(3.5)	9
Fries	58(67.4)	23(26.7)	5(5.8)	13.5
Ice Cream	60(69.8)	22(25.6)	4(4.7)	6.5

Table 3 shows the food preferences of the Grade 9 students in a national high school in Palo, Leyte. Chicken, mangoes, pechay, chips and water were the most preferred foods of the Grade 9 students in meats, fruits, vegetables, snacks, and drinks respectively. Meanwhile, the least preferred foods were fish, durian and guyabano, ampalaya, and taho were the least preferred foods in meats, fruits, vegetables, snacks, and drinks respectively.

Overall, their most preferred food was water, followed by chips. According to the Institute of Medicine, we cannot survive without water. It is essential to numerous bodily processes. The current study discovered that students have strong preference for junk food. This could be due to the time factor, lowest cost, palatable taste, marketing through a constant barrage of advertisements, peer pressure, and the easy availability of a wide variety of junk foods item. The ingredients in junk foods enhance their flavor and make them addictive, according to Purushothaman et al. (2015). Meanwhile, the least preferred food was guyabano.

Table 3
Food Preference of the Grade 9 Respondents

Food Preference, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	71(81.6)	16(18.4)	-	6
Meat				
Chicken	67(77)	20(23)	-	11
Fish	45(51.7)	35(40.2)	7(8)	50.5
Pork	54(62.1)	29(33.3)	4(4.6)	35
Beef	50(57.5	28(32.2)	9(10.3)	42
Fruits				
Apple	66(75.9)	19(21.8)	2(2.3)	13.5
Banana	65(74.7)	18(20.7)	4(4.6)	16.5
Mangoes	68(78.2)	13(14.9)	6(6.9)	9
Orange	64(73.6	20(23)	3(3.4)	20
Rambutan	67(77)	20(23)	-	11
Vegetables				
Cabbage	44(50.6)	29(33.3)	14(16.1)	52
Malunggay	52(59.8)	30(34.5)	5(5.7)	38.5
Monggo	48(55.2)	29(33.3)	10(11.5)	46.5
Petchay	53(60.9)	28(32.2)	6(6.9)	36
Eggplant	39(44.8)	39(44.8)	9(10.3)	46.5
Snacks				
Bananacue	71(86.6)	11(12.6)	5(5.7)	6
Chips	76(87.4)	10(11.5)	1(1.1	2
Chocolate	71(81.6)	13(14.9)	3(3.4)	6
Fires	74(85.1)	11(12.6)	2(2.3)	3
Ice Cream	73(83.9)	13(14.9)	1(1.1)	4

Table 4 shows the food preferences of the Grade 10 students in a national high school in Palo, Leyte. Overall, the most preferred food was water, followed by rice. Meanwhile, the least preferred food was guyabano. For the meat, the most preferred food by the Grade 10 students was fish (62), while the least preferred was beef (48). Meanwhile, for the fruits, the most preferred was rambutan (65), while the least preferred was guyabano (23). For the vegetables, the most preferred was talong (59), while the least preferred was ampalaya (24). For the snacks, the most preferred food was chips (74), while the least preferred was taho (26). For the drinks, the most preferred was water (84), while the least preferred was juices (51).

According to Khalifa, et al. (2018), every living thing on the planet, notably the human species, depends on water. Millions of Filipinos depend on rice as a food source and consider it to be a national food staple. In the Philippines, meals would not be complete without rice in some forms (Mamiit, et al., 2021). In both clinical and cultural investigations, the health advantages of guyabano have been demonstrated. It aids in reducing blood pressure, heart rate, body heat, and aches and pains. Asthma, inflammation, and pain can all be alleviated with it (Stuart, 2019). Some do not like ampalaya because of its bitter taste. According to Jahurul et al. (2020), rambutan has a stronger flavor and is a good source of proteins, carbs, vitamins, and minerals (Ranaweera, N. I., et al., 2021). One of the most widely consumed snacks worldwide is the potato chip or crisp (Dhital et al., 2018; Tian et al., 2017).

