CUSTOMERS PREFERENCE, BUYING BEHAVIOR OF MUSHROOM

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Abstract

The study explores customer preference and buying behavior concerning mushrooms, aiming to provide insights into consumer choices and market dynamics. Mushrooms have gained significant popularity due to their nutritional value, versatility, and unique flavours, leading to increased consumer interest and a growing market. Understanding the factors influencing customer preference and buying behavior is crucial for market players, including producers, retailers, and marketers, to effectively cater to consumer needs and drive sales. Data was collected from 160 respondents in the Gwalior region through an online questionnaire using random sampling. The findings reveal several key factors that influence customer preference for mushrooms. Nutritional value, taste, and culinary versatility emerge as primary drivers of consumer choice. Health-conscious individuals are particularly drawn to mushrooms due to their low calorie and fat content, as well as their rich nutrient profile. Moreover, the umami taste and ability to complement a variety of dishes make mushrooms attractive to a wide range of consumers, including vegetarians and flexitarians. The collected data was analysed using the Cronbach's Alpha Reliability Test that was applied to check the reliability for A Study of Customers Preference Buying Behavior of Mushroom, Factor Analysis was applied to identify the underlying factors of A Study of Customers Preference Buying Behavior of Mushroom questionnaires. Through these analyses, the study aimed to gain insights into the factors influencing customer preference and buying behavior towards mushroom.

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CHAPTER -I

1.   **INTRODUCTION**

1.1 Conceptual Framework
Mushroom belongs to fungus consisting of fresh fleshy spore bearing fruit type of body.
Mushroom can be grown on soil, on ground and also on its source of food.
The standard name for the mushroom is the cultivated white button mushroom (Agaricus Bisporus). We can say terminologically a mushroom is which often said to be fungi with a stem, a cap, and gills underside side of the cap. Above mentioned gills produce spores and which are able to spread the fungus and helps in occupying the surface.
Mushrooms are essentials in the diet of the people consuming across the world. Mushrooms consists of proteins, glucans, fibre, vitamins, and minerals. Mushroom also consists of high nutritional value. Consumption of mushrooms has a positive effect on health because they offer properties of anti-inflammatory as well as it detoxifies the compounds which causes cancer. Mushrooms helps in strengthening the immunity system and lowers the risk of obesity, cancer, and cardiovascular disease. Mushrooms are the healthy food consumed by each and every people across the world irrespective of their ages i.e. (children, young and also old people.)
From the past times mushrooms are considered as a healthy food and also as a remedy for the diseases. Mushroom consumption now a days is been popular as well. And also, there is a huge demand for the products made by the mushroom. Mainly the health benefits of mushroom, and the vegetarianism, contributed a lot in the increase in consumption of mushroom. With all the above-mentioned details we got to know consumption of mushroom is expanding rapidly on global scale in recent times.

Scientific Name: - AGARICUS BISPORUS
Kingdom: - Fungi
Phyllum: - Basidiomycota

consumption of mushroom has been increased vastly in the countries like USA, INDIA, and other European countries.
Mushroom requires high humidity and moisture conditions to grow.

Types of Mushrooms
Mushrooms are of mainly five types they are: -
1) BUTTON MUSHROOM: - Button mushroom is also called as white mushroom. They are easily found in super markets.

Button mushroom requires lowest temperature to grow (18-25 degree centigrade) The shelf life of this mushroom is about 2days.

It requires 60% of moisture content to grow. Life cycle of Button mushroom: - It has two stages of life cycle
a)   Mycelium stage (10-25 degrees)
b)   Fruiting stage (18 degrees)

2) MILKY MUSHROOM: - Milky mushroom requires (25-35 degrees centigrade) to grow Shelf life of this mushroom is 5 days. Hence it can be easily transported to various parts of the world.
Milky mushroom requires 75% of moisture content to grow.
3)   GANODERMA MUSHROOM: - It mainly grows at the base of the trees and trunks and it is a poisonous mushroom because it blocks the xylem of the plant.
Ganoderma mushroom is mainly used in the preparation of the medicine
4)   CORDYCEPS MUSHROOM: - It is the second most expensive mushroom. It requires around
5)   23-degree centigrade temperature. It requires 75% of moisture content to grow. This mushroom is the source of antioxidants. Used as both vegetable and medicine. In long term illness it strengthens the body after exhaustion.
6) OYSTER MUSHROOM: - It is the very good source of protein (20-30%). This mushroom is easily digestible and reduces inflammation in the body and also it supports the immune system.

It requires 20–28-degree centigrade temperature. It requires 80% of moisture content.
Shelf life is about 10-15 hours Not only these five types but many more types of mushrooms are there but apart these five types are the main and important to the people in day-to-day life.

Customer Preference: - Customer preference refers to the individual taste, needs, and desires that a customer has for a product or service. It is what motivates a customer to choose one product or service over another. Understanding customer preferences is crucial for businesses as it helps them to design products and services that meet the needs and wants of their target audience. This can lead to increased customer satisfaction, loyalty, and ultimately, profits. To understand customer preferences, companies can use a variety of methods such as market research, customer surveys, and focus groups.

Buying Behavior: - Buying behaviour refers to the actions and decisions that a consumer makes when purchasing a product or service. It encompasses the entire process, from identifying a need or want, to making a purchase, to post-purchase evaluation. The study of buying behaviour helps companies to understand why and how consumers make purchasing decisions and what factors influence those decisions.

There are several factors that influence buying behaviour, including personal, psychological, and social factors. Personal factors include income, age, education, and family size. Psychological factors include motivation, perception, beliefs, and attitudes. Social factors include family, friends, reference groups, and culture.

The buying process typically includes the following stages:

Problem recognition: The consumer recognizes a need or want for a product or service.

Information search: The consumer seeks information about potential products or services to satisfy the need or want.

Evaluation of alternatives: The consumer compares the available products or services to determine the best option.

Purchase decision: The consumer decides to make a purchase.

Post-purchase evaluation: The consumer evaluates the satisfaction with the purchased product or service. Understanding buying behaviour is important for businesses because it allows them to design their marketing strategies, products, and services to meet the needs and wants of their target customers.

Rationale of The Study

Rationale of the study explains the reason why the study was conducted or why the study should be conducted.

As an Agriculture graduate my passion towards agriculture made me to conduct a study on Customers Preference Buying Behavior and Consumption Pattern of Mushroom.

According to the Background information of this study it stated that in between 1990'searly2000 period people were unaware about mushrooms. people are also unaware of knowledge and information related to the cultivation of mushroom. This background study also stated that the awareness has been created with the training sessions of mushroom cultivation. so here the main motive of mine which made me to make a study on this is to create awareness and get the result of people's thoughts on this study which relates Customers Preference Buying Behavior and Consumption Pattern of Mushroom.

With this study we can know the consumers preference towards mushroom and also their behavior when buying which include the cost of the mushrooms compared to vegetables.

And finally, we will be able to know the consumption pattern of the mushroom by the people.

With this study we can bring the awareness as well as we can know the behavior, preferences and consumption pattern of mushroom and its products.

1.1 Objectives of the Study

This study was conducted with following objectives: -

a) To study the customer's preference towards mushroom based on demographic variables
b) To study the buying behavior for mushroom based on demographic variables
c) To identify the different attributes of mushroom that has impact on buying of mushroom
d) To explore the relation between customer's preference, buying behavior

1.2 Hypothesis of The Study

The Hypothesis of a study on consumer behavior and buying preferences of mushrooms could be that the majority of consumers prefer to purchase mushrooms that are organic, locally grown, and have a good taste and texture. The study may also test the hypothesis that consumers are willing to pay a premium for mushrooms with specific certifications or labels such as "organic" or "non-GMO". Additionally, the study could explore the hypothesis that the demographic factors such as age, income, and education level play a role in determining the consumers' buying preferences of mushrooms. In summary, the study's hypothesis could focus on identifying the factors that influence the consumers' purchasing decisions when it comes to buying mushrooms.

$H_0 1$: - There is no impact of customer's preference towards mushroom based on demographic variables
$H_0 2$: - There is no impact of buying behavior for mushroom based on gender variables
$H_0 3$: - There is no impact on different attributes of mushroom on its buying
$H_0 4$: - There is no relation between customer's preference and buying behavior

Review of Literature

Review of literature helps in understanding and conducting the current research by providing information of previous sources and researchers on a specific topic

Review of literature gives the idea to persuade the research with the help of related theories, methods and techniques in the previous studies. Review of literature helps in work efficiency and also helps effectively in interpreting research values. It also helps in understanding the concept.

The theme of this research is to study about ''Customers Preference Buying Behaviour of Mushroom''.

This chapter is written mainly to explain about various customers preferences towards mushroom, their buying behavior as well as their consumption pattern.

Satya Prakash (2011) conducted his research on consumer behaviour for mushroom. In his research he stated that the mushroom prices must be down a little for the common man to purchase. And also, the package must be tiny so that the purchase need is matched. He also stated that many more type of mushrooms must be able to be available for the people to consume it.

Mahantesh Shirur (2014) conducted his research on mushroom consumption and buying behaviour in India. He in his research stated that most of the respondents from the study were unaware about the mushrooms, their nutritional values, and also its medicinal usage. He also stated that the cost of the purchasing value is very high compared to the vegetables. He also stated that mushrooms are not available in each and every part of the region belonging to India.

Singh (1977) revealed that the large number of people still had not want to gain knowledge of cultivation of mushroom while some part time growers of the area of Udaipur, Jaipur and Kota had the knowledge of cultivation of mushroom. They usually trade with local traders, restaurants and private buyers.

Subharban et al (1991) found that the growers who gained knowledge and training in mushroom cultivation, about half the growers applied the techniques in cultivation.

Vekaria et al (1993) revealed that 18.63 per cent of the respondents possessed the high

knowledge of modern agricultural techniques while nearly half of (49%) the respondents had the medium knowledge and (18.63%) respondents had the low knowledge of cultivation of mushroom

Chadha (1994) found that many small and marginal growers had lack of knowledge and training in mushroom cultivation. Thus, they produce unhygienic mushrooms which results in development of pests and diseases and reduced production.

Deshmukh et al. (1998) found in his research that 56 per cent growers had sufficient knowledge related to mushroom cultivation whereas, 44 per cent growers had insufficient knowledge regarding mushroom. The knowledgeable growers were also known about the location and identification of edible and non-edible mushroom.

Ahmad and Philip (1999) reported that the people who took training in various fields viz mushroom cultivation, freshwater pisciculture, kitchen gardening, and layer farming, about 50% of the trainees acquired the medium skill level of medium level of knowledge in training centres.Sagar (2002) reported that most of the farmers gained the medium level of knowledge about mushroom farming followed by those farmers who gained high level of knowledge (15.86%) and low level of knowledge (13.14%).

