



DEVELOPMENT AND ACCEPTABILITY OF CORN COB CHIPS

Jenel V. Alipio,
Marinette Gumarang, MSHM,
Michael Dave A. Javier,
Tim Kurt L. Nicolas,
Jeany C. Rosqueta,

ABSTRACT

Agriculture sector is one of the major foundations of a country that plays a vital role whether the country can thrive or not. Corn is one of the major crops emerging from the agricultural lands. This research study focused on the Development and Acceptability of Corn Cob Chips. To gather the needed data, a questionnaire was floated to 15 respondents. After the researcher retrieved the accomplished questionnaires, the data's are compiled and tallied. Weighted Mean and Frequency Count-Percentage were used to measure and analyzed the data. Findings revealed that Outlook Factors have a huge level of influence on the Level of Acceptability of the respondents towards the Corn Cob Chips and its flavors. (3.79), (3.55), (3.47), (3.29) which represents the overall mean score implies that Appearance, Flavor, Taste and Texture has a significant influence on the respondent's level of acceptability towards the corn cob chips. The researchers recommend that the results could be used as a foundation to better improve new food product innovation and implementation, and on how to make use of different sensory evaluation factors to approach their prospective markets.

Key words: *Food Innovation, Corn Cob, Chips, Sensory Evaluation, Agricultural Waste, Purchasing Decision, Consumers*

INTRODUCTION

Agriculture is one of the major foundations that makes or destroy a country, it helps and supports people when it is on peak, but it wreaks havoc of poverty and hunger when it's on rock bottom. Agricultural sector is one of the most important sectors in the country that the government must strengthen, because a strong agriculture sector builds income, livelihood and transformation. What makes a country prosper and develop is by making sure that its agricultural sectors are thriving. Nearly all countries started off poor, and only a handful has achieved high-income status. However, the ones that achieved it started with agriculture and went through an economic transformation that accelerated growth and reduced hunger and under nutrition. For example, China's rapid growth in GDP per capita in current US dollars from \$155 to \$8,123 between 1978 and 2016 was due to this kind of transformation (Justin Lin, 2018).

Just like in all the different countries present out there, Philippines which is a country that is known for its rich environmental biodiversity and agricultural resources takes pride on their agricultural



sector. The Philippines' agricultural sector, shaped by its tropical climate and varied terrain, primarily revolves around farming and fisheries. Leading the way are crop productions like sugarcane, rice, coconut, and bananas, which not only fulfill domestic demands but also stand as significant export commodities. This reflects evolving market demands and the Philippines' ability to adapt and diversify its agricultural products for international trade. With its rich natural resources and favorable climate, the Philippines continue to thrive in agricultural production, contributing significantly to its economy and global trade relation (C. Balita, 2024).

In the Philippines, the agriculture and food sector account for almost 15 to 20% of gross national income. Around 32% of the Philippines working population are employed around the agricultural sector, and food trade generates up to 10% of national exports. In the Philippines, agricultural production centers on key food crops like rice, coconut, banana, maize, and cassava. Interestingly, a significant portion (27-38%) of the food energy consumed in the country comes from crops that are not originally native to the region. These non-native plants have a diverse range that is primarily found in other parts of the world. The Philippines boasts 155,660 crop varieties in its collections of crop diversity, but this pales in comparison to the over 700,000 varieties found in international collections supported by organizations like the Crop Trust. This indicates both the rich diversity of crops cultivated in the Philippines and the broader global diversity of crops available for consumption and agricultural use (Crop Trust, 2024).

Aside from rice crops, corn is also one of the most sought staple crops in the Philippines. According to (Pambansang Museo ng Pilipinas, 2022) they stated that even though it's not native to the Philippines, corn holds significant importance as the second most essential crop in the country. The Department of Agriculture reports that approximately 14 million Filipinos rely on white corn as their primary staple food instead of rice. Meanwhile, yellow corn is mainly used as animal feed to support the livestock industry. This highlights the versatile role of corn in the Philippines, catering to both human dietary needs and animal nutrition.

The emerging world of corn products continues to provide a livelihood for the people, the agricultural land, and the food industry. Corn crop isn't just a staple that is laid down on the table to be eaten alongside with variety of dishes, corn is also a crop that has so many advantages since it is convertible into numerous and variety of product with different kinds. Corn is also processed into corn starch, corn syrups, oil, gluten, and used as main ingredients for various delicacies (Pambansang Museo ng Pilipinas, 2022). During a radio interview, Phoebe Galeon, who works at the Department of Food Science and Technology at the University of Science and Technology of Southern Philippines-Cagayan de Oro Campus, talked about the various ways to process corn and the opportunities it presents (Erika Vizcarra, 2023). Galeon shared other products that are made using corn are tortilla, dumpling and tacos, as for breakfast; corn caters to cereals, chips and coffee. Corn meal, corn starch, corn flour and corn oil are among the highly processed products derived from the crop (Erika Vizcarra, 2023). Corn is used to make sodas and juices by producing high-fructose corn syrup. Additionally, corn is utilized in various other ways such as making dextrose, maltodextrin, and in industries like textiles, paper, and pharmaceuticals (Erika Vizcarra, 2023).



Aside from the second most sought staple crop, corn also serves people a huge variety of product line extension and product listing just by being processed and innovated through the help innovative researchers and product operation developer. Just like the banana fruit that from the fruit, to the peel and to its tree, that are all usable and beneficial that is why none of its part should be thrown, Corn crop also has the same situation.

Corn crop all in all is a complete package full of benefits and advantages, from the kernel seeds that can be transformed into numerous varieties of new product entrants. Then the Corn silk which is the long shiny fibers found on top of the corn, Corn silk, a natural fiber found on corn plants, has been traditionally used in folk medicine to treat various ailments. Some studies suggest that it may have benefits such as reducing inflammation, blood sugar levels, blood pressure, and cholesterol. However, more research is required to confirm these potential effects (Ansley Hill, 2023). As for corn husk, they are often seen as a bypass product and something that should be thrown in the trash and thus it becomes a waste, but there are better way to use this waste in a more useful manner, since corn husk is convertible into nutrient rich compost. According to (Can I compost it?) though corn husks may seem harmless, disposing of them improperly can harm the environment. When they're thrown in landfills, they produce methane gas, which is a powerful greenhouse gas that worsens climate change. Composting corn husks is a responsible way to get rid of them and brings many benefits for both the environment and your garden. When you compost corn husks, they turn into valuable organic matter that enriches the soil; making it healthier and better for plants to grow (Can I compost it?).

Corn Cob, which usually treated as agricultural waste in the Philippines and Corn is a major crop in the country that generates large amounts of Agricultural residues. The cobs are usually thrown away, but now they contribute to the country's foreign exchange as an export product that has been successfully exported to various countries such as Japan and South Korea. A lot may think that Corn cobs are not essential and don't have any contribution to our country. A lot of people don't know that corn Cobs can be used as animal feeds, culinary Ingredients, substitutes for plastic materials, crafts, and substitutes for gas fuel. In terms of culinary, corn cobs can be boiled, barbecued, or roasted, spent corn cobs are bursting with flavor and good for all sorts of other dishes, including corn cob ice cream, and stock that can be used in soups.

The benefit of Corn Cob is that it consists primarily of insoluble fiber, which makes it a low-glycemic index food. This means it is a food that is digested slowly and doesn't cause an unhealthy spike in blood sugar.

Corn cobs, the fibrous inner cores of corn plants, are typically discarded as agricultural waste after the kernels are harvested. However, these cobs represent a valuable source of cellulose, a renewable and biodegradable polymer with a wide range of potential applications. One promising avenue for utilizing corn cobs is in the production of corn cob chips, a versatile material with various uses in food, packaging, and other industries.

The Philippines heavily relies on agriculture, with almost half of its 30-million-hectare land area dedicated to farming. Out of this, 13 million hectares are used for growing various crops, including rice,



corn, coconut, bananas, pineapples, and sugarcane. These crops are vital sources of biomass energy. Agricultural waste in the Philippines mainly consists of rice husk, rice straw, corn cob, corn husk, coconut husk, coconut shell, banana, pineapple, and bagasse (Asean Briefing, 2017).