In addition, fish eating is mostly included in "grow" category; Whereas, consuming fish is crucial for the development of a child's brain, as well as for the development of muscles and fatty acids that protect against heart disease (Barclay & Kinch, 2013; Mccormack & Barclay, 2013). Meanwhile, the least consumed meat by Filipinos out of the meats analyzed is beef, which is also thought to be the most expensive form of meat among those from Korea and the Philippines (Ong et al., 2023).

Research Question 2: What foods are consumed by the junior high school students segmented by grade levels? Tables 5-8 present the junior high school students' food consumption with their corresponding frequencies and percentages, as well as their rankings to determine the most consumed food.

Table 4
Food Preference of the Grade 10 Respondents

Food Preference, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	80(92)	6(6.9)	1(1.1)	2
Meat				
Chicken	61(70.1)	24(27.6)	2(2.3)	15.5
Fish	62(71.3)	25(28.7)	-	22.5
Pork	54(62.1)	30(34.5)	3.(3.4)	29.5
Beef	48(55.2)	33(37.9)	6(6.9)	40.5
Fruits				
Apple	64(73.6)	22(25.3)	1 (1.1)	10
Lanzones	59(67.8)	25(28.7)	3(3.4)	19.5
Mangoes	61(70.1)	23(26.4)	3(3.4)	15.5
Orange	63(72.4)	18(20.7)	6(6.9)	11
Rambutan	65(74.7)	19(21.8)	3(3.4)	8.5
Vegetables				
Malunggay	46(52.9)	39(44.8)	2(2.3)	44.5
Monggo	46(52.9)	32(36.8)	9(10.3)	44.5
Petchay	55(63.2)	27(31)	5(5.7)	27
Sayote	46(52.9)	36(41.4)	5(5.7)	44.5
Eggplant	59(67.8)	23(26.4	5(5.7)	19.5
Snacks				
Bread	66 (75.9)	21(12.6)	1(1.1)	6.5
Chicharron	66(75.9)	20(23)	1(1.1)	6.5
Chips	74 (85.1)	13 (14.9)	-	3
Fishball	67(77)	20(23)	-	5
Fries	68(78.2)	19(21.8)	-	4

Table 5 illustrates the food consumption of the Grade 7 students in a national high school. The most consumed food was rice followed by kutsinta. Meanwhile, their least consumed food was cotton fruit. Chicken was the Grade 7 students' most consumed meat, while beef was the least consumed. Bananas were the most consumed fruit, while durian was the least consumed. Malunggay was their most consumed vegetable, while ampalaya was the least consumed. Kutsinta was the most consumed snack, while Camote cue was the least consumed. Juices were their most consumed drink, while soft drinks were the least consumed.

According to Pelegrino (2020), even with the accessibility of other staple foods, for example, noodles, bread, and rice will be top among choices. Meanwhile, Kutsinta is a traditional Filipino rice cake that is frequently served with shaved coconut. Made from sticky rice cooked in coconut milk and wrapped in palm, banana, or bamboo leaves, it is the country's most iconic local dish (Abriza., 2018). According to Hog (2023), in the Philippines and Thailand, doctors continue to warn about eating cotton fruit that swallowing the seeds whole could cause an obstruction in the intestine. This could be one of the reasons why cotton fruit is least consumed. Eating chicken can reduce the risk of injuries and diseases like osteoporosis by strengthening muscles and improving bone health (WebMD Editorial Contributors, 2020).

Banana is one of the known world foods, consumed by everyone as a need of life and recognized in the developed world as healthy and nutritious fruit; it is even taken in a lunch box by children to school (Agrofair, 2021). Moreover, some people dislike durian primarily because of its strong smell, which attracts some people, while it is disgusting for others (Le, 2021). Ampalaya is known for its distinctive bitterness reason why some do not like eating ampalaya. It is not entirely uncommon for people to reject a strong bitter taste (Merano, 2021).

According to WebMD Editorial Contributors (2020), juice spares your body from having to digest full foods' fibers and other components, allowing it to absorb nutrients more quickly. Additionally, you can get a greater variety of vitamins and minerals from juice.