Július Árvay (2023) Edible mushrooms represent a food with high nutritional properties, and their consumption has a positive effect on the health of consumers. The aim of the paper is to identify the behavior and preferences of consumers in the consumption of edible mushrooms in Slovakia. The aim of the paper was achieved by conducting a consumer survey using the snowball sampling method on a sample of 1166 respondents in the Slovak Republic, of which 1032 respondents were consumers of edible mushrooms. Using statistical methods (the Chi-square test of independence, Kruskal–Wallis H test, and Friedman test, as well as categorical principal component analysis), differences in consumer behavior were examined in three identified segments created based on the amount of consumption of edible mushrooms. The results of the consumer study showed the existence of statistically significant differences between the defined segments in terms of frequency of consumption, evaluation of the preference of edible mushrooms in various meals,evaluation of important reasons for consumption, and determination of preference for individual species of mushrooms, as well as determination of preference for the place of consumption and the option of obtaining mushrooms for consumption. Moreover, four latent components determining the purchase of mushrooms applicable in all segments were defined. Supporting the consumption of edible mushrooms among Slovak consumers is possible by increasing consumer awareness through recommendations and published articles. The research paper provides a new insight into the behavior and preferences of consumers in mushroom consumption, divided into three segments, which can fill the scientific research gap. The results provide valuable information for scientific purposes, as well as for food companies and policy makers.

Karin Scholtmeijer (2023) There is a need for new protein sources to feed the world in a sustainable way. Converting non-food-grade "woody" side streams into food containing proteins will contribute to this mission. Mushroom forming fungi are unique in their capability to convert lignocellulosic substances into edible biomass

containing protein. Especially if substrate mycelium can be used instead of mushrooms, this technology could be a serious contribution to addressing the protein challenge. In this Perspective, we discuss challenges toward production, purification, and market introduction of mushroom mycelium based foods.

Michael A Kertesz (2023) The cultivated edible mushrooms Agaricus bisporus and Pleurotus ostreatus are valuable food crops and an important source of human nutrition. Agaricus bisporus is the dominant cultivated species in the western hemisphere and in Australia, while in Asian Countries P. ostreatus is more prevalent. These two mushroom species are grown on fermented-pasteurized substrates, and bacteria and fungi play an important role in converting feedstock into a selective medium for the mushroom mycelium. The mushrooms are usually introduced to the substrate as grain spawn, and the actively growing hyphae form a range of direct interactions with the diverse bacterial community in the substrate. Of these interactions, the most well studied is the removal of inhibitory volatile C8 compounds and ethylene by pseudomonads, which promotes mycelium growth and stimulates primordia formation of both A. bisporus and P. ostreatus. Bacterial biomass in the substrate is a significant nutrition source for the A. bisporus mycelium, both directly through bacteriolytic enzymes produced by A. bisporus, and indirectly through the action of extracellular bacterial enzymes, but this is less well studied for P. ostreatus. Apart from their role as a food source for the growing mycelium, bacteria also form extensive interactions with the mycelium of A. bisporus and P. ostreatus, by means other than those of the removal of inhibitory compounds. Although several of these interactions have been observed to promote mycelial growth, the proposed mechanisms of growth promotion by specific bacterial strains remain largely uncertain, and at times conflicting. Bacterial interactions also elicit varying growth-inhibitory responses from A. bisporus and P. ostreatus. This review explores characterized interactions involving bacteria and A. bisporus, and to a lesser degree P. ostreatus, and whilst doing so identifies existing research gaps and emphasizes directions for future work.

Ashish Chhetri (2022) Mushrooms are edible fungus body which are not only delicious to consume but are proteinaceous as well. Mushroom provides important nutrients; different mushroom has varying composition and nutritional profile. People are slowly getting aware of its taste and value and have gradually started to increase their consumption. The demand of mushroom is seen high in market but the supply seems to be poor in the state of Sikkim. The study is conducted in all four district of Sikkim i.e., South, East, West and North Sikkim, where we have identified retailer and customer of respective areas and conducted our research. This study attempts to understand and analyse the market of mushroom in Sikkim and put forward the holistic approach on how to set business plan as a start up in Sikkim. Since this sector of business is still left untapped in Sikkim, it provides a blooming area for successful business start-up in the state.

Manglesh Kumar (2022) The oyster mushroom is a popular mushroom due to its tremendous stability of cap and stem, cooking qualities and longer shelf life. Among the consumers, where Pleurotus sop mushrooms is very trendy, but currently this mushroom is not cultivated in large scale. Due to its gradual depletion of nutrients due to their subsequent utilization of mushroom mycelium. Hence good growth and better yield of mushroom can be achieved when different substrates are supplemented. The basic plant substrates that can be used for oyster mushroom cultivation are saw dust, wheat straw, rice husk, Mango, Jackfruit, Coconut, hulls, straw, stalk, paper corn cobs, waste cotton, leaves and pseudo stem of banana, water hyacinth, duck weed, rice straw etc. This substrate does not require costly processing method and enrichment material which helps in supporting the growth. Among the different substrates used the study has revealed that faster mycelial growth is consistent with better yield and highest biological efficiency.

Miriam Mabel Selani (2022) This study investigated consumers' perception of labels of burgers with sodium reduction and/or addition of mushroom flavor enhancer. Six visual stimuli were created using a factorial design with sodium content (regular, sodium-reduced, and sodium-reduced plus health claim) and flavor enhancer (monosodium glutamate (MSG) and mushroom extract) as factors. Consumers answered an attitudinal questionnaire and evaluated the stimuli through expected liking and check-all-that-apply (CATA) questions. Three consumers' clusters were identified, which associated positive attributes to labels of burgers with mushroom flavor enhancer and negative attributes to labels of MSG-burgers, regardless of sodium content. The main positive drivers of liking were "I would buy", "attractive", "innovative", "tasty", and "contain fewer additives", which were associated with burgers with mushroom flavor enhancer, while "contain additives", "processed", "artificial", "unhealthy", and "not attractive" were the negative drivers of liking that should be modified in a reformulation to increase liking. This study provides valuable information for the development of healthier burgers and their positioning in the market. **Ch. Anusha (2022)** The present study was conducted with the main objective to determine the sensory and consumer acceptance of two value added products i.e., cake and toffee developed by incorporating the mushroom (Pleurotus Hypsizygus ulmarius) powder. Mushroom powder was incorporated in cake formulation by replacing refined wheat flour at various proportions (0-30%) i.e., 10, 15, 20, 25 and 30% on dry weight basis. While, toffee formulations were prepared by replacing papaya pulp at various proportions (0-15%) i.e., 3, 5, 10 and 15% on dry weight. Organoleptic evaluation was conducted to evaluate the sensory profile of the formulated products. Best accepted formulation from two products were subjected to consumer acceptability by untrained panelists (n=80). Sensory scores revealed that cake formulated by incorporating 20%

mushroom powder and toffee formulated by incorporating 10% mushroom powder scored high for sensorial characteristics and were acceptable by all the consumers during consumer acceptability study. Nutritionally, mushroom incorporated food products can highly contribute to tackle protein malnutrition and other micronutrient deficiencies, as well as acting as a novel food fortification strategy.

Tanay Dineshkumar Shah (2021) Mushrooms have high nutritional value. They are a rich source of protein and fiber and have very low calories and low cholesterol. Days are not far when mushrooms will be a regular alternative to vegetables for many vegetarians. India is having a favourable environmental condition to grow mushrooms. Hence various varieties of mushrooms are grown in different regions of India. However, the per capita consumption of mushroom in India is very less as compared to other countries though mushroom has many health benefits as compared to other regular diets a normal Indian consumes. Gujarat is one of the states of India where the consumption of mushrooms is less. The paper concentrates on finding out the probable reasons for the people of Gujarat who are not consuming mushrooms regularly in their diets. The survey was conducted targeting the majority of youngsters *i.e.,* Generation Z as the eating habits of present youngsters will define the mushroom market in the future. However, to know the perspective of millennials as well as baby boomers, people from those age groups were also included in the survey. There were 213 responses on the questionnaire which contained 14 questions. The survey results show that 16% of the people consider mushrooms as non-vegetarian, about 14% of the people were not cleared whether they have consumed mushrooms in their lifetime. Among those who are regular mushroom eaters, 50% preferred eating button mushrooms and almost 32% of the people preferred Oyster mushrooms. Through the results, it can be concluded that people have a misconception regarding mushrooms as almost 16% considered mushrooms as non-vegetarian. The result will enable many young mushroom entrepreneurs to develop the relevant marketing strategy by understanding the consumer perception regarding mushroom consumption in their regular diet.

Laila Naher (2021) Mushrooms are popular due to the nutrition contents in the fruit bodies and are relatively easy to cultivate. Mushrooms from the white-rot fungi group can be cultivated on agricultural biomass such as sawdust, paddy straw, wheat straw, oil palm frond, oil palm empty fruit bunches, oil palm bark, corn silage, corn cobs, banana leaves, coconut husk, pineapple peel, pineapple leaves, cotton stalk, sugarcane bagasse and various other agricultural biomass. Mushrooms are exceptional decomposers that play important roles in the food web to balance the ecosystems. They can uptake various minerals, including essential and non-essential minerals provided by the substrates. However, the agricultural biomass used for mushroom cultivation is sometimes polluted by heavy metals because of the increased anthropogenic activities occurring in line with urbanisation. Due to their role in mycoremediation, the mushrooms also absorb pollutants from the substrates into their fruit bodies. This article reviews the sources of agricultural biomass for mushroom cultivation that could track how the environmental heavy metals are accumulated and translocated into mushroom fruit bodies. This review also discusses the possible health risks from prolonged uptakes of heavy metal-contaminated mushrooms to highlight the importance of early contaminants' detection for food security.

Qian Wang (2021) In recent years, the rise in meat consumption has been criticized for health, environmental, and ethical reasons. This trend has fostered the shift from a meat-centric diet to a plant-forward diet. A prime example of this is the introduction of "blended meat products" that mix plant-based ingredients into meat-based foods. This study designed and implemented a survey in a U.S. college campus residential dining hall (n = 296) to investigate the impact of key demographic, motivational and attitudinal factors on the purchase intention of a meat-mushroom blended burger in which mushrooms partially replaced beef. The results show that young consumers with a positive perception of a sustainable diet, with a positive attitude toward food innovation, and with a positive motivation to process sustainability and nutrition information were more likely to purchase the meat-mushroom blended burger. The results have implications for marketers, policymakers, as well as for retailers. These findings can help them better understand young consumers' behavior and identify strategies to encourage young adults to shift from a meat-centric diet to a plant-forwarded diet.