Chips has a long pile of history ever since it was first introduced in the market and was accepted by the consumers, it serves as a leisure snack, a finger food, and sometimes an easy staple if people try to avoid the long messy hours of cooking. Chips went from traditional snack into a variety of modern and innovative versions of different business enterprises. Potatoes were one of the traditional roots of chips, and more often than not, new varieties of chips launched are still made out of a staple root crop which is potato. Potatoes are a nutrient rich crop but due to many chemical additives, it does not seem as healthy as it is in the form of chips.

Although not many people know of it, and most people sees corn cob as a waste that belongs to trash, we the researchers think otherwise. The main reason the research study about “Development and Acceptability of Corn Cob Chips” are conducted was because of first the “Innovation” and second “Additional Value”. Innovation because it is now the time that we start producing and innovating new products from scratch, from the traditional and well accepted potato chips to the unconventional corn cob chips. Consumers lack satisfaction and their wants are ever changing, thus they tend to try out new things to satisfy their wants for something new that they have never tried before. And as for the Additional value, it is a proud moment to exclaim that what other people see as waste, we can turn them into something peculiar and eye catching. Farmers worked so hard to put these staples in our tables, so isn't it just the right thing to add some value on it.

This study is significant and beneficial amongst different people of different levels and status. This study will be of great benefits towards the farmers as it will bring them another source of revenue and also to address some of their agricultural waste management dilemma. For consumers also, as if, this study will be implemented effectively, it can cater to their wants for a new innovative product that is not just pleasant to the taste buds but is also a healthier snack option. Since agricultural waste, when it is not managed well and the disposal isn't done properly, it can compromise health and safety of the community, so by eliminating one of the root causes of this agricultural waste through this study, then the community will also greatly benefit from it. As for entrepreneurs and food expert, this study will greatly benefit them from being able to extend another business ventures and also to enhance their knowledge about food innovations in cases of things considered as discarded waste but are still beneficial. For the teachers, HM Department, Researchers, this study will be of great help for them as it gives them more in-depth knowledge that food innovations give life to all things just by making use of your imaginations and creativity. And for the future researchers, this study will be of great help to them, as they can improve this study in a more efficient way, and can even implement this into the final stages which is recreating and producing the product itself.

This research aimed to develop and measure the respondent's acceptability of using corn cob as chips, alongside with the health benefits that it offers. The researchers also made use of this study



to challenge themselves if they can make a better and healthier chip through applying their knowledge from their chosen profession.

This study determines and investigates how the factors such as; (appearance, flavor, taste and texture) influences the level of acceptability of the respondents towards the given flavors (original, barbeque, sour and cream, cheese) of the corn cob chips. Through determining the respondent’s level of acceptability towards these variables, this greatly benefits on the future development of the product, this study is also to provide knowledge on the respondents specially the food experts, and hospitality management students, as well as the faculty members of the importance of food innovations, and to look for innovative opportunity even on little things.

METHODOLOGY

This chapter describes the Researcher's method and procedures, techniques, and sources of data that helped the researcher for further data gathering. This chapter consists of the; research design, respondents of the study, data gathering tools, data gathering procedures, product method procedures and data analysis.

Research design

Since the aim of this study is to examine, understand and investigate the influence of the outlook factors (appearance, flavor, taste and texture) on the respondent’s level of acceptability towards the corn cob chips and its flavors (original, barbeque, sour and cream, cheese), a quantitative descriptive method was used in order to further analyze and identify the patterns and connections between the sought variables listed and introduced in this research study.

Respondents of the Study

The researchers categorized the respondents into three populations, which is a. Food Expert, B. Non-Food Expert and C. Hospitality Management Students. A total of 11 participants are from the International School of Asia and the Pacific (ISAP) Hospitality College Department and a total of 4 participants are from the NGN Grand Hotel are considered to be the study’s respondents.

TABLE 01: DISTRIBUTION OF THE RESPONDENTS

Respondents	Locale	Male	Female	Total
	ISAP HM department	1		1



Food Expert	NGN Grand Hotel	1	3	4
				5
Non-Food Expert	ISAP HM department (Faculty Members)	2	3	5
Hospitality Management Students	ISAP HM department (HM Students)	4	1	5
Total				15

Data Gathering Tool

Since the study covers the Level of Acceptability of the Food and Non-Food expert respondents towards the development of corn cob chips, this study utilized the use of survey questionnaires as the primary source of data and information. The survey questionnaire consists of questions that are semi-structured which contains both open and close ended questions to cover the diversity of the research problems. The survey questionnaires were divided into three parts; the first part consists of the profile of the respondents. The second part was comprised with close ended likert scale questions to measure the level of acceptability of the respondents towards the corn cob chips. The third part contains open ended questions requesting for respondent’s opinion, suggestions and recommendations for the enhancement and improvement of corn cob chips.

Data Gathering Procedure

Before administering the survey questionnaires, the researchers obtained the respondent’s consent to engage voluntarily in this study in compliance with the Data Privacy Act of 2012 and Research Ethics. A consent letter was also provided to seek for the respondent’s permission ahead of time. This ensured that the respondents’ information was kept confidential and secure. All data acquired was strictly for the purpose of the study.

The distribution and gathering of data and information were made in-person; this is to show respect and acknowledgement towards the respondents. The goal of the in person survey distribution is to make sure that the respondents will be given clear instructions on how to properly and effectively fill out the survey questionnaires, and also to be able to address the respondent’s queries along the way.

Along the process of data gathering, the researchers made use of non-probability purposive and self-selection sampling technique in order to pick and rule out the study’s respondents. Before conducting and distributing the questionnaires to the respondents, the researcher asked for consent and permissions to collect data from them. For the more in-depth experience to answer the survey



questionnaires with a more relevant knowledge, the researchers prepared a cooked corn cob chips to be assessed and experienced by the respondents first hand. After the product tasting, the researchers gave the respondents the time to assess the corn cob chips before answering the questionnaire. Upon the successful data gathering through the survey questionnaires, the data was tabulated and interpreted by the researchers with the help of the statistician.

Data Analysis

The study used the following statistical tools needed in the analysis of the data.

Frequency count and percentage – this tool is used in categorizing the respondent’s Demographic profile; age, sex and years in the food industry.

Weighted Mean – this tool was used to determine the relationship of the outlook factors (appearance, flavor, taste and texture) and the corn cob chips flavor (original, barbeque, sour and cream, cheese) towards the level of acceptability of the respondents on the corn cob chips. The 4-Point Likert Scale Value will be assigned to score the four categories and the weighted mean will analyze the result.

The items of the questionnaire were measured by the 4-Point Likert Scales which entailed Highly Acceptable to Poorly Acceptable, an arrangement which made the analysis easier and quick. The Scale of Interpretation of the mean is demonstrated in the following illustration.

1. 0.99 – 1.00 Poorly Acceptable
2. 1.00 – 1.99 Moderate Acceptable
3. 2.00 – 2.99 Very Acceptable
4. 3.00 – 4.00 Highly Acceptable

RESULTS

TABLE 2 FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE FOOD EXPERT RESPONDENTS WHEN GROUPED ACCORDING TO AGE

Age	Frequency	Percentage
24 - 28 years old	2	40.00
29 - 33 years old	2	40.00
34 - 48 years old	1	20.00
TOTAL	5	100.00

The frequency distribution of the food expert respondents according to age is shown in the table above. The table shows that of the 5 food expert respondents, the highest frequency comes from the frequency of 2 (40.00) within the age bracket of 24 to 28 years old, and a frequency of 2 (40.00) within the age bracket of 29 to 33 years old. On the other hand the lowest frequency comes from the frequency of 1 (20.00) within the age bracket of 34 to 48 years old. The table and datas above shows that the food expert respondents belong to the category of middle adulthood. People from the adulthood prefers



purchasing products that are worth the price meaning, they would most likely purchase products in accordance to its benefits towards them, product likability/features and quality. Age has a significant influence on consumer purchase intention. Older adults tend to pay greater attention to online advertising, resulting in higher purchase intention, especially later in the day when processing resources are lowest (Roy Gobinda et al., 2020). Additionally, age is a significant factor in consumer buying behavior, with different generational cohorts having varying needs and spending patterns (Eva Nahalkova Tesarova et al., 2023). Furthermore, personal and socio-demographic characteristics, including age, lifestyle, and occupation, significantly impact consumer buying behavior (Marie Slaba, 2020). Overall, age plays a crucial role in shaping consumer purchase intention, with older adults and different generational cohorts exhibiting distinct behaviors and preferences.