Table 5
Food Consumption of the Grade 7 Respondents

Food Consumption, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	71(82.6)	15(17.4)	-	1
Meat				
Chicken	37(43)	49(57)	-	22
Fish	20(23.3)	61(70.9)	5(5.8)	50
Pork	24(27.9)	56(65.1)	6(7)	45.5
Beef	13(15.1)	57(66.3)	16(18.6)	57.5
Fruits				
Apple	28(32.6)	51(59.3)	7(8.1)	35.5
Bananas	37(43)	47(54.7)	2(2.3)	22
Lanzones	26(30.2)	53(61.6)	7(8.1)	39
Mangoes	35(40.7)	47(54.7)	4(4.7)	26.5
Orange	30(34.9)	54(62.8)	2(2.3)	32
Vegetables				
Cabbage	25(29.1)	42(48.8)	19(22.1)	42
Carrot	25(29.1)	46(53.5)	15(17.4)	42
Malunggay	37(43)	40(46.5)	9(10.5)	22
Pechay	36(41.9)	44(51.2)	6(7)	25
Eggplant	29(33.7)	47(54.7)	10(11.6)	33.5
Snacks				
Champorado	49(57)	32(37.2)	5(5.8)	8
Chicharron	50(58.1)	33(38.4)	3(3.5)	7
Fries	38(44.2)	45(52.3)	3(3.5)	9
Hotcake	29(33.7)	52(60.5)	5(5.8)	6
Kutsinta	59(68.6)	22(25.6)	5(5.8)	2

Table 6 illustrates the food consumption of the Grade 8 students in a national high school in Palo, Leyte. The most consumed, overall, was water, followed by rice. Meanwhile, the least consumed food was ampalaya. These results were consistent with their most preferred foods. Moreover, fish was the most consumed meat among the Grade 8 students, while beef was the least consumed. Bananas were the most consumed fruit, while durian was the least consumed fruit. Malunggay, which was their most preferred vegetable, was also their most consumed; in addition, sayote was also their most consumed food, while ampalaya was the least consumed. Lumpia was the most consumed snack, while siopao was the least consumed. Water was the most consumed drink, while milk tea was the least consumed.

Rice special for Filipino (Pelegrino, 2022). According to OCEANA (2022), a typical Filipino diet consists of rice, vegetables, and fish, with fish serving as the majority of Filipinos' main source of protein. Fish has long been regarded as one of the more nutrient-dense foods that may be consumed. According to Mendiola (2023), bananas were the most popular fruit showing how much Filipinos adore this important agricultural product. Bananas have long been regarded as one of the market's least expensive fruits. Bananas are taken most frequently for a variety of reasons, including their low cost on the market, their well-liked flavor, and their high fiber content (Admin, 2022). Meanwhile, Filipinos adore lumpia because it is a delectable dish that can be eaten as an appetizer, a main course, or a snack. They adore lumpia's variety and the flavors and textures it has to offer (Alcala, 2022).

Table 6

Food Consumption of the Grade 8 Respondents

Food Consumption, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	68(71.1	17(19.8)	1(1.2)	2
Meat				
Chicken	26(30.2)	59(68.6)	1(1.2)	29.5
Fish	34(39.5)	50(58.1)	2(2.3)	11
Pork	25(29.1)	58(67.4)	3(3.5)	34.5
Beef	16(18.6)	57(66.3)	13(15.1)	34.5
Fruits				
Apple	25(29.1)	58(67.4)	3(3.5)	34.5
Bananas	42(48.8)	42(48.8)	2(2.3)	4
Mangoes	30(34.9)	52(60.5)	4(4.7)	18
Orange	30(34.9)	50(58.1)	6(7)	18
Rambutan	29(33.7)	51(59.3)	6(7)	20.5
Vegetables				
Carrot	31(36))	42(48.8)	13(15.1)	16
Malunggay	40(46.5)	41(47.7)	5(5.7)	6.5
Monggo	36(41.9)	35(40.7)	15(17.4)	9.5
Petchay	40(46.5)	36(41.9)	10(11.6)	6.5
Eggplant	33(38.4)	44(51.2)	91(1.2)	12
Snacks				
Bananacue	32(37.2)	52(60.5)	2(2.3)	14.13
Bread	48(55.8)	36(41.9)	2(2.3)	3
Fishball	32(37.2)	152(60.5)	2(2.3)	14
Lumpia	41(47.7)	42(48.8)	3(3.5)	5
Pansit	36(41.9)	48(55.8)	2(2.3	9.5