Pramod K. Nanda (2021) Consumers are increasingly interested in nutritious, safe and healthy muscle food products with reduced salt and fat that benefit their well-being. Hence, food processors are constantly in search of natural bioactive ingredients that offer health benefits beyond their nutritive values without affecting the quality of the products. Mushrooms are considered as next-generation healthy food components. Owing to their low content of fat, high-quality proteins, dietary fibre and the presence of nutraceuticals, they are ideally preferred in formulation of low-caloric functional foods. There is a growing trend to fortify muscle food with edible mushrooms to harness their goodness in terms of nutritive, bioactive and therapeutic values. The incorporation of mushrooms in muscle foods assumes significance, as it is favourably accepted by consumers because of its fibrous structure that mimics the texture with meat analogues offering unique taste and umami flavour. This review outlines the current knowledge in the literature about the nutritional richness, functional bioactive compounds and medicinal values of mushrooms offering various health benefits. Furthermore, the effects of functional ingredients of mushrooms in improving the quality and sensory attributes of nutritionally superior and next-generation healthier muscle food products are also highlighted in this paper.

Neema Kassim (2021) Complementary foods based on habitual cereals such as maize have been linked with the promotion of undernutrition in young children. Blending the starchy-rich maize with nutritious-rich indigenous food such as oyster mushroom could improve the nutritional composition of complementary foods. This study investigated the effectiveness and suitability of oyster mushrooms in improving the nutritional value of maize flour commonly used as a bulk ingredient in complementary foods. Flour made of well-cleaned and sun-dried oyster mushroom was blended with maize flour at 0% (control), 30%, 40%, and 50%. Proximate composition, mineral density, and sensory evaluation were determined using standard procedures. Significant improvement in the nutritional quality of formulated flour blends with all proportions of mushroom flour was obtained. Blending maize flour with 30%, 40%, or 50% oyster mushroom flour improved the protein content of formulated flour blends from 8.63% to 18.20%, 8.63% to 20.37% and 8.63% to 22.75%, respectively. The increase in ash and fiber content ranged between 82.52% to 84.16% and 50.69% to 58.35%, respectively. Mineral content of formulated flour blends was improved from 62.89% to 64.72% (iron), 7.63% to 22.69% (zinc), 77.48% to 78.02% (calcium), and 67.55% to 67.64% (potassium). Sensory scores of porridges prepared from formulated flour blends showed good acceptance for the colour, flavour, and aroma of the porridges from three formulated flour blends. Overall, this study recommends blending oyster mushroom with maize flour to improve the nutritional content of formulated flour blend for young children who rely on maize porridge as their complementary food.

Josefina Ballesteros (2021) This study determined consumers' awareness and interest towards mushroom and mushroom-based product ideas. A survey of 222 adults was conducted in rice-based farming communities in selected provinces, namely, Aurora, Bulacan, Nueva Ecija, and Pampanga. Results showed that taste, nutritional, and health benefits were the top attributes considered by both sexes whenever they buy food for household consumption. Most of the respondents (99%) liked eating mushroom because of its palatability (71%) and perceived healthiness (26%). However, the majority (76%) consumed mushroom only once a month or seldom in a year due to its limited availability. Food supplements, coffee-like beverages, and snacks (bread, chips, cookies) were the most interesting mushroom-based product ideas. These findings suggest product development opportunities and strategies to increase utilization and encourage mushroom cultivation in Central Luzon.

Xiaofen Du (2021) Mushroom possesses a distinctive sensory quality and unique nutrients. Its pairing with egg white and consumer acceptance has never been investigated. In this study, formulated mushroom–egg white patty prototypes (white and crimini mushrooms at 0%, 10%, 20%, and 30%, either oven roasted or steamed) were evaluated by 380 participants for acceptance and intensity of nine sensory attributes. Mushroom–egg white patty prototypes received positive hedonic scores for overall acceptance and the likeability of overall flavor, mushroom flavor, meaty flavor, egg white flavor, overall texture, and firmness. Consumer overall acceptance was most strongly and positively correlated with overall flavor liking, followed by overall appearance and overall texture likeability. Additionally, the likeability of flavor pairing between mushroom and egg white was rated positively across all 16 patties, indicating a good flavor match of mushroom and egg white. Consumer hedonic levels toward mushroom patties were significantly ($p \le .05$) impacted by cooking method, mushroom type, and mushroom level. The addition of mushroom was acceptable up to 20%, with steam method and crimini mushroom most preferred. The results provided new insights into consumer attitudes and potentially important sensory factors affecting the acceptability of mushroom–egg white patties, consequently increasing the utilization and consumption of mushrooms and mushroom-blended products.

Sonja Pecić (2020) Since ancient times, mushrooms have been used as a remedy for long life and health promotion in Asian countries. Several studies have been conducted in order to investigate the possibility of using different forms of mushrooms in food and pharmaceutical production, especially as pharmaceuticals and/or nutraceuticals. Because of their huge potential, an increasing number of these products have been included in the assortment of small craft shops, as well as large multinational companies worldwide. The most notable medicinal fungus used in food and pharmaceutical production is Ganoderma lucidum. As a consequence of greater production and consumption of natural products worldwide, the market for mushroom-based products has been growing as well during recent years and is now expanding throughout many countries. As the application of mushroom in food and pharmaceutical industry is increasing, it is necessary to investigate the determinants of consumption of mushroom-based products in order to stimulate greater adoption of such products at the global level. Consumers' adoption is significantly affected by their attitudes towards consumption of mushroom-based products. Attitudes are formed under the influence of certain internal (such as sociodemographic, psychographic, and behavioral profiles of consumers) and external factors (such as market availability, prices, products' origin, and availability of product information). By identification of the most important drivers of consumption, the predictability of behavior of consumers in different markets can be increased, which raises the potential for greater market expansion of mushroom-based products.

Jhunilata Bhuyan (2020) Mushrooms have been consumed many years ago and it is reflected in history. It was not only taken up as the food rather it was utilized as healthy and medicated food by the people from time immemorial. Romans perceived it as "food for god", from centuries Chinese considered mushroom as "health food" and "elixir of life". Mushrooms have been played as an important part of human civilization due to its

attractive culinary properties, medicinal and nutritional values. Now a day educated and young mass are come forward for taking mushroom cultivation as a source of their sustainable income generating activities.

Anno Steven (2020) This research examined the factors that influence consumption of cultivated edible mushrooms in Ilala Municipal. The main objective of this study was to examine factors influencing consumption of cultivated edible mushrooms, with three specific objectives: to determine whether psychological factors, personal factors and social and cultural factors influence consumption of cultivated edible mushrooms. Conceptual frame work, of this study was the construct of the independent variables composed of factors influencing consumption of cultivated edible mushrooms in the categories of Psychological factors, Personal Factors and Social cultural factors, and the second part of the construct was made up of the consumption of mushrooms. The study used a cross-sectional exploratory research design followed with the descriptive analysis to examine factors that influence consumption of mushrooms on the participants of the study who happened to be involved in the study at one point in time. The sample size was 157 participants obtained through convenience sampling techniques where else, method for data collections was questionnaires. The findings indicated that the following factors influenced consumption of cultivated edible mushrooms particularly in Ilala Municipal: perceived nutritional value, perceived toxicity, and perceived taste under the category of psychological factors. Also, it was indicated that social cultural factors such as ethnicity influences consumption while personal factors and religion do not influence consumption of cultivated edible mushrooms. It is recommended that the Government should incorporate mushrooms in the horticultural strategic plans in order to develop and encourage mushrooms production for business and income generation while also producers and marketing personnel should employ proper marketing strategies that meet the needs of customers.

Rebecca Owusu (2020) This study uses choice experiment to investigate men and women consumers' preferences and willingness to pay for edible mushrooms in Ghana. We used a mixed logit model to examine preference heterogeneity. The econometric modelling revealed that men consumers have a negative utility for oyster mushrooms compared to straw mushrooms. They also have preference for cheap and locally cultivated mushrooms compared to expensive and imported mushrooms. However, women consumers have preferences for the shiitake mushroom variety compared to the straw mushroom variety. They also prefer cheap mushrooms irrespective of their location and such mushrooms must be frozen and not fresh. The findings highlight variation between men and women in preferences for mushroom variety, however, both have preferences for low prices, suggesting that both genders are economically rational and obey the law of demand. **Ryan Ardoin (2020)** Effects of mushroom type, seasoning and health benefit information (HBI) on consumers' saltiness expectation, sensory liking, elicited emotions and purchase intent (PI) of extruded snacks were investigated. Five snacks were evaluated: straw mushroom (Volvariella volvacea) extradites without (SME) or with seasoning (SMES), phoenix mushroom (Pleurotus pulmonarius) extradites without (PME) or with seasoning (PMES), and the control without mushroom and seasoning. Hedonic scores and positive emotions were generally higher for seasoned mushroom-containing snacks (SMES and PMES) with 65% and 75.83% of consumers reporting willingness to purchase, respectively, after receiving HBI. Bored, interested and satisfied were identified as significant emotional predictors for PI odds. Flavour, saltiness, overall liking, bored, good and interested were critical attributes, differentiating snacks. This study demonstrated that sensory liking and PI of extruded brown rice-based snacks containing mushroom could be improved through savoury seasoning addition, which also allowed saltiness expectations to be met.

Mark Lang (2020) There is a growing trend towards shifting from meat-centric to plant-forward diets both within industry and society today. It is happening to improve impacts on the environment, public health, and animal welfare. Aligned with this, many new plant-based alternatives to traditional meat based foods and diets are being introduced. Research has focused on testing sensory characteristics and appeal with consumers. The current study responds to calls in the literature to extend learning about plant-forward foods, beyond sensory testing, and into consumer acceptance and adoption of these products. The objectives of this study are to examine the nature of consumer response to blending plant-based ingredients (mushrooms) into traditional meat-based foods and to understand the individual lifestyle and motivational differences that influence this response. Data is obtained through an online consumer survey and descriptive and structural equation analyses are employed. Results find that consumer acceptance is influenced greatly by their assessment of plant-based foods' taste, health, sustainability, cost, and novelty. Results also find that assessment is influenced by individual differences in food values and lifestyle including healthy eating and food innovativeness. Contributions to marketing theory include the integration of new constructs with existing theory to establish new relationships that better explain and predict the acceptance of blending plant-based ingredients into meat-based foods. Understanding consumer context and motivations for adopting these products has important consequences for marketing positioning, messaging and promotion.