These food expert respondents that belongs towards the middle adulthood category were the people who had the most knowledge and experiences amongst different varieties of new product entrants/extensions and innovations, meaning they had a classified criterion on how they would perceive the new product innovations, if it is feasible or not, to be launched in the market. Experts are usually more open to innovative food technologies, as they appreciate the many benefits of using the innovation, such as improved food quality or simplified food production processes, more than the small uncertainties related to potentially detrimental effects of the technology (Bearth & Siegrist, 2016). Such result implies that Age has a significant influence towards their perception and level of acceptability towards the creation and production of corn cob chips.

TABLE 3 FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE FOOD EXPERT RESPONDENTS WHEN GROUPED ACCORDING TO SEX

Category	Frequency	Percentage
Male	2	40.00
Female	3	60.00
TOTAL	5	100.00

The frequency distribution of the food expert respondents according to sex is shown in the table above. The table shows that of the 5 food expert respondents, the highest frequency comes from the frequency of 3 (60.00) which are from the Female Category, on the other hand the lowest frequency comes from the frequency of 2 (40.00) which are from the Male Category. The table above shows that of the five food expert respondents' majority of them are females. Male/Man and Female/Woman tends to have a different perception on how they see products and how some factors affect their perceptions and level of acceptability towards a product, and the impact on their purchasing behavior and decisions. Gender is a factor that affects buying behavior and has a certain tendency. Men tend to follow the quick and easy process of utilitarianism, making decisions based on data and facts. In contrast, women tend to be hedonistic and prefer emotionally determined hunting. Men and women will make different choices when facing the same product. These phenomena show that genders may influence consumer



behavior (Chen Ningning, 2020). Such result implies that Sex/Gender plays a vital role in the level of acceptability and purchasing decisions towards the corn cob chips.

TABLE 4 FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE FOOD EXPERT RESPONDENTS WHEN GROUPED ACCORDING TO YEARS IN THE FOOD INDUSTRY

Category	Frequency	Percentage
1 year	2	40.00
2 years	2	40.00
3 years	1	20.00
TOTAL	5	100.00

The frequency distribution of the food expert respondents according to years they've spent in the food industry is shown in the table above. The table shows that of the 5 food expert respondents, the highest frequency comes from the frequency of 2 (40.00) within the time bracket of 24 to 1 year, and a frequency of 2 (40.00) within the time bracket of 2 years. On the other hand, the lowest frequency comes from the frequency of 1 (20.00) within the time bracket of 3 years. There's a huge difference between a food expert and a normal consumer's perception towards new and innovated products, there lots of things that a food expert notices and knows about the product that normal purchasers won't take notice of. The longer a food expert is in the food industry, the higher their in-depth knowledge and experiences are towards food innovations. Amongst food innovations, food experts are one of the people on the frontlines because they study the product first hand either scientifically or in observation to look for benefits, advantages and changes that is needed to be implied on the product. Just as a chef begins with a concept for a new dish, product development starts with an idea. Chefs often draw inspiration from their culinary experiences, cultural influences, and trends. In the culinary world, chefs create recipes to bring their concepts to life. They experiment with ingredients, flavors, and cooking techniques until they achieve the desired taste and presentation. In product development, this phase is akin to prototyping. Engineers and designers work on creating prototypes to test and refine the product's functionality and aesthetics. Just like chefs, they iterate until they get it right (Susan Sipos, 2023). Such result implies that food experts, no matter how many years they have stayed in the food industry, they will always have a different approach and level of acceptability towards new product innovations like corn cob chips

TABLE 5 FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE NON-FOOD EXPERT RESPONDENTS WHEN GROUPED ACCORDING TO AGE

Age	Frequency	Percentage
-----	-----------	------------



20-26 years old	9	90.00
27-33 years old	1	10.00
TOTAL	10	100.00

The frequency distribution of the non-food expert respondents according to age is shown in the table above. The table shows that of the 10 non-food expert respondents, the highest frequency comes from the frequency of 9 (90.00) within the age bracket of 20 to 26 years old. On the other hand the lowest frequency comes from the frequency of 1 (10.00) within the age bracket of 27 to 33 years old. The study of millennials' consumer behavior found that factors such as brand image, peer influence, and promotional activity have a significant influence on their purchase intention through e-commerce platforms (Kendall Goodrich, 2013). Additionally, age is a significant factor in consumer buying behavior, with different generational cohorts having varying needs and spending patterns (Eva Nahalkova Tesarova et al., 2023). Furthermore, personal and socio-demographic characteristics, including age, lifestyle, and occupation, significantly impact consumer buying behavior (Marie Slaba, 2020). Overall, age plays a crucial role in shaping consumer purchase intention, with older adults and different generational cohorts exhibiting distinct behaviors and preferences. Such result implies that Age has a significant influence towards their perception and level of acceptability towards the creation and production of corn cob chips.

TABLE 6 FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE NON-FOOD EXPERT RESPONDENTS WHEN GROUPED ACCORDING TO SEX

Category	Frequency	Percentage
Male	6	60.00
Female	4	40.00
TOTAL	10	100.00

The frequency distribution of the non-food expert respondents according to sex is shown in the table above. The table shows that of the 10 non-food expert respondents, the highest frequency comes from the frequency of 6 (60.00) which are from the Male Category, on the other hand the lowest frequency comes from the frequency of 4 (40.00) which are from the Female Category. The table above shows that of the ten non-food expert respondents' majority of them are males. Male/Man and Female/Woman tends to have a different perception on how they see products and how some factors affect their perceptions and level of acceptability towards a product, and the impact on their purchasing behavior and decisions. Gender is a factor that affects buying behavior and has a certain tendency. Men tend to follow the quick and easy process of utilitarianism, making decisions based on data and facts. In contrast, women tend to be hedonistic and prefer emotionally determined hunting. Men and women will make different choices when facing the same product. These phenomena show that genders may influence consumer behavior (Chen Ningning, 2020). Such result implies that Sex/Gender plays a vital role in the level of acceptability and purchasing decisions towards the corn cob chips.

TABLE 7 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO ORIGINAL FLAVOR IN TERMS OF APPEARANCE



STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The color of the chips is pleasant, and it matches the expected color for corn cob chips.	3.73	HIGHLY ACCEPTABLE
2. The shape and size of the corn cob chips affect their perceived health and desirability to consumers.	3.73	HIGHLY ACCEPTABLE
3. The packaging is appropriate to the product	3.93	HIGHLY ACCEPTABLE
4. The Packaging is sturdy and cannot easily be destroyed	3.87	HIGHLY ACCEPTABLE
OVERALL MEAN	3.82	HIGHLY ACCEPTABLE

The table above shows that (3.73) mean score of respondents are Highly Acceptable to the fact that the color of the chips influences their perception towards the original flavor of the corn cob chips, while on the same page (3.73) mean score of the respondents also are Highly acceptable with the fact that the shape and size of the corn cob chips highly influence their acceptability and desirability towards the product. A total of (3.93) mean score of the respondents answered that they find the packaging of the product as Highly Acceptable and is a vital part that influences them to purchase the product. The (3.87) mean score of the respondents answered that they find it Highly Acceptable when the product packaging is sturdy and is not easily broken. The overall mean score (3.82) of the majority of the respondents finds the Appearance of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. A product's appearance can have aesthetic and symbolic value for consumers, can communicate functional characteristics and give a quality impression (functional value), and can communicate ease of use (ergonomic value). In addition, it can draw attention and can influence the ease of categorization of the product (Marielle Creusen, 2004). Such result implies that Appearance has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Original Flavor.