Table 7 illustrates the food consumption of the Grade 9 students in a national high school of Palo. It can be observed that overall, they mostly consume water, followed by rice. Their least consumed food was durian. Moreover, chicken and fish were the most consumed meat among the Grade 9 students, which was also their most preferred, while beef and pork were the least consumed. Apple was their most consumed fruit, while durian was the least consumed fruit. Malunggay was the most consumed vegetable, while kangkong was the least consumed. Banana cue was the most consumed snack, while moron and taho were the least consumed.

Water was the most consumed drink, while milk tea was the least consumed. Water is what children and teens drink the most. According to Edeh Samuel Chukwuemeka, rice is the most consumed food in the world. Rice is also one of the highest produced crops in the world, and it is also the food that is most consumed directly.

Table 7
Food Consumption of the Grade 9 Respondents

Food Consumption, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	71(81.6)	16(18.4)	-	2
Meat				
Chicken	30(34.5)	57(65.5)	-	30.5
Fish	30(34.5)	57(60.9)	4(4.6)	30.5
Pork	23(26.4)	58(63.2)	9(10.3)	46.5
Beef	23(26.4)	50(57.5)	14(16.1)	46.5
Fruits				
Apple	38(43.7)	47(54)	2(2.3)	15
Bananas	36(41.4)	47(54)	4(4.6)	18.5
Mangoes	35(40.2)	48(55.2)	4(4.6)	22
Orange	32(36.8)	53(60.9)	2(2.3)	26.5
Rambutan	25(28.7)	60(69)	2(2.3)	41
Vegetables				
Carrot	23(26.4)	47(54)	20(23)	46.5
Squash	23(26.4)	50(57.5)	17(19.5)	46.5
Malunggay	31(35.6)	49(56.3)	7(8)	28.5
Petchay	23(26.4)	60(69)	4(4.6)	46.5
Eggplant	27(31)	56(64.4)	4(4.6)	36
Snacks				
Bananacue	60(69)	26(29.9)	1(1.1)	3
Bread	54(62.1)	30(34.5)	3(3.4)	4
Chips	47(54)	36(41.4)	4(4.6)	5
Chocolate	42(48.3)	42(48.3)	3(3.4)	10
Ice Cream	45(51.7)	40(46)	2(2.3)	6

Table 8 shows the foods consumed by the Grade 10 students in a national high school in Palo, Leyte. Overall, the most consumed food was water, followed by rice. Meanwhile, the least consumed food was guyabano.
For the meat, the most consumed food by the Grade 10 students was fish (44), which was also their most referred, while the least consumed was beef (20). For the fruits, the most consumed was bananas (39), while the least consumed was guyabano (8). For the vegetables, the most consumed was talong (26), which was also their most preferred, while the least consumed were ampalaya and kalabasa (15). For the snacks, the most consumed food was bread (42), while the least consumed were peanuts and siopao (16). For the drinks, the most consumed was water (74), while the least consumed was milk tea (14).

According to Popkin et al. (2010), life is dependent on water. Humans can only survive for a few days without water. It is a part of all living things and accounts for somewhere between 75% of an infant's body weight and 55% of an elderly person. It is therefore essential for the assurance of a suitable, steady, and affordable supply in this regard. Rice has become a major food item in the Philippines due to its significance, which is most socially, culturally, economically, and politically sensitive. Therefore, it is important that there should be an adequate, steady supply of rice at affordable prices (Villarin, 2021). According to Whitton et al. (2021), poultry was identified as a major driver for the increase in total consumption of meat, while beef and sheep meat consumption have been generally reduced. Meanwhile, plant-based natural fibers including banana, coir, sisal, jute, kenaf, and many more have been researched for industrial purposes. Banana fiber is of particular significance because it is one of the most consumed fruits in the world and is produced in 130 countries where local banana waste is available, with an annual production of 115.7 million tonnes in 2018. (Balda, 2021). Meanwhile, due to the abundance of various bioactive compounds, namely protein, vitamins, minerals, carbohydrates, phytosterols and dry matter content, eggplant has been regarded as one of

the most important vegetables for its nutritional benefits (Sharma, M., 2021). Some people do not like ampalaya because of its bitter taste.