Vanessa Shonkwiler (2019) As consumer demand for food labeling becomes increasingly important, producers and retailers can include various labeling to attract new customers. This study investigates Connecticut consumers' preferences and willingness to pay for mushrooms marketed with various labels using a latent class approach to identify classes within the market. Results reveal three market segments (price/GMO-label,

locally/organically grown, and traditional mushroom varieties). Overall, only a third of consumers valued the "locally grown" or "organic" labels, so charging a premium for these labels might alienate a majority of consumers. Finally, GMO labeled mushrooms are discounted, but the non-GMO label receives little value.

Juanita Prempeh (2018) Mushroom cultivation is increasingly becoming a serious agribusiness in Ghana, especially at the time when entrepreneurship is being encouraged to reduce the pressure of employment in the government sector and also due to its nutritional and medicinal attributes. A survey was carried out using the rapid appraisal method to review the existing methods of sterilization, use of gamma radiation in substrate sterilization and food preservation, preference of mushrooms in Ghana by consumers and nutritional and medicinal attributes of the mushroom. Information and knowledge on the gamma irradiation technique for substrate production and consumption patterns of *P. ostreatus* mushrooms were not widely disseminated as anticipated. **Hairazi Rahim (2017)** Mushroom is one of the famous foods in Malaysia. Consumers usually purchase fresh mushrooms, compared to the processed products. However, lately, consumers start to look at mushroom-based products due to many information about the health benefits of this product. However, information about the health benefits of this product has lately increased make consumers start to look at mushroom-based products. The objective of this study is to identify consumer behaviour towards mushroom-based products in Malaysia and explore the factors that have influenced consumers to purchase mushroom-based products. A survey involving 600 respondents representing major ethnic groups was carried out in peninsular Malaysia. This study showed that majority of mushroom-based consumers are people within the ages between 21-30. It also revealed that the factors that had a great influence to the purchase of mushroom-based products were product attributes, information on health benefits, certificate that indicates product quality and perception toward the products. Product with good taste is the most important criterion for consuming mushroom-based products. This is followed by scientific claims from authorised bodies concerning these products.

Preethi (2015) Mushrooms are known world over for their nutritional and medicinal importance. Even as the mushroom production and consumption are on the rise in rest of the world, India witnesses a lukewarm response in its growth. The mushroom consumer behaviour though is scarcely studied in India, is of considerable value to mushroom producers and people involved in mushroom marketing and processing. , the present study was envisaged to develop a scale to assess the mushroom consumption behaviour covering five major dimensions influencing the mushroom consumption by following psychometric technique using normalised rank approach. Based on the study, the Mushroom Consumer Behaviour Index (MCBI) was developed for application in mushroom consumer behaviour research. Among the five dimensions of the scale, the Situational dimension assumed highest scale value (5.93) followed by Dietary preferences (4.98), Economic dimension (4.62), Psychological dimension (4.25) and lastly the Social dimension assuming the least value (4.09). The scale developed will find utility for analysing the mushroom consumption behaviour across different regions and different sections of the society and to draw suitable conclusions by the researchers and the policy makers.

Mahantesh Shirur (2015) Mushrooms are valued high for their nutritional and medicinal properties. However, their consumption among the masses is not common. Hence, the present study was undertaken to understand the marketing channels and mushroom consumer behaviour among the people. The extent of variation in price spread observed in the average selling price when sold to consumers, retailers and wholesalers for all the mushroom varieties was studied which varied between Rs. 27-40. The perishability and lack of processing facilities for mushrooms is the main reason for such a huge price escalation as the growers will mostly depend on the marketing channels to sell their produce. Majority consumers preferred button mushroom over other mushroom varieties though, they are on par with respect to the nutritional and medicinal properties and are easier and cheaper to cultivate. Hence, Extension assumes a major role in spreading awareness on this among the growers and the consumers.

CHAPTER -II
2. Research Methodolgy

Research Methodology
2.1 The Study: The study was exploratory in nature. Survey method was used to collect the data.
2.2 The Sample Design
2.2.1 Population: The population for this study was people residing in Gwalior region.
2.2.2 Sample Frame: Sample frame of this study were Customers Preference, Buying Behaviour of Mushroom
2.2.3 Sampling Technique: Judgmental sampling technique was used in this study.
2.2.4 Sampling Size: The sample size of this study was 160 respondents of consumers
2.2.5 Sampling Element: The sampling element of this study were individual respondents
2.3 Tools used for Data Collection: Re-standardized questionnaires were used to collect data on A Study of Customers Preference Buying Behaviour of Mushroom Likert type scale was used to collect data where 1 indicates strongly disagree and 5 indicates strongly agree

2.4 Tools used for Data Analysis:
Cronbach's Alpha Reliability Test was applied to check the reliability for A Study of Customers Preference Buying Behaviour of Mushroom Factor Analysis was applied to identify the underlying factors of A Study of Customers Preference Buying Behaviour of Mushroom questionnaires Two Way ANOVA test was be applied to identify the difference between A Study of Customers Preference Buying Behaviour of Mushroom Linear Regression test was applied to check the impact of A Study of Customers Preference Buying Behaviour of MushroomT test is used to compare the means of A Study of Customers Preference Buying Behaviour of Mushroom

CHAPTER – III

3.   Results And Discussions
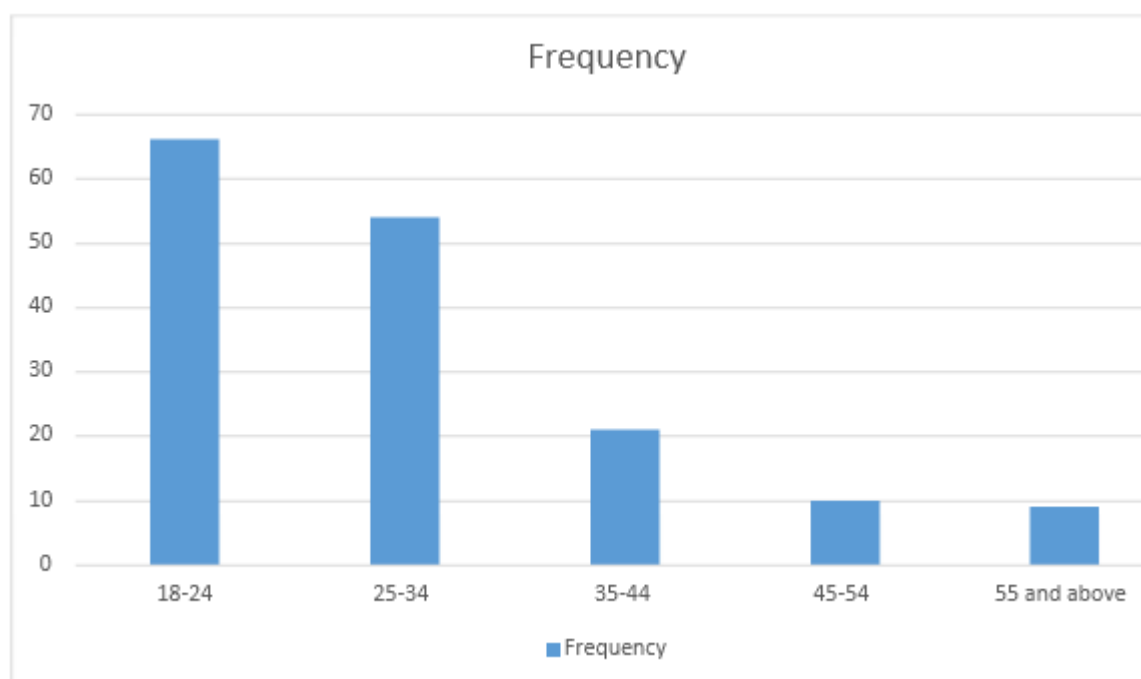
1.Gender	Frequency	Percent
Female	64	40.0
Male	96	60.0
Total	160	100.0
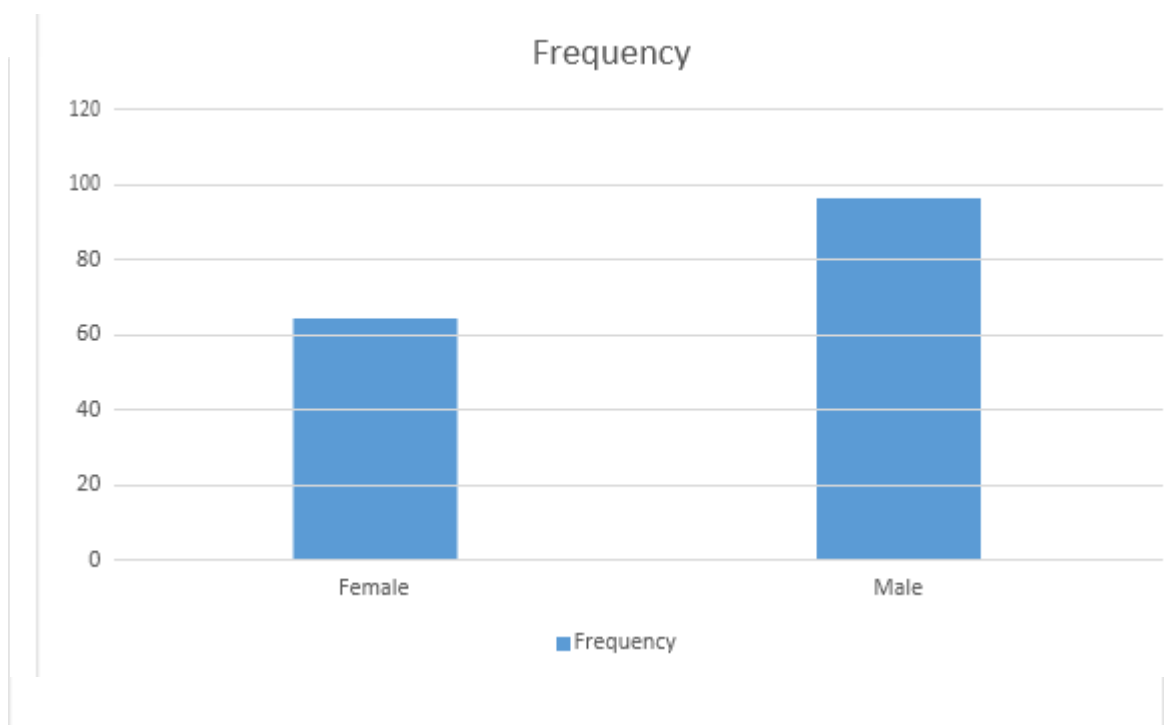
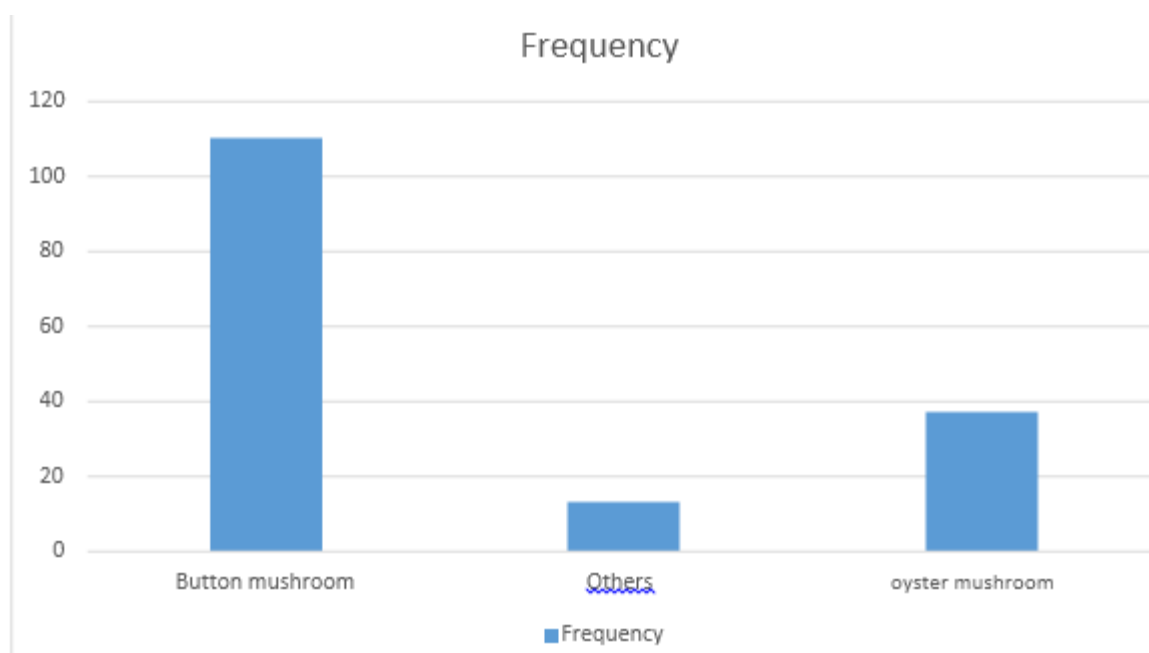**Interpretation: -** From the above analysis 40.0% customers are Females,60.0% customers are Males.