Table 8 Item Mean and Descriptive Scale of the Study of the Level of Acceptability of the Respondents towards Corn Cob Chips Relative to Original Flavor in terms of Flavor

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips captured the essence of the corn flavour	3.33	HIGHLY ACCEPTABLE
2. The flavor of the corn cob chips is consistent throughout the content of the package.	3.53	HIGHLY ACCEPTABLE
3. The corn cob chips are tasty and flavorful	3.40	HIGHLY ACCEPTABLE
4. The Original flavor of Corn Cob Chips is more dominant than the flavor of the corn itself	3.20	HIGHLY ACCEPTABLE
OVERALL MEAN	3.37	HIGHLY ACCEPTABLE

The table above shows that (3.33) mean score of respondents are Highly Acceptable to the fact that the final physical product of corn cob ships has effectively captured the essence of the corn crop's natural flavor, while on the same page (3.53) mean score of the respondents also are Highly Acceptable with the fact that the final corn cob chip product possessed a consistent flavor all throughout the whole package which highly influenced their acceptability and desirability towards the product. A total of (3.40)



mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip tasted good and flavorful, and this trait is a vital part that influences them to purchase the product. The (3.20) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip flavor was more dominant than corn itself, which made it possible to correlate it to even wider variety of flavors in the future. The overall mean score (3.37) of the majority of the respondents finds the Flavor of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. In the F&B industry, flavor is the key to creating a competitive advantage. According to Rodriguez and Brito (2011), customers prefer to focus on the food tasting experience over any other marketing communication activities. The majority of consumers admit the importance of flavor when they choose what to eat (Wansink, 2003). Furthermore, Soars (2009) demonstrated that establishing unique and attention catching food flavors has a significant effect in constructing consumers' loyalty. Such result implies that Flavor has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Original Flavor.

Table 9 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO ORIGINAL FLAVOR IN TERMS OF TASTE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are tastier compared to the traditional potato or corn-based chips in terms of flavor	3.27	HIGHLY ACCEPTABLE
2. The corn cob chips give a different level of taste in terms of their flavor compared to the other existing chip products.	3.20	HIGHLY ACCEPTABLE
3. There is a desirable taste in your mouth.	3.47	HIGHLY ACCEPTABLE
4. The taste of the corn cob chips has evolved from the first bite to subsequent ones.	3.07	HIGHLY ACCEPTABLE
OVERALL MEAN	3.25	HIGHLY ACCEPTABLE

The table above shows that (3.27) mean score of respondents are Highly Acceptable to the fact that corn cob chips are tastier compared to the traditional potato or corn based chips, while on the same page (3.20) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a different and unique level of taste in terms of the flavor compared to other chips in the market. A total of (3.47) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip gives them a desirable taste of saltiness, earthiness and tanginess in their mouths and this trait is a vital part that influences them to purchase the product. The (3.07) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip tasted even better the longer they consume it. The overall mean score (3.25) of the majority of the respondents finds the Taste of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. As much as 85% of household shopping is derived from repeat purchases. Thus, if your product tastes great, the chances are consumers who loved it the first time



around will purchase it again and again (Wirral Sensory Services). Likewise, the result showed that taste has a positive impact on consumer buying behavior. It indicates that better taste stimulates consumer buying behavior (Anjala Dhakal, 2023). Such result implies that Taste has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Original Flavor.

Table 10 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO ORIGINAL FLAVOR IN TERMS OF TEXTURE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are crunchy and crispy.	2.93	VERY ACCEPTABLE
2. The corn cob chips have a smooth texture.	3.40	HIGHLY ACCEPTABLE
3. The corn cob chips are thicker than the other existing chip products.	3.33	HIGHLY ACCEPTABLE
4. The texture of corn cob chips meets my expectations in one chip.	3.13	HIGHLY ACCEPTABLE
OVERALL MEAN	3.20	HIGHLY ACCEPTABLE

The table above shows that (2.93) mean score of respondents are Very Acceptable to the fact that corn cob chips felt crunchy and crispy upon tasting the product, while on the same page (3.40) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a smooth texture that is soothing and comfortable to eat. A total of (3.33) mean score of the respondents answered that they find it Highly Acceptable and wonderful how the corn cob chips were of thicker texture that makes it exciting to eat, and this trait is a vital part that influences them to purchase the product. The (3.13) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip's texture meet their expectations on the product. The overall mean score (3.20) of the majority of the respondents finds the Texture of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. Food texture has a substantial influence on consumers' perception of 'quality' and during chewing, information on changes in the texture of a food is transmitted to the brain from sensors in the mouth, from the sense of hearing and from memory, to build up an image of the textural properties of the food (J. Chen, 2015). Such result implies that Texture has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Original Flavor.

Table 11 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO BARBEQUE FLAVOR IN TERMS OF APPEARANCE



STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The color of the chips is pleasant, and it matches the expected color for corn cob chips.	3.80	HIGHLY ACCEPTABLE
2. The shape and size of the corn cob chips affect their perceived health and desirability to consumers.	3.80	HIGHLY ACCEPTABLE
3. The packaging is appropriate to the product	3.87	HIGHLY ACCEPTABLE
4. The Packaging is sturdy and cannot easily be destroyed	3.87	HIGHLY ACCEPTABLE
OVERALL MEAN	3.83	HIGHLY ACCEPTABLE

The table above shows that (3.80) mean score of respondents are Highly Acceptable to the fact that the color of the chips influences their perception towards the barbeque flavor of the corn cob chips, while on the same page (3.80) mean score of the respondents also are Highly acceptable with the fact that the shape and size of the corn cob chips highly influence their acceptability and desirability towards the product. A total of (3.87) mean score of the respondents answered that they find the packaging of the product as Highly Acceptable and is a vital part that influences them to purchase the product. The (3.87) mean score of the respondents answered that they find it Highly Acceptable when the product packaging is sturdy and is not easily broken. The overall mean score (3.83) of the majority of the respondents finds the Appearance of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. A product's appearance can have aesthetic and symbolic value for consumers, can communicate functional characteristics and give a quality impression (functional value), and can communicate ease of use (ergonomic value). In addition, it can draw attention and can influence the ease of categorization of the product (Marielle Creusen, 2004). Such result implies that Appearance has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Barbeque Flavor.

Table 12 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO BARBEQUE FLAVOR IN TERMS OF FLAVOR

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips captured the essence of the corn flavour	3.73	HIGHLY ACCEPTABLE
2. The flavor of the corn cob chips is consistent throughout the content of the package.	3.67	HIGHLY ACCEPTABLE
3. The corn cob chips are tasty and flavorful	3.80	HIGHLY ACCEPTABLE
4. The Original flavor of Corn Cob Chips is more dominant than the flavor of the corn itself	3.80	HIGHLY ACCEPTABLE
OVERALL MEAN	3.75	HIGHLY ACCEPTABLE

The table above shows that (3.73) mean score of respondents are Highly Acceptable to the fact that the final physical product of corn cob ships has effectively captured the essence of the corn crop's natural flavor, while on the same page (3.67) mean score of the respondents also are Highly Acceptable with the fact that the final corn cob chip product possessed a consistent flavor all throughout the whole



package which highly influenced their acceptability and desirability towards the product. A total of (3.80) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip tasted good and flavorful, and this trait is a vital part that influences them to purchase the product. The (3.80) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip flavor was more dominant than corn itself, which made it possible to correlate it to even wider variety of flavors in the future. The overall mean score (3.75) of the majority of the respondents finds the Flavor of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. In the F&B industry, flavor is the key to creating a competitive advantage. According to Rodriguez and Brito (2011), customers prefer to focus on the food tasting experience over any other marketing communication activities. The majority of consumers admit the importance of flavor when they choose what to eat (Wansink, 2003). Furthermore, Soars (2009) demonstrated that establishing unique and attention catching food flavors has a significant effect in constructing consumers' loyalty. Such result implies that Flavor has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Barbeque Flavor.