According to Illo & Orobia (2022), because many Filipinos like to eat bread and pastries such as siopao and bread have many health benefits, combining it with a very healthy and nutritious filling. There is still a limited number of processed peanut products available on the local market, but they have great potential (Soriano, 2021). Moreover, every living thing in the earth depends on water, especially the human species. (Khalifa, 2018). And some people do not like to consume milk tea because of its price and sugar level.

Research Question 3: What factors influence the student's food preference and food consumption segmented by grade levels?

The following tables show the factors that may have had an influence with the respondents' preference, and consumption by grade level. The tables show the frequency and percentage for the factors, as well as their rankings to determine which had the most influence.

Table 8

Food Consumption of the Grade 10 Respondents

Food Consumption, n=88%				
Food	**Like Very Much**	**Neither Like nor Dislike**	**Dislike Very Much**	**Rank**
Rice	71(81.6)	16(18.4)	-	2
Meat				
Chicken	24(27.6)	60(69)	3(3.4)	27.5
Fish	44(50.6)	44(50.6)	1(1.1)	3
Pork	22(25.3)	55(63.2)	10(11.5)	38.5
Beef	20(23)	53(60.9)	14(16.1)	45.5
Fruits				
Bananas	39(44.8)	45(51.7)	3(3.4)	6
Mangoes	27(31)	57(65.5)	3(3.4)	17
Orange	26(29.9)	53(60.9)	8(9.2)	19.5
Pineapple	25(28.7)	50(57.5)	9(10.3)	23
Rambutan	28(32.2)	50(57.5)	9(10.3)	15.5
Vegetables				
Kangkong	22(25.3)	49(56.3)	16(19.4)	38.5
Malunggay	25(28.7)	51(58.6)	11(12.6)	23
Pechay	23(26.4)	52(59.8)	12(13.8)	33
Sayote	24(27.6)	53(60.9)	10(11.5)	27.5
Eggplant	26(29.9)	50(57.5)	11(12.6)	19.5
Snacks				
Bananacue	31(35.6)	52(60.5)	4(4.6)	12.5
Bread	42(48.3)	42(48.3)	3(3.4)	4
Ice Cream	31(35.6)	50(57.5)	6(6.9)	12.5
Kamotecue	33(37.9)	52(59.8)	1(1.1)	10
Suman	32(36.8)	44(50.6)	11(12.6)	12.5

Table 9

Factors that Influence the Food Preference and Food Consumption of the Grade 7 Respondents

Food Preference, n= 88(%)				Food Consumption, n=88(%)			
Factor	**Yes**	**No**	**Rank**	**Factor**	**Yes**	**No**	**Rank**
Accessibility	73(84.9)	13(15.1)	2	Accessibility	78(90.7)	8(9.3)	1
Community (Environmental)	70(81.4)	16(18.6)	3	Mood	73(84.9)	13(15.1)	3
Senses: taste, smell, sight and touch	74(86)	12(14)	1	Price	75(87.2)	11(12.8)	2

Table 9 presents the factors that influence the food preference and food consumption of the Grade 7 students in a national high school. It can be observed that students' senses were the main influence on their food preference, followed by the accessibility of the food. Meanwhile, their exposure to advertising has the least influence on their food preference. Accessibility was the most influential factor in the food consumption of Grade 7 students, this was followed by the price of the meal. The factor with the least influence on the food consumption was the meal structure.