| 2.Age	Frequency	Percent
18-24	66	41.3
25-34	54	33.8
35-44	21	13.1
45-54	10	6.3
55 and above	9	5.6

Total	160	100.0

INTERPRETATION: - From the above analysis 41.3% customers Age Group is 18-24 years,33.8% customers Age Group is 25-34 years,13.1% customers Age Group is 35-44 years,6.3% customers Age Group is 45-54 years,5.6% customers Age Group is 55 and above.

| 3.Which type of mushroom do you prefer?	Frequency	Percent
Button mushroom	110	68.8
Others	13	8.1
oyster mushroom	37	23.1
Total	160	100.0

Frequency

Interpretation: - From the above analysis 68.8% customers are preferring Button mushroom,8.1% customers are preferring other type of mushroom,23.1% customers are preferring oyster mushroom.

| 4.Reason behind for mushroom purchase?	Frequency	Percent
Health consciousness	84	52.5
Other	15	9.4
Taste	61	38.1
Total	160	100.0
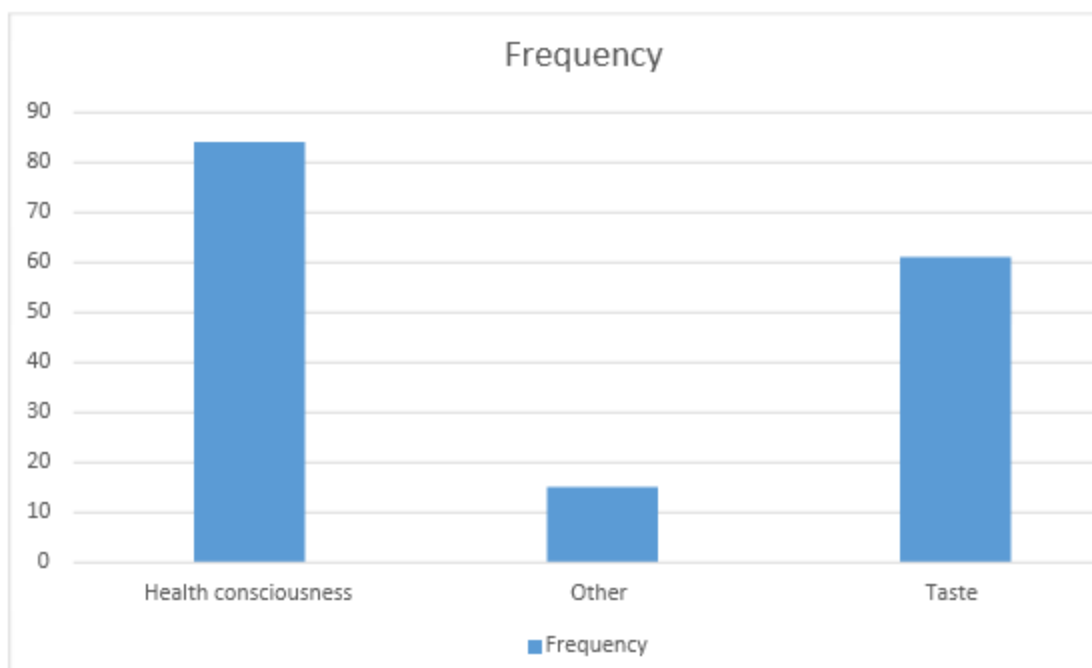
INTERPRETATION: - From the above analysis 52.5% customers are purchase mushroom for Health consciousness,9.4% customers are purchase mushroom for other reason,38.1% customers are purchase mushroom for Taste.

| 5.How do you usually buy mushrooms?	Frequency	Percent
From a Farmers market	36	22.5
From a grocery store	82	51.3
From an online retailer	30	18.8
other	12	7.5
Total	160	100.0
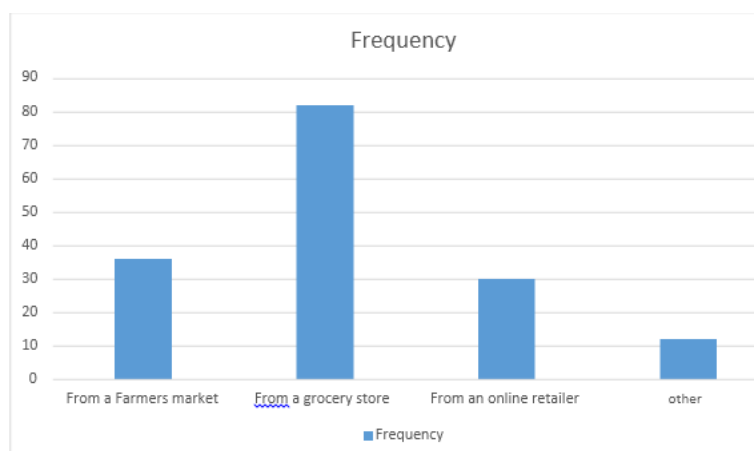
INTERPRETATION: - From the above analysis 22.5% customers are buy mushrooms from a farmers' market,51.3% customers are buy mushrooms from a grocery store,18.8% customers are buy mushrooms from an online retailer,7.5% customers are buy mushrooms from other place.

6.What is your Occupation?	Frequency	Percent
Homemaker	15	9.4
others	5	3.1
Professional	61	38.1
Retired	7	4.4
Student	72	45.0
Total	160	100.0
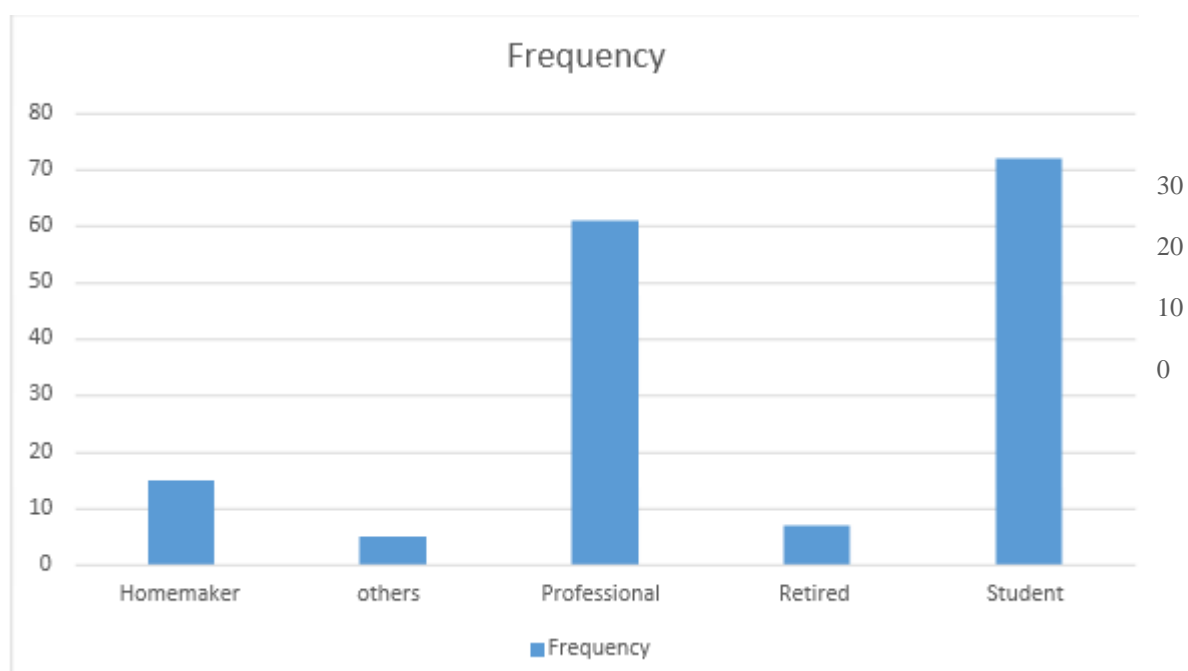
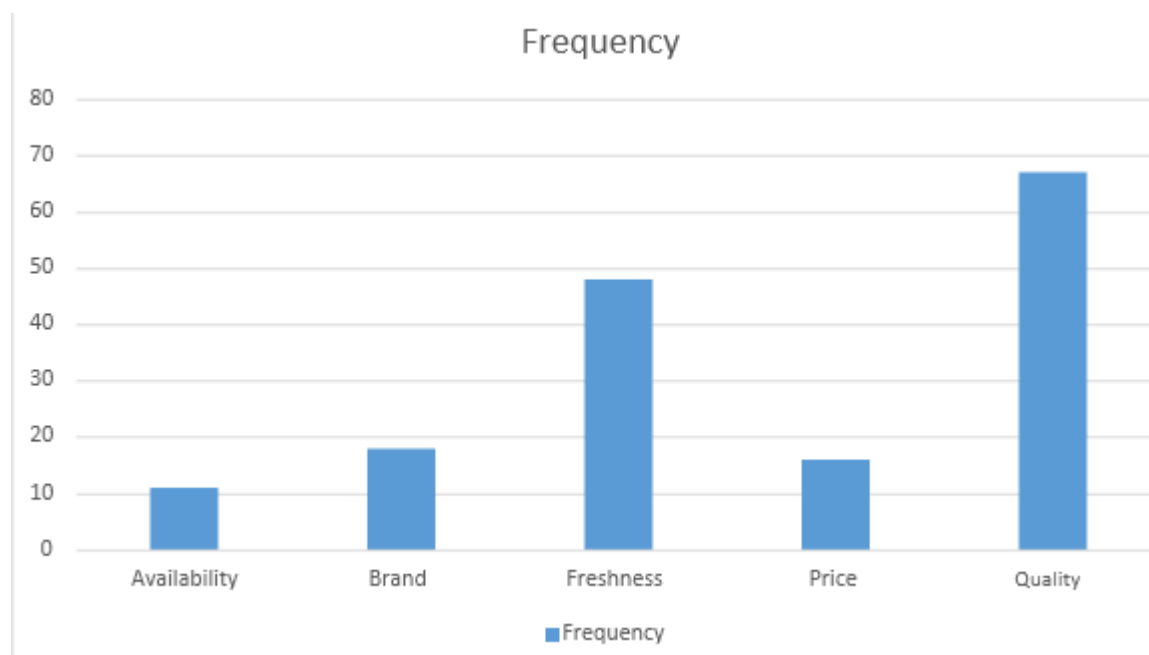**INTERPRETATION: -** From the above analysis 9.4% customers' occupation is Homemaker,3.1%customers' occupation is others,38.1% customers' occupation is Professional,4.4% customers' occupation is Retired,45.0% customers' occupation is Student.