Table 13 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO BARBEQUE FLAVOR IN TERMS OF TASTE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are tastier compared to the traditional potato or corn-based chips in terms of flavour	3.53	HIGHLY ACCEPTABLE
2. The corn cob chips give a different level of taste in terms of their flavor compared to the other existing chip products.	3.73	HIGHLY ACCEPTABLE
3. There is a desirable taste in your mouth.	3.73	HIGHLY ACCEPTABLE
4. The taste of the corn cob chips has evolved from the first bite to subsequent ones.	3.60	HIGHLY ACCEPTABLE
OVERALL MEAN	3.65	HIGHLY ACCEPTABLE

The table above shows that (3.53) mean score of respondents are Highly Acceptable to the fact that corn cob chips are tastier compared to the traditional potato or corn-based chips, while on the same page (3.73) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a different and unique level of taste in terms of the flavor compared to other chips in the market. A total of (3.73) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip gives them a desirable taste of saltiness, earthiness and tanginess in their mouths and this trait is a vital part that influences them to purchase the product. The (3.60) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip tasted even better the longer they consume it. The overall mean score (3.65) of the majority of the respondents finds the Taste of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. As much as 85% of household shopping is derived from repeat purchases. Thus, if your product tastes great, the chances are consumers who loved it the first time around will purchase it again and again (Wirral Sensory Services). Likewise, the result showed that



taste has a positive impact on consumer buying behavior. It indicates that better taste stimulates consumer buying behavior (Anjala Dhakal, 2023). Such result implies that Taste has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Barbeque Flavor.

Table 14 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO BARBEQUE FLAVOR IN TERMS OF TEXTURE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are crunchy and crispy.	3.40	HIGHLY ACCEPTABLE
2. The corn cob chips have a smooth texture.	3.20	ACCEPTABLE
3. The corn cob chips are thicker than the other existing chip products.	3.47	HIGHLY ACCEPTABLE
4. The texture of corn cob chips meets my expectations in one chip.	3.67	HIGHLY ACCEPTABLE
OVERALL MEAN	3.43	HIGHLY ACCEPTABLE

The table above shows that (3.40) mean score of respondents are Very Acceptable to the fact that corn cob chips felt crunchy and crispy upon tasting the product, while on the same page (3.20) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a smooth texture that is soothing and comfortable to eat. A total of (3.47) mean score of the respondents answered that they find it Highly Acceptable and wonderful how the corn cob chips were of thicker texture that makes it exciting to eat, and this trait is a vital part that influences them to purchase the product. The (3.67) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip's textures meet their expectations on the product. The overall mean score (3.43) of the majority of the respondents finds the Texture of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. Food texture has a substantial influence on consumers' perception of 'quality' and during chewing, information on changes in the texture of a food is transmitted to the brain from sensors in the mouth, from the sense of hearing and from memory, to build up an image of the textural properties of the food (J. Chen, 2015). Such result implies that Texture has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Barbeque Flavor

Table 15 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO SOUR AND CREAM FLAVOR IN TERMS OF APPEARANCE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
------------	-----------	-------------------



1. The color of the chips is pleasant, and it matches the expected color for corn cob chips.	3.73	HIGHLY ACCEPTABLE
2. The shape and size of the corn cob chips affect their perceived health and desirability to consumers.	3.67	HIGHLY ACCEPTABLE
3. The packaging is appropriate to the product	3.93	HIGHLY ACCEPTABLE
4. The Packaging is sturdy and cannot easily be destroyed	3.80	HIGHLY ACCEPTABLE
OVERALL MEAN	3.78	HIGHLY ACCEPTABLE

The table above shows that (3.73) mean score of respondents are Highly Acceptable to the fact that the color of the chips influences their perception towards the barbeque flavor of the corn cob chips, while on the same page (3.67) mean score of the respondents also are Highly acceptable with the fact that the shape and size of the corn cob chips highly influence their acceptability and desirability towards the product. A total of (3.93) mean score of the respondents answered that they find the packaging of the product as Highly Acceptable and is a vital part that influences them to purchase the product. The (3.80) mean score of the respondents answered that they find it Highly Acceptable when the product packaging is sturdy and is not easily broken. The overall mean score (3.78) of the majority of the respondents finds the Appearance of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. A product's appearance can have aesthetic and symbolic value for consumers, can communicate functional characteristics and give a quality impression (functional value), and can communicate ease of use (ergonomic value). In addition, it can draw attention and can influence the ease of categorization of the product (Marielle Creusen, 2004). Such result implies that Appearance has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Sour and Cream Flavor

Table 16 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO SOUR AND CREAM FLAVOR IN TERMS OF FLAVOR

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips captured the essence of the corn flavour	3.60	HIGHLY ACCEPTABLE
2. The flavor of the corn cob chips is consistent throughout the content of the package.	3.67	HIGHLY ACCEPTABLE
3. The corn cob chips are tasty and flavorful	3.73	HIGHLY ACCEPTABLE
4. The Original flavor of Corn Cob Chips is more dominant than the flavor of the corn itself	3.40	HIGHLY ACCEPTABLE
OVERALL MEAN	3.60	HIGHLY ACCEPTABLE

The table above shows that (3.60) mean score of respondents are Highly Acceptable to the fact that the final physical product of corn cob ships has effectively captured the essence of the corn crop's natural flavor, while on the same page (3.67) mean score of the respondents also are Highly Acceptable with the fact that the final corn cob chip product possessed a consistent flavor all throughout the whole package which highly influenced their acceptability and desirability towards the product. A total of (3.73)



mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip tasted good and flavorful, and this trait is a vital part that influences them to purchase the product. The (3.40) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip flavor was more dominant than corn itself, which made it possible to correlate it to even wider variety of flavors in the future. The overall mean score (3.60) of the majority of the respondents finds the Flavor of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. In the F&B industry, flavor is the key to creating a competitive advantage. According to Rodriguez and Brito (2011), customers prefer to focus on the food tasting experience over any other marketing communication activities. The majority of consumers admit the importance of flavor when they choose what to eat (Wansink, 2003). Furthermore, Soars (2009) demonstrated that establishing unique and attention catching food flavors has a significant effect in constructing consumers' loyalty. Such result implies that Flavor has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Sour and Cream Flavor.

Table 17 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO SOUR AND CREAM FLAVOR IN TERMS OF TASTE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are tastier compared to the traditional potato or corn-based chips in terms of flavour	3.53	HIGHLY ACCEPTABLE
2. The corn cob chips give a different level of taste in terms of their flavor compared to the other existing chip products.	3.40	HIGHLY ACCEPTABLE
3. There is a desirable taste in your mouth.	3.53	HIGHLY ACCEPTABLE
4. The taste of the corn cob chips has evolved from the first bite to subsequent ones.	3.53	HIGHLY ACCEPTABLE
OVERALL MEAN	3.50	HIGHLY ACCEPTABLE

The table above shows that (3.53) mean score of respondents are Highly Acceptable to the fact that corn cob chips are tastier compared to the traditional potato or corn-based chips, while on the same page (3.40) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips have a different and unique level of taste in terms of the flavor compared to other chips in the market. A total of (3.53) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip gives them a desirable taste of saltiness, earthiness and tanginess in their mouths and this trait is a vital part that influences them to purchase the product. The (3.53) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip tasted even better the longer, they consume it. The overall mean score (3.50) of the majority of the respondents finds the Taste of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. As much as 85% of household shopping is derived from repeat



purchases. Thus, if your product tastes great, the chances are consumers who loved it the first time around will purchase it again and again (Wirral Sensory Services). Likewise, the result showed that taste has a positive impact on consumer buying behavior. It indicates that better taste stimulates consumer buying behavior (Anjala Dhakal, 2023). Such result implies that Taste has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Sour and Cream Flavor.