Table 10

Factors that Influence the Food Preference and Food Consumption of the Grade 8 Respondents

Food Preference, n= 88(%)				Food Consumption, n=88(%)			
Factor	**Yes**	**No**	**Rank**	**Factor**	**Yes**	**No**	**Rank**
Availability	76(88.4)	10(11.6)	2	Availability	70(81.4)	16(18.6)	2
Family/Parents	80(93)	6(7)	1	Family/ Parents	78(90.7)	8(9.3)	1
Mood	71 (82.6)	15(17.4)	3	Appetite	68(79.1)	18(20.9)	3

Table 10 presents the factors that influence the food preference and food consumption of the Grade 8 students in a National High School. The table implies that the students' parents/family had the most influence in their food preference and food consumption. This was followed by the availability of the food. In contrast, the dietary behavior of the students had the least influence on their food preference and food consumption.

Table 11

Factors that Influence the Food Preference and Food Consumption of the Grade 9 Respondents

Food Preference, n= 88(%)				Food Consumption, n=88(%)			
Factor	**Yes**	**No**	**Rank**	**Factor**	**Yes**	**No**	**Rank**
Availability	75(86.2)	12(13.8	2	Availability	74(85.1)	13(14.9)	1
Family/Parents	76(87.4)	11(12.6)	1	Family/ Parents	73 (83.9)	14(16.1)	2
Senses: taste, smell, sight and touch	69(79.3)	18(20.7)	3	Price	72(82.8)	15(17.2)	3

Table 11 presents the factors that influence the food preference and food consumption of the Grade 9 students in a National High School. The family/parents of the students were found to be the most influential factor on their food preferences, followed by the availability of the food. Meanwhile, the community/environment had the least influence on their food preferences. The availability of the food had the most influence in the food consumption of the students, followed by their family/parents. Their community/environment also had the least influence on their food consumption.

Table 12

Factors that Influence the Food Preference and Food Consumption of the Grade 10 Respondents

Food Preference, n= 88(%)				Food Consumption, n=88(%)			
Factor	**Yes**	**No**	**Rank**	**Factor**	**Yes**	**No**	**Rank**
Availability	76(87.4)	11(12.6)	1	Availability	71(81.6)	16(18.4)	1
Accessibility	69(79.3)	18(20.7)	3.5	Family/ Parents	62(71.3)	25(28.7)	3.5
Meal Structure	72(82.8)	15(27.2)	2	Price	65(74.7)	22(25.3)	2

Table 12 presents the factors that influence the food preference and food consumption of the Grade 10 students in a National High School. The availability of the food was revealed to be the most influential factor on the food preferences of the Grade 10 students. This was followed by the meal structure. Meanwhile, the students' food preference was least influenced by the size of the meal. The availability of the food was also the most influential factors in Grade 10 students' food consumption, followed by the price. Their food consumption was influenced the least by their senses.

4. CONCLUSION

Based on the findings of this study, the following conclusions are hereby drawn:

1. Overall, the most preferred foods among 7th grade students were rice, chicken, orange, malunggay and banana cue. The most preferred foods among grade 8 students were rice, chicken, orange, malunggay and banana cue. Meanwhile, the most preferred foods of grade 9 students were rice, chicken, mangoes, pechay, chips and the foods preferred by grade 10 students were rice, fish, rambutan, eggplant and chips.
2. Overall, the most foods consumed by the 7th grade students were rice, chicken, bananas, malunggay and kutsinta. The most foods consumed by grade 8 students were rice, fish, bananas, malunggay, pechay and bread. On the other hand, the most consumed foods by grade 9 students were rice, chicken, fish, apples, malunggay and banana cue. Meanwhile, rice, fish, bananas, eggplant and bread for grade 10.
3. Senses were the main influence on the food preference of Grade 7 students, the Grade 8 and Grade 9 students' family/parents had the most influence in their food preference, and the availability of the food was the most influential factor on the food preferences of the Grade 10 students.
4. Accessibility was the most influential factor in their food consumption of the Grade 7 students, the Grade 8 students' parents/family had the most influence in their food consumption, and the availability of the food had the most influence in the food consumption of the Grade 9 and Grade 10 students.

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