7.How often do you buy mushrooms?	Frequency	Percent
Daily	11	6.9
Monthly	60	37.5
Rarely	29	18.1
Weekly	60	37.5
Total	160	100.0
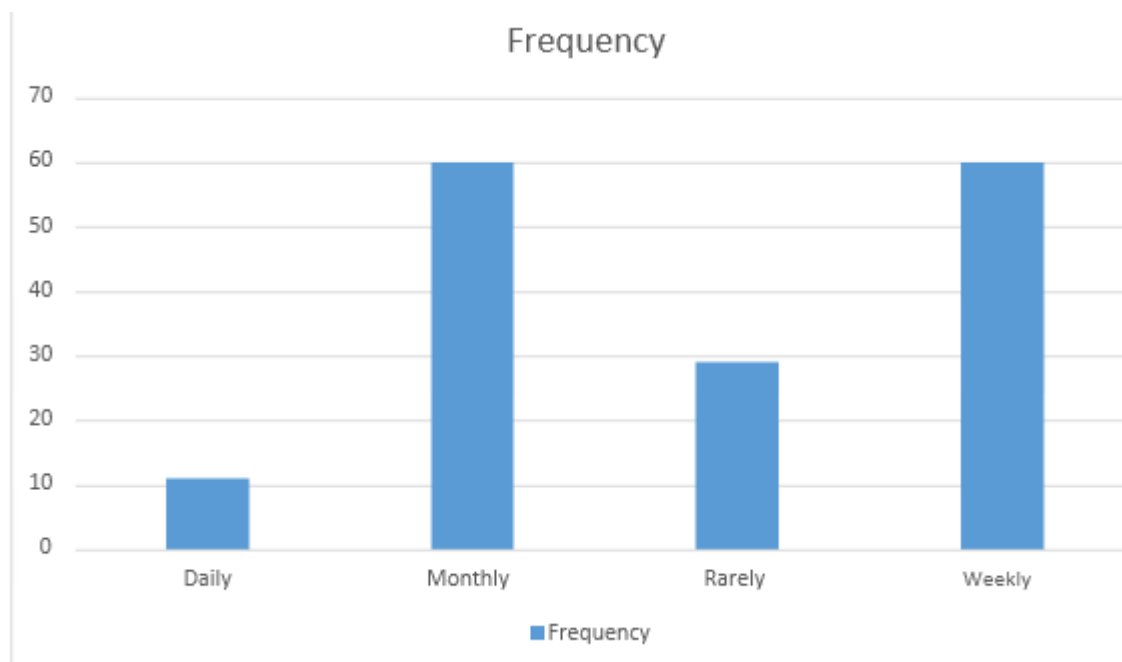
INTERPRETATION: - From the above analysis 6.9% customers are Daily buy mushrooms,37.5% customers are Monthly buy mushrooms,18.1% customers are Rarely buy mushrooms,37.5% customers are Weekly buy mushrooms.

| 8.When buying mushrooms, which of the following factors do you consider the most important?	Frequency	Percent
Availability	11	6.9
Brand	18	11.3
Freshness	48	30.0
Price	16	10.0
Quality	67	41.9
Total	160	100.0

INTERPRETATION: - From the above analysis 6.9% customers are considering the Availability while buying mushrooms,11.3% customers are considering the Brand while buying mushrooms,30.0% customers are considering the Freshness while buying mushrooms,10.0% customers are considering the Price while buying mushrooms,41.9% customers are considering the Quality while buying mushrooms.

| 9.How likely are you to buy mushrooms that are packaged in eco-friendly?	Frequency	Percent
Neutral	36	22.5
Somewhat likely	30	18.8
Somewhat unlikely	5	3.1
Very likely	87	54.4
Very unlikely	2	1.3
Total	160	100.0
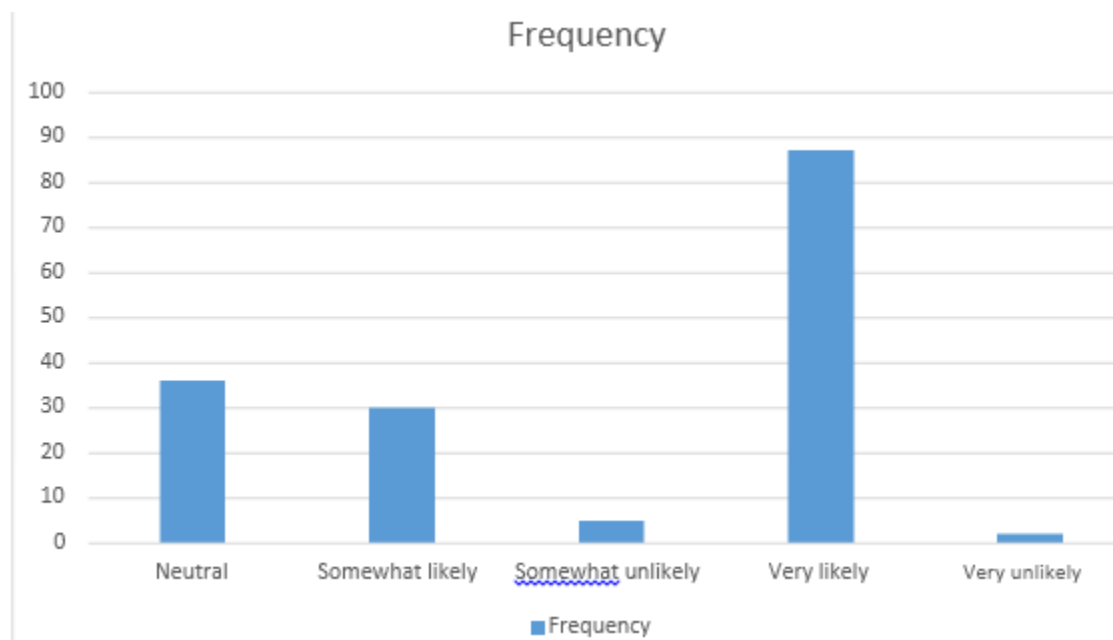
INTERPRETATION: - From the above analysis 22.5% customers are Neutral to buy mushrooms that are packaged in eco-friendly,18.8% customers are Somewhat likely to buy mushrooms that are packaged in eco-friendly,3.1% customers are Somewhat unlikely to buy mushrooms that are packaged in eco-friendly,54.4% customers are Very likely to buy mushrooms that are packaged in eco-friendly,1.3% customers are Very unlikely to buy mushrooms that are packaged in eco-friendly.

| 10.How likely are you to buy mushrooms that are grown locally?	Frequency	Percent
Neutral	37	23.1
Somewhat likely	32	20.0
Somewhat unlikely	4	2.5
Very likely	86	53.8
Very unlikely	1	0.6
Total	160	100.0
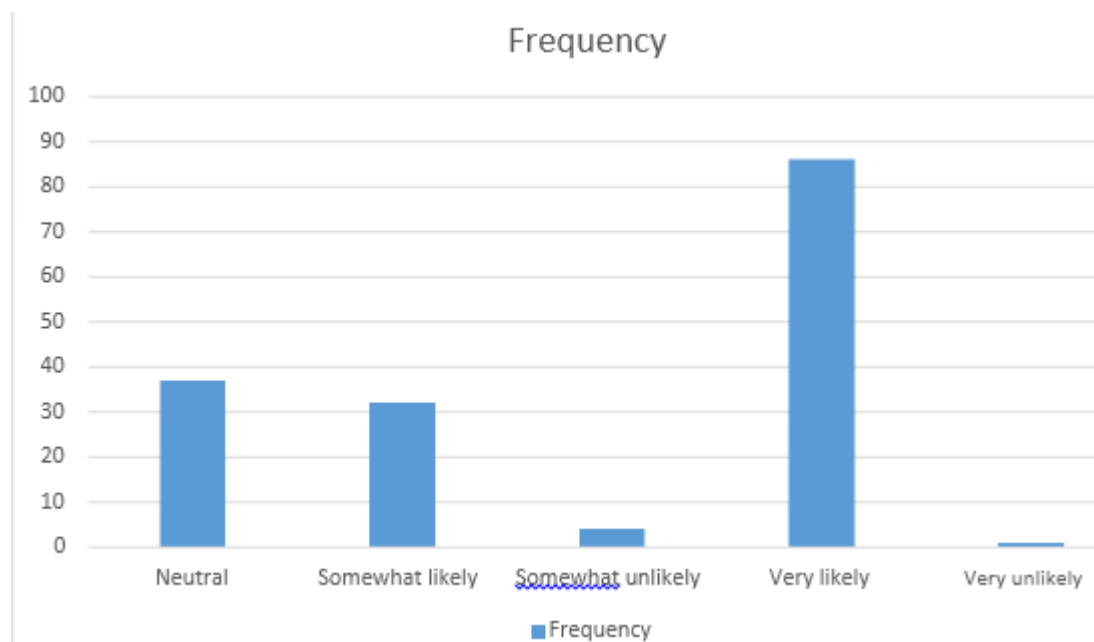
INTERPRETATION: - From the above analysis 23.1% customers are Neutral to buy mushrooms that are grown locally,20.0% customers are Somewhat likely to buy mushrooms that are grown locally,2.5% customers are Somewhat unlikely to buy mushrooms that are grown locally,53.8% customers are Very likely to buy mushrooms that are grown locally,0.6% customers are Very unlikely to buy mushrooms that are grown locally.