Table 18 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO SOUR AND CREAM FLAVOR IN TERMS OF TEXTURE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are crunchy and crispy.	3.47	HIGHLY ACCEPTABLE
2. The corn cob chips have a smooth texture.	3.20	HIGHLY ACCEPTABLE
3. The corn cob chips are thicker than the other existing chip products.	3.20	HIGHLY ACCEPTABLE
4. The texture of corn cob chips meets my expectations in one chip.	3.53	HIGHLY ACCEPTABLE
OVERALL MEAN	3.35	HIGHLY ACCEPTABLE

The table above shows that (3.47) mean score of respondents are Very Acceptable to the fact that corn cob chips felt crunchy and crispy upon tasting the product, while on the same page (3.20) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a smooth texture that is soothing and comfortable to eat. A total of (3.20) mean score of the respondents answered that they find it Highly Acceptable and wonderful how the corn cob chips were of thicker texture that makes it exciting to eat and this trait is a vital part that influences them to purchase the product. The (3.53) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip's textures meet their expectations on the product. The overall mean score (3.35) of the majority of the respondents finds the Texture of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. Food texture has a substantial influence on consumers' perception of 'quality' and during chewing, information on changes in the texture of a food is transmitted to the brain from sensors in the mouth, from the sense of hearing and from memory, to build up an image of the textural properties of the food (J. Chen, 2015). Such result implies that Texture has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Sour and Cream Flavor.

Table 19 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO CHEESE FLAVOR IN TERMS OF APPEARANCE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The color of the chips is pleasant, and it matches the expected color for corn cob chips.	3.73	HIGHLY ACCEPTABLE



2. The shape and size of the corn cob chips affect their perceived health and desirability to consumers.	3.67	HIGHLY ACCEPTABLE
3. The packaging is appropriate to the product	3.80	HIGHLY ACCEPTABLE
4. The Packaging is sturdy and cannot easily be destroyed	3.73	HIGHLY ACCEPTABLE
OVERALL MEAN	3.73	HIGHLY ACCEPTABLE

The table above shows that (3.73) mean score of respondents are Highly Acceptable to the fact that the color of the chips influences their perception towards the barbeque flavor of the corn cob chips, while on the same page (3.67) mean score of the respondents also are Highly acceptable with the fact that the shape and size of the corn cob chips highly influence their acceptability and desirability towards the product. A total of (3.80) mean score of the respondents answered that they find the packaging of the product as Highly Acceptable and is a vital part that influences them to purchase the product. The (3.73) mean score of the respondents answered that they find it Highly Acceptable when the product packaging is sturdy and is not easily broken. The overall mean score (3.73) of the majority of the respondents finds the Appearance of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. A product's appearance can have aesthetic and symbolic value for consumers, can communicate functional characteristics and give a quality impression (functional value), and can communicate ease of use (ergonomic value). In addition, it can draw attention and can influence the ease of categorization of the product (Marielle Creusen, 2004). Such result implies that Appearance has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Cheese Flavor. **Table 20 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO CHEESE FLAVOR IN TERMS OF FLAVOR**

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips captured the essence of the corn flavour	3.40	HIGHLY ACCEPTABLE
2. The flavor of the corn cob chips is consistent throughout the content of the package.	3.47	HIGHLY ACCEPTABLE
3. The corn cob chips are tasty and flavorful	3.53	HIGHLY ACCEPTABLE
4. The Original flavor of Corn Cob Chips is more dominant than the flavor of the corn itself	3.53	HIGHLY ACCEPTABLE
OVERALL MEAN	3.48	HIGHLY ACCEPTABLE

The table above shows that (3.40) mean score of respondents are Highly Acceptable to the fact that the final physical product of corn cob ships has effectively captured the essence of the corn crop's natural flavor, while on the same page (3.47) mean score of the respondents also are Highly Acceptable with the fact that the final corn cob chip product possessed a consistent flavor all throughout the whole package which highly influenced their acceptability and desirability towards the product. A total of (3.53) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip tasted good and flavorful, and this trait is a vital part that influences them to purchase the



product. The (3.53) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip flavor was more dominant than corn itself, which made it possible to correlate it to even wider variety of flavors in the future. The overall mean score (3.48) of the majority of the respondents finds the Flavor of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. In the F&B industry, flavor is the key to creating a competitive advantage. According to Rodriguez and Brito (2011), customers prefer to focus on the food tasting experience over any other marketing communication activities. The majority of consumers admit the importance of flavor when they choose what to eat (Wansink, 2003). Furthermore, Soars (2009) demonstrated that establishing unique and attention catching food flavors has a significant effect in constructing consumers' loyalty. Such result implies that Flavor has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Cheese Flavor.

Table 21 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO CHEESE FLAVOR IN TERMS OF TASTE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are tastier compared to the traditional potato or corn-based chips in terms of flavour	3.47	HIGHLY ACCEPTABLE
2.The corn cob chips give a different level of taste in terms of their flavor compared to the other existing chip products.	3.53	HIGHLY ACCEPTABLE
3. There is a desirable taste in your mouth.	3.53	HIGHLY ACCEPTABLE
4. The taste of the corn cob chips has evolved from the first bite to subsequent ones.	3.40	HIGHLY ACCEPTABLE
OVERALL MEAN	3.48	HIGHLY ACCEPTABLE

The table above shows that (3.47) mean score of respondents are Highly Acceptable to the fact that corn cob chips are tastier compared to the traditional potato or corn based chips, while on the same page (3.53) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a different and unique level of taste in terms of the flavor compared to other chips in the market. A total of (3.53) mean score of the respondents answered that they find it Highly Acceptable and wonderful that the corn cob chip gives them a desirable taste of saltiness, earthiness and tanginess in their mouths and this trait is a vital part that influences them to purchase the product. The (3.40) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip tasted even better the longer they consume it. The overall mean score (3.48) of the majority of the respondents finds the Taste of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. As much as 85% of household shopping is derived from repeat purchases. Thus, if your product tastes great, the chances are consumers who loved it the first time around will purchase it again and again (Wirral Sensory Services). Likewise, the result showed that



taste has a positive impact on consumer buying behavior. It indicates that better taste stimulates consumer buying behavior (Anjala Dhakal, 2023). Such result implies that Taste has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Cheese Flavor

Table 22 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO CHEESE FLAVOR IN TERMS OF TEXTURE

STATEMENTS	ITEM MEAN	DESCRIPTIVE SCALE
1. The corn cob chips are crunchy and crispy.	3.27	HIGHLY ACCEPTABLE
2. The corn cob chips have a smooth texture.	3.13	ACCEPTABLE
3. The corn cob chips are thicker than the other existing chip products.	3.13	ACCEPTABLE
4. The texture of corn cob chips meets my expectations in one chip.	3.27	HIGHLY ACCEPTABLE
OVERALL MEAN	3.20	HIGHLY ACCEPTABLE

The table above shows that (3.27) mean score of respondents are Highly Acceptable to the fact that corn cob chips felt crunchy and crispy upon tasting the product, while on the same page (3.13) mean score of the respondents also are Highly acceptable with the fact that the corn cob chips has a smooth texture that is soothing and comfortable to eat. A total of (3.13) mean score of the respondents answered that they find it Highly Acceptable and wonderful how the corn cob chips were of thicker texture that makes it exciting to eat, and this trait is a vital part that influences them to purchase the product. The (3.27) mean score of the respondents answered that they find it Highly Acceptable when the corn cob chip's textures meet their expectations on the product. The overall mean score (3.20) of the majority of the respondents finds the Texture of the product as Highly Acceptable and plays a vital part in influencing them into buying the product. Food texture has a substantial influence on consumers' perception of 'quality' and during chewing, information on changes in the texture of a food is transmitted to the brain from sensors in the mouth, from the sense of hearing and from memory, to build up an image of the textural properties of the food (J. Chen, 2015). Such result implies that Texture has a significant influence on the respondent's level of acceptability towards Corn Cob Chips Cheese Flavor.

Table 23 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO APPEARANCE

FLAVORS	ITEM MEAN	DESCRIPTIVE SCALE
Original Flavor	3.82	Highly Acceptable
Barbeque Flavor	3.83	Highly Acceptable
Sour and Cream Flavor	3.78	Highly Acceptable



Cheese Flavor	3.73	Highly Acceptable
OVERALL MEAN	3.79	Highly Acceptable

The table above shows that (3.82) mean score of respondents are Highly Acceptable to the corn cob chip original flavour in terms of its appeal that catches their attention and the beauty of the overall appearance of the final physical product; while on the same page (3.83) mean score of the respondents also are Highly acceptable towards the corn cob chip barbeque flavour in terms of the appropriateness of the product packaging. A total of (3.78) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip sour and cream flavor in terms of that the packaging of the corn cob chip product looked sturdy and not easily destroyed. The (3.73) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip cheese flavour in terms of the pleasant color of the chip alongside with the desirable shape and size of the chip that affects their purchasing decision about the product. The overall mean score (3.79) of the majority of the respondents finds the Appearance of the product as Highly Acceptable and plays a vital part in influencing them into buying the product.

Table 24 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO FLAVOR

FLAVORS	ITEM MEAN	DESCRIPTIVE SCALE
Original Flavor	3.37	Highly Acceptable
Barbeque Flavor	3.75	Highly Acceptable
Sour and Cream Flavor	3.60	Highly Acceptable
Cheese Flavor	3.48	Highly Acceptable
OVERALL MEAN	3.55	Highly Acceptable

The table above shows that (3.37) mean score of respondents are Highly Acceptable to the corn cob chip original flavour because it captures the essence of the corn flavor; while on the same page (3.75) mean score of the respondents also are Highly acceptable towards the corn cob chip barbeque flavour because the corn cob chip has a consistent flavour all throughout the whole content of the product. A total of (3.60) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip sour and cream flavor because they find it tasty and flavorful until the very last bite. The (3.48) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip cheese flavour because they find it that the overall corn cob chip product has a well-blended taste and is appealing to taste buds. The overall mean score (3.55) of the majority of the respondents finds the Flavor of the product as Highly Acceptable and plays a vital part in influencing them into buying the product.

Table 25 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO TASTE

FLAVORS	ITEM MEAN	DESCRIPTIVE SCALE
---------	-----------	-------------------



Original Flavor	3.25	Highly Acceptable
Barbeque Flavor	3.65	Highly Acceptable
Sour and Cream Flavor	3.50	Highly Acceptable
Cheese Flavor	3.48	Highly Acceptable
OVERALL MEAN	3.47	Highly Acceptable

The table above shows that (3.25) mean score of respondents are Highly Acceptable to the corn cob chip original flavour because it is tastier compared to the traditional chips sold in the market; while on the same page (3.65) mean score of the respondents also are Highly acceptable towards the corn cob chip barbeque flavour because the richness of the taste of the corn cob chip has a different level of catchiness than the other chips. A total of (3.50) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip sour and cream flavor because the taste brings them desirable flavors booming inside their mouths. The (3.48) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip cheese flavour because the corn cob chips tasted better and good, plus it tasted wonderfully every after each bite. The overall mean score (3.47) of the majority of the respondents finds the Taste of the product as Highly Acceptable and plays a vital part in influencing them into buying the product.

Table 26 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO TEXTURE

FLAVORS	ITEM MEAN	DESCRIPTIVE SCALE
Original Flavor	3.20	Highly Acceptable
Barbeque Flavor	3.43	Highly Acceptable
Sour and Cream Flavor	3.35	Highly Acceptable
Cheese Flavor	3.20	Highly Acceptable
OVERALL MEAN	3.29	Highly Acceptable

The table above shows that (3.20) mean score of respondents are Highly Acceptable to the corn cob chip original flavour because the corn cob chips felt crispy and crunchy; while on the same page (3.43) mean score of the respondents also are Highly acceptable towards the corn cob chip barbeque flavour because the corn cob chips possesses a smooth texture. A total of (3.35) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip sour and cream flavor because the corn cob chips are way more thicker yet crunchy and smooth at the same time than the other existing chips in the market. The (3.20) mean score of the respondents answered that they find it Highly Acceptable towards the corn cob chip cheese flavour because the corn cob chips was able to meet their expectations for chip products. The overall mean score (3.29) of the majority of the respondents finds the Texture of the product as Highly Acceptable and plays a vital part in influencing them into buying the product.



Table 27 ITEM MEAN AND DESCRIPTIVE SCALE OF THE STUDY OF THE LEVEL OF ACCEPTABILITY OF THE RESPONDENTS TOWARDS CORN COB CHIPS RELATIVE TO THE OUTLOOK FACTORS

FLAVORS	ITEM MEAN				Significant Influence On Level of Acceptability	DESCRIPTIVE SCALE
	A	F	TA	TXT		
Original Flavor	3.82	3.37	3.25	3.20	SIGNIFICANT	HIGHLY ACCEPTABLE
Barbeque Flavor	3.83	3.75	3.65	3.43	SIGNIFICANT	HIGHLY ACCEPTABLE
Sour and Cream Flavor	3.78	3.60	3.50	3.35	SIGNIFICANT	HIGHLY ACCEPTABLE
Cheese Flavor	3.73	3.48	3.48	3.20	SIGNIFICANT	HIGHLY ACCEPTABLE
Total Mean	<u>3.79</u>	<u>3.55</u>	<u>3.47</u>	<u>3.29</u>	SIGNIFICANT	HIGHLY ACCEPTABLE
Overall Mean	= <u>3.52</u>				<u>SIGNIFICANT</u>	<u>HIGHLY ACCEPTABLE</u>

Legend; A – Appearance, F – Flavor, Ta – Taste, Txt – Texture

The table above shows the total mean score of (3.79) which refers that Appearance has a significant influence on the level of acceptability of the respondents towards the Corn cob chips and its flavors (Original, Barbeque, Sour and Cream, Cheese). Product appearance has been considered a significant factor of influence in the consumer behaviour (Sridhar, N., 2018). The perceived product appearance has a significant impact on the customer's purchase decision. Customers pay attention to the way a product is presented, including factors such as lighting techniques and background settings, which influence their attitude towards the offer and the likelihood of making a purchase (Scispace). Overall, the perceived product appearance, whether in terms of photography or physical design, has a significant impact on the customer's purchase decision (Scispace).

On the other hand, the total mean score of (3.55) refers that Flavor has a significant influence on the level of acceptability of the respondents towards the Corn cob chips and its flavors (Original, Barbeque, Sour and Cream, Cheese). Flavors can bring consistent management of the taste attributes that consumers are looking for each time they place your product into their cart (Brenda Dehart, 2023).

A total mean score of (3.47) also refers that Taste has a significant influence on the level of acceptability of the respondents towards the Corn cob chips and its flavors (Original, Barbeque, Sour and Cream, Cheese). The taste of a food product has a significant influence on consumer preferences and purchasing decisions. Overall, consumers are willing to compromise on taste to obtain potential health benefits from functional snacks, and information provided before consumption can influence taste evaluation and willingness to pay (Scispace).



And a total mean score of (3.29) refers that Texture has a significant influence on the level of acceptability of the respondents towards the Corn cob chips and its flavors (Original, Barbeque, Sour and Cream, Cheese). Texture is important in a product as it affects the enjoyment and acceptability of food, and plays a key role in consumer acceptance and market value (Scispace, 2023).

The overall mean score of (3.52) indicates that the Outlook Factors (Appearance, Flavor, Taste and Texture) has a significant influence on the Level of Acceptability of the Respondents towards the Corn cob chip product and its flavors, and it is Highly Acceptable. In physical retailing stores, interiors like lighting, color, music, scent, and exteriors such as storefront window design, landscaping in the vicinity of the store, and wall-mounted flags elicit consumers' emotional responses. Retailers use these cues to tweak the shopping surroundings to stimulate emotions of consumers to increase the likelihood of making purchases. These cues were termed as atmospherics by Kotler. These cues or atmospherics stimulate the consumers' senses, and marketers use these cues as sensory triggers to connect with customers for providing them with unique experiences. Thus, when retailers interact with consumers through their five senses, sight, sound, smell, touch, and taste, it is specified as sensory marketing. Previous studies posited that multisensory marketing techniques could also alter consumer attitudes, intentions, and consumption behaviors. Studies suggest that through senses, consumers also learn about and develop an understanding of companies, goods, and brands.