11.I am willing to pay more for mushrooms that are organic	Frequency	Percent
Agree	64	40.0
Disagree	25	15.6
Neutral	30	18.8
Strongly Agree	20	12.5
Strongly Disagree	21	13.1
Total	160	100.0
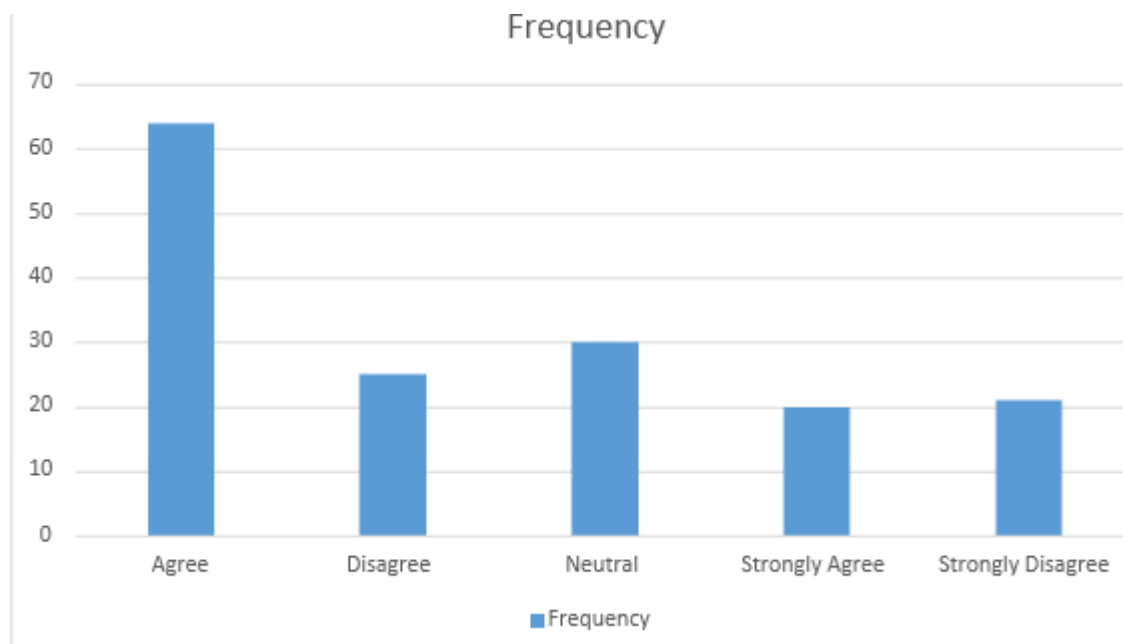
INTERPRETATION: - From the above analysis 40.0% customers are Agree with willing to pay more for organic mushrooms,15.6% customers are Disagree with willing to pay more for organic mushrooms,18.8% customers are Neutral with willing to pay more for organic mushrooms,12.5% customers are Strongly Agree with willing to pay more for organic mushrooms,13.1% customers are Strongly Disagree with willing to pay more for organic mushrooms.

12.When buying mushrooms how important is the packaging to you?	Frequency	Percent
Neutral	24	15.0
Somewhat important	35	21.9
Somewhat unimportant	7	4.4
Very important	93	58.1
Very unimportant	1	0.6
Total	160	100.0
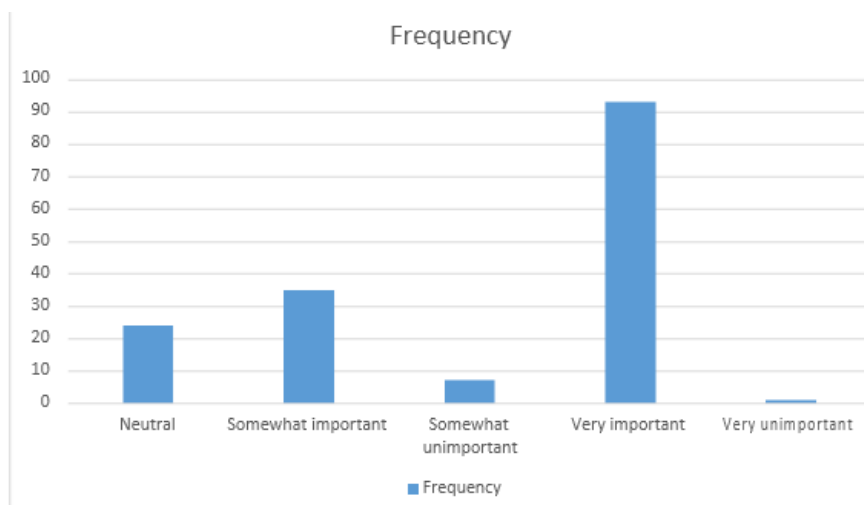
INTERPRETATION: - From the above analysis 15.0% customers are said packaging is Neutral important while buying mushrooms,21.9% customers are said packaging is Somewhat important while buying mushrooms,4.4% customers are said packaging is Somewhat unimportant while buying mushrooms,58.1% customers are said packaging is Very important while buying mushrooms,0.6% customers are said packaging is Very unimportant while buying mushrooms.

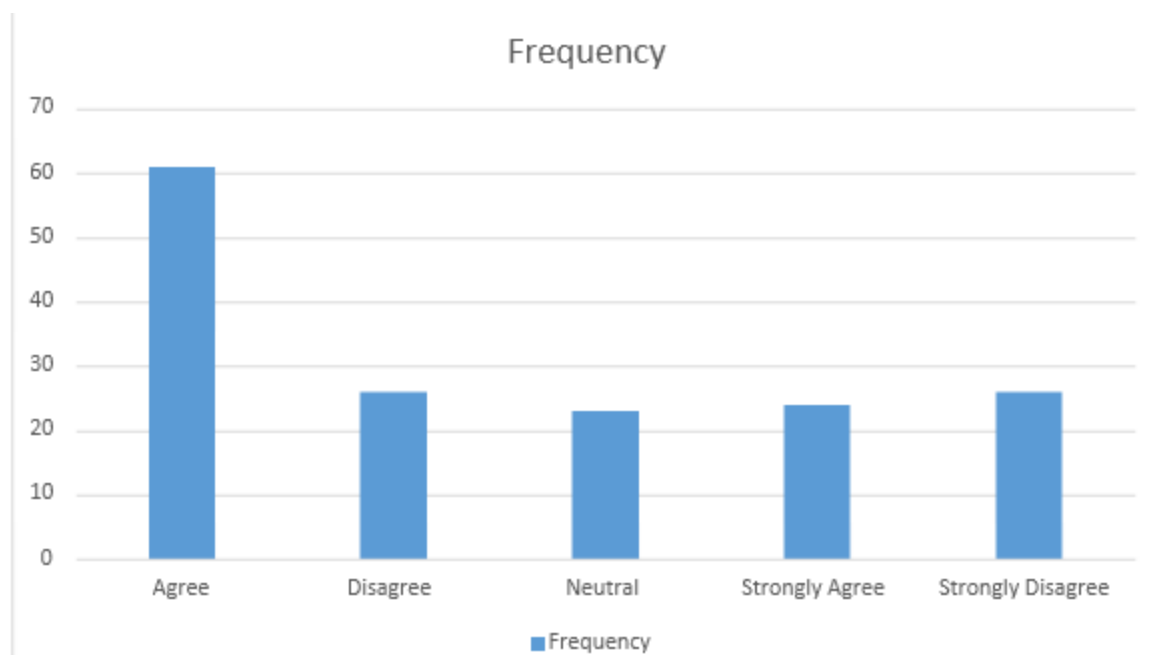| 13. I am willing to pay more for mushrooms that are grown locally	Frequency	Percent
Agree	61	38.1
Disagree	26	16.3
Neutral	23	14.4
Strongly Agree	24	15.0
Strongly Disagree	26	16.3
Total	160	100.0

INTERPRETATION: - From the above analysis 38.1% customers are Agree with willing to pay more for local mushrooms,16.3% customers are Disagree with willing to pay more for local mushrooms,14.4% customers are Neutral with willing to pay more for local mushrooms,15.0% customers are Strongly Agree with willing to pay more for local mushrooms,16.3% customers are Strongly Disagree with willing to pay more for local mushrooms.

14.I am more likely to buy mushrooms that are packaged in co-friendly materials	Frequency	Percent
Agree	70	43.8
Disagree	16	10.0
Neutral	19	11.9
Strongly Agree	23	14.4
Strongly Disagree	32	20.0
Total	160	100.0
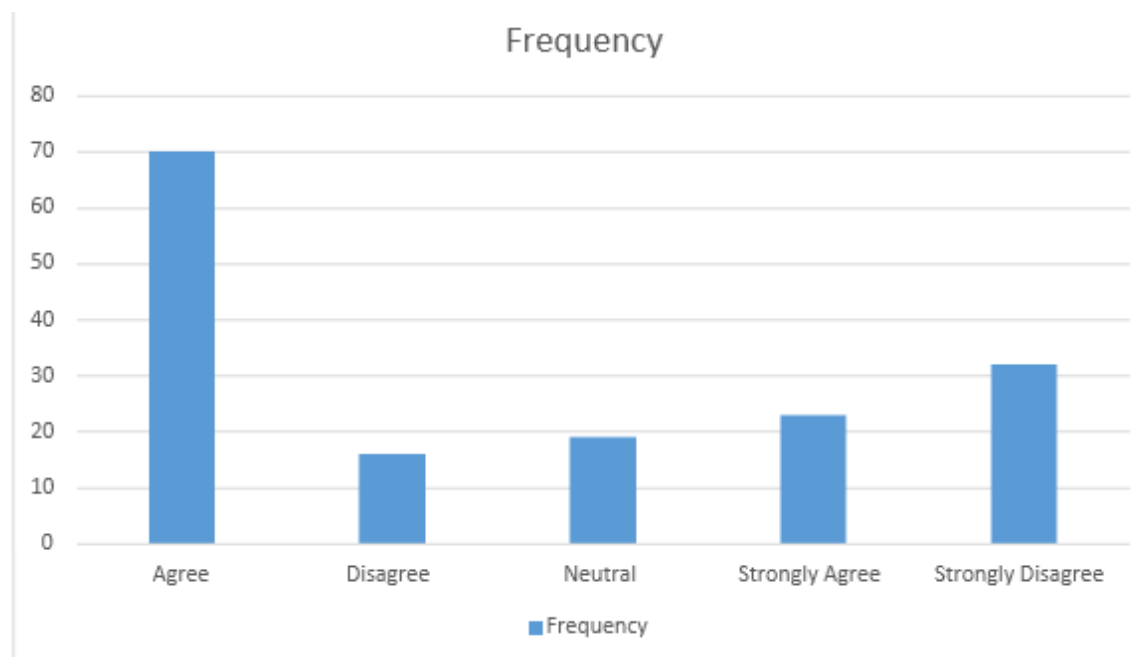
INTERPRETATION: - From the above analysis 43.8% customers are Agree with more likely to buy mushrooms that are packaged in ecofriendly materials,10.0% customers are Disagree with more likely to buy mushrooms that are packaged in ecofriendly materials,11.9% customers are Neutral with more likely to buy mushrooms that are packaged in ecofriendly materials,14.4% customers are Strongly Agree with more likely to buy mushrooms that are packaged in ecofriendly materials,20.0% customers are Strongly Disagree with more likely to buy mushrooms that are packaged in ecofriendly materials.