Thematic Analysis

FORMULATED MEANING	CLUSTER THEME	EMERGENT THEME
ORIGINAL		DEVELOPMENT AND ACCEPTABILITY OF CORN COB CHIPS
• Make alternative way to reduce oiliness.	APPEARANCE	
• Be moderate when it comes putting salt.	FLAVOR	
• Add more taste on original flavor.		
• There's a little bit different on the after taste.	TASTE	
• Improve the consistency of cuts.		
• Delicious but not crunchy.	TEXTURE	
BARBEQUE		
• Make alternative way to reduce oiliness.	APPEARANCE	
• Add more taste on original flavor.	FLAVOR	
• There's a little bit different on the after taste.	TASTE	
• Improve the consistency of cuts.		
• Delicious but not crunchy.	TEXTURE	
SOUR AND CREAM		
• Make alternative way to reduce oiliness.	APPEARANCE	
• Add more taste on original flavor.	FLAVOR	
• There's a little bit different on the after taste.	TASTE	
• Improve the consistency of cuts.		
• Delicious but not crunchy.	TEXTURE	
CHEESE		
• Make alternative way to reduce oiliness.	APPEARANCE	
• Add more taste on original flavor.	FLAVOR	
• There's a little bit different on the after taste.	TASTE	
• Improve the consistency of cuts.		
• Delicious but not crunchy.	TEXTURE	

Table 28 **DEVELOPMENT AND ACCEPTABILITY OF CORN COB CHIPS**

Based on the assessment of the respondents to the Corn Cob Chips their Suggestion are the Following:

<ul style="list-style-type: none"> • For the original flavor, don't coat it with butter, it should be original/classic. But the taste, it's delicious.
<ul style="list-style-type: none"> • It is delicious but it is not that crunchy.



<ul style="list-style-type: none"> It's very oily, maybe after you finish frying the chips, place a tissue and place it there so that the tissue can absorb the excess oil. But all in all, it's very delicious.
<ul style="list-style-type: none"> The Corn cob chips are quite oily, make sure to find an alternative way to reduce the oiliness, but overall it is highly recommended.
<ul style="list-style-type: none"> Taste a little bit different on the aftertaste.
<ul style="list-style-type: none"> Add more taste on the original flavor.
<ul style="list-style-type: none"> Improve the consistency of the cuts.
<ul style="list-style-type: none"> No need to enhance about the corn cob chips it's delicious and crispy.

REFERENCES

(n.d.). Retrieved from Can I compost it? (Can I put corn husk in my compost bin?): <https://canicompostit.com/corn-husk/>

(n.d.). Retrieved from Scispace (How does the taste of a food product influence consumer preferences and purchasing decisions?) : <https://typeset.io/questions/how-does-the-taste-of-a-food-product-influence-consumer-1aots3qqx6>

(n.d.). Retrieved from Scispace (How does the perceived product appearance affect the customer's purchase decision?): <https://typeset.io/questions/how-does-the-perceived-product-appearance-affect-the-4izmumyqsl>

(n.d.). Retrieved from Wirral Sensory Services (Why Taste is so vital for food products): <https://wssintl.com/taste-testing-vital-food-products/#:~:text=Great%20Taste%20Drives%20Customer%20Loyalty,purchase%20it%20again%20and%20again.>

(2017 , May 19). Retrieved from Asean Briefing (Biomass Industry in the Philippines) : <https://www.aseanbriefing.com/news/biomass-industry-philippines/#:~:text=The%20majority%20of%20agricultural%20waste,banana%20C%20pineapple%20and%20general%20bagasse.>

(2022, September 02). Retrieved from Pambansang Museo ng Pilipinas (Rice and Corn Week: Filipino Corn Snacks): <https://www.nationalmuseum.gov.ph/2022/09/02/rice-and-corn-week-filipino-corn-snacks/#:~:text=Although%20it%20is%20not%20endemic,is%20used%20to%20feed%20livestock>

ResearchGate (The Impact of Senses on Purchasing Decisions: Research on F&B Products at Service Points) . (2022, April). *Journal of Trade Science* , 9(4) , 60-72.

(2023, July 17). Retrieved from Healthline (What Is Corn Silk, and Does It Have Benefits?): <https://www.healthline.com/nutrition/corn-silk>



(2023, September 25). Retrieved from SSRN (Factors Influencing Consumer Buying Behavior of Beer in Kathmandu Valley) Anjala Dhakal/Pokhara University. : https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4560741

(2024). Retrieved from Crop Trust (Crop Countries and Genebanks (Philippines): <https://www.croptrust.org/pgafa-hub/crops-countries-and-genebanks/countries/philippines/#:~:text=Agricultural%20production%20focuses%20on%20the,found%20elsewhere%20on%20the%20planet.>

Balita, C. (2024, March 26). Retrieved from Statista (Agriculture in the Philippines - statistics & facts): <https://www.statista.com/topics/5744/agriculture-industry-in-the-philippines/#topicOverview>

Bearth, A. &. (2016). Are risk or benefit perceptions more important for public acceptance of innovative food technologies: A meta-analysis. *Trends in Food Science & Technology*, 49, 14-23.

Belk, R. W. (1975). Situational Variables and Consumer Behavior. *Journal of Consumer Research*, 2(3), pages 154 - 164.

Brenda, D. (2023, March 3). Retrieved from LinkedIn (How flavors can provide value to developers and consumers). : <https://www.linkedin.com/pulse/how-flavors-can-provide-value-developers-consumers-brenda-dehart/>

Chen, N. (2020, May). Retrieved from wkuwire.org (Impact of gender on consumer buying behavior): https://wkuwire.org/bitstream/20.500.12540/437/1/wku_etd001_cbpm01_000409.pdf

Donovan, R. R. (1982). Store Atmosphere: An Environmental Psychology Approach. *Journal of Retailing*, 58(1), pages 34 -57.

E., L. (2022). "Multimodal sensory marketing" in retailing: the role of intra- and intermodality transductions. *Consum Mark Cult [Internet]*. 25(3), 252–71.

Eva, N. T. (2023). The use regression and correlation analysis in generational stratification and consumer behaviour. .

Gobinda, R. R. (2020). Antecedents of Online Purchase Intention Among Ageing Consumers. *Global Business Review*.

Hultén B, B. N. (2009). What is sensory marketing? *Sens Mark [Internet]*. 1–23.

institute), G. P. (2018, February 8). Retrieved from IFPRI Blog (Agriculture is key for economic transformation, food security, and nutrition): <https://www.ifpri.org/blog/agriculture-key-economic-transformation-food-security-and-nutrition>

J. Chen, A. R. (2015). Retrieved from Science Direct (Food Texture and Structure): <https://www.sciencedirect.com/topics/food-science/food->



Vizcarra, E. (2023, April 19). Retrieved from Department of Agriculture (Agricultural Training Institute) (FOOD Technology Expert Highlights Commercial Potential of Corn: <https://ati2.da.gov.ph/ati-main/content/article/erika-z-vizcarra/food-technology-expert-highlights-commercial-potential-corn>

Fontanilla, R. C., & Guzman, C. R. (2023). The Quality of Online Learning Delivery and The Learning Management System of The Medical Colleges of Northern Philippines (MCNP) And International School of Asia and The Pacific (ISAP): A Correlational Study, The Seybold Report ISSN 1533-921, Vol. 18, 06.

TEJADA, M. A. M., & QUEROL, J. V. P. EXTENDING THE CAPACITY OF AN RFID TECHNOLOGY AND REAL TIME CLOCK IN CONTROLLING THE POWER DISTRIBUTION OF MCNP-ISAP.

Fontanilla, R., Fontanilla Jr, R., Galadi, D., & Nano, A. (2023). A Comparative Evaluation of the Technical Education System of the Philippines and England: An Integrative Literature Review. Herculean Journal, 1(1).

Ahhuy, A. A. L., Lapuz, L. W. M. G., Callores, L. R. F. G., TEJADA, M. A. M., & FONTANILLA, C. R. C. Responding to The Clients 'plea: The Research and Development Center's (RDC's) Satisfaction and Loyalty Survey. Research in Management and Social Sciences, ISSN, 2278-6236.