15.I prefer to buy mushrooms from a specific brand	Frequency	Percent
Agree	60	37.5
Disagree	18	11.3
Neutral	29	18.1
Strongly Agree	19	11.9
Strongly Disagree	34	21.3
Total	160	100.0
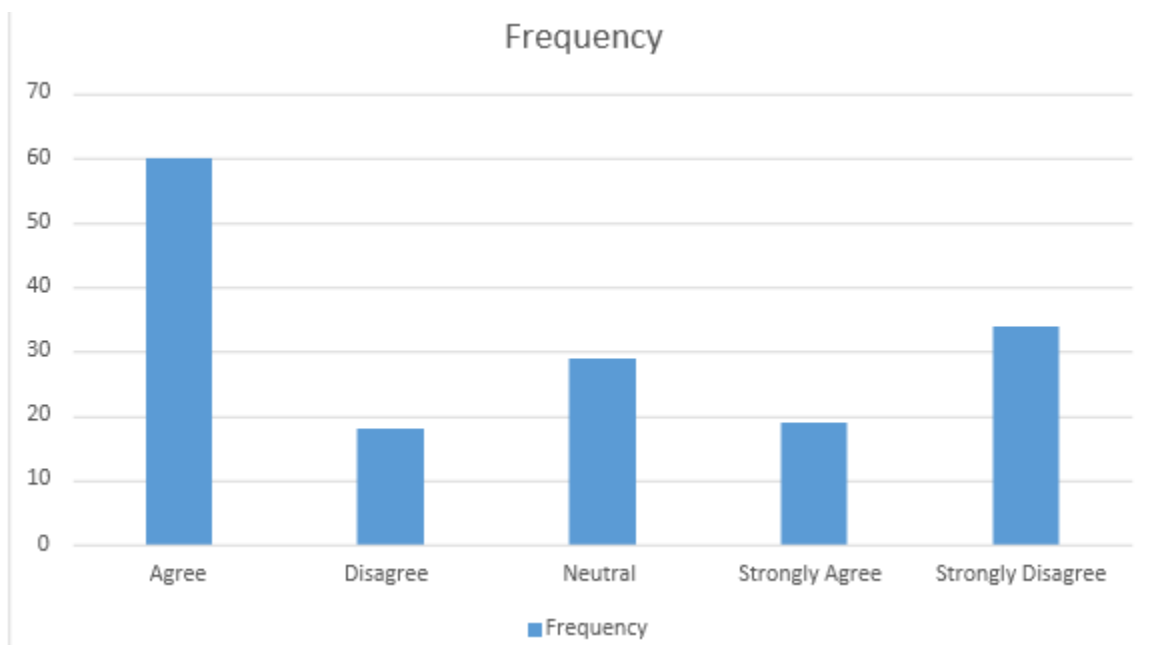
INTERPRETATION: - From the above analysis 37.5% customers are Agree with prefer to buy mushrooms from a specific brand,11.3% customers are Disagree with prefer to buy mushrooms from a specific brand,18.1% customers are Neutral with prefer to buy mushrooms from a specific brand,11.9% customers are Strongly Agree with prefer to buy mushrooms from a specific brand,21.3% customers are Strongly Disagree with prefer to buy mushrooms from a specific brand.

16.I am more likely to recommend mushroom to family or friends?	Frequency	Percent
Agree	63	39.4
Disagree	19	11.9
Neutral	20	12.5
Strongly Agree	21	13.1
Strongly Disagree	37	23.1
Total	160	100.0
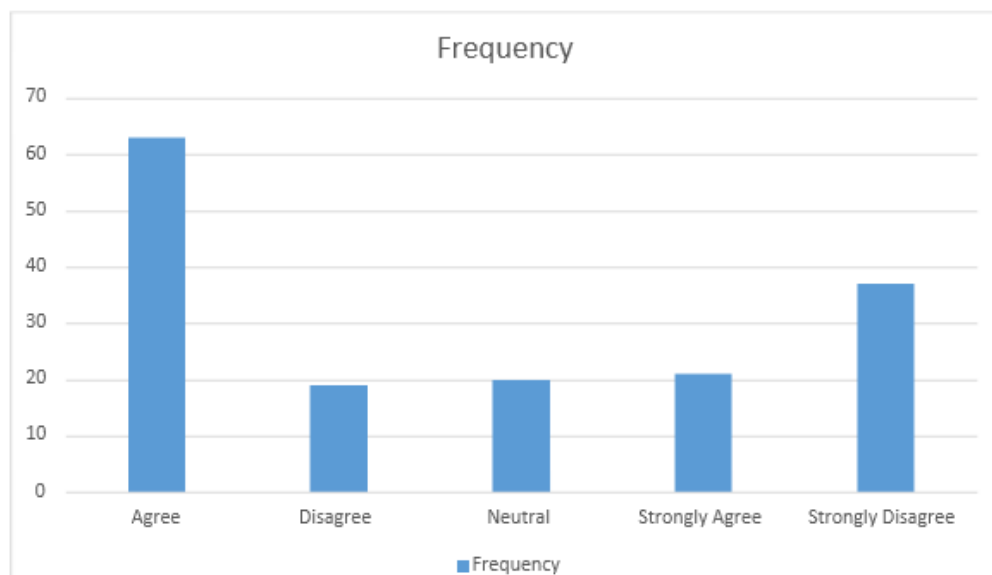
INTERPRETATION: - From the above analysis 39.4% customers are Agree with more likely to recommend mushroom to family or friends,11.9% customers are Disagree with more likely to recommend mushroom to family or friends,12.5% customers are Neutral with more likely to recommend mushroom to family or friends,13.1% customers are Strongly Agree with more likely to recommend mushroom to family or friends,23.1% customers are Strongly Disagree with more likely to recommend mushroom to family or friends.

DESCRPTIVE ANALSYSIS
Descriptive Statistics

	Gender	Mean	Std. Deviation	N
I am willing to pay more for mushrooms that are organic	Male	2.03	1.301	96
	Female	**3.03**	1.458	64
	Total	2.43	1.448	160
I am willing to pay more for mushrooms that are grown locally	Male	2.09	1.290	96
	Female	**3.23**	1.581	64
	Total	2.55	1.516	160
I am more likely to buy mushrooms that are packaged in co-friendly materials	Male	2.11	1.443	96
	Female	**3.25**	1.643	64
	Total	2.57	1.620	160
I prefer to buy mushrooms from a specific brand	Male	2.26	1.431	96
	Female	**3.31**	1.592	64
	Total	2.68	1.580	160
I am more likely to recommend mushroom to family or friends?	Male	2.18	1.444	96
	Female	**3.45**	1.613	64
	Total	2.69	1.634	160

Inference: - there is significance difference between the gender and preference of mushroom.
Ecofriendly materials, recommend mushroom, pay more and organic mushrooms.

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Intercept	Pillai's Trace	.834	154.233[b]	5.000	154.000	.000	.834	771.167	1.000
	Wilks' Lambda	.166	154.233[b]	5.000	154.000	.000	.834	771.167	1.000
	Hotelling's Trace	5.008	154.233[b]	5.000	154.000	.000	.834	771.167	1.000
	Roy's Largest Root	5.008	154.233[b]	5.000	154.000	.000	.834	771.167	1.000
Gender	Pillai's Trace	.184	6.927[b]	5.000	154.000	.000	.184	34.634	.998
	Wilks' Lambda	.816	6.927[b]	5.000	154.000	.000	.184	34.634	.998
	Hotelling's Trace	.225	6.927[b]	5.000	154.000	.000	.184	34.634	.998
	Roy's Largest Root	.225	6.927[b]	5.000	154.000	.000	.184	34.634	.998

a. Design: Intercept + Gender

b. Exact statistic

c. Computed using alpha = .05

Tests of Between-Subjects Effects									
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerf
Corrected Model	willing to pay organic	38.400a	1	38.4	20.578	0	0.115	20.578	0.995
	Locally grown	49.959b	1	49.959	25.008	0	0.137	25.008	0.999
	Packaged eco-friendly	49.504c	1	49.504	21.27	0	0.119	21.27	0.996
	brand	42.504d	1	42.504	18.958	0	0.107	18.958	0.991
	Recommend	62.526e	1	62.526	27.302	0	0.147	27.302	0.999
Intercept	willing to pay organic	984.15	1	984.15	527.383	0	0.769	527.383	1
	Locally grown	1090.134	1	1090.134	545.688	0	0.775	545.688	1
	Packaged eco-friendly	1105.104	1	1105.104	474.81	0	0.75	474.81	1
	brand	1192.604	1	1192.604	531.932	0	0.771	531.932	1
	Recommend	1217.251	1	1217.251	531.508	0	0.771	531.508	1
Gender	willing to pay organic	38.4	1	38.4	20.578	0	0.115	20.578	0.995
	Locally grown	49.959	1	49.959	25.008	0	0.137	25.008	0.999
	Packaged eco-friendly	49.504	1	49.504	21.27	0	0.119	21.27	0.996
	brand	42.504	1	42.504	18.958	0	0.107	18.958	0.991
	Recommend	62.526	1	62.526	27.302	0	0.147	27.302	0.999
a. R Squared = .115 (Adjusted R Squared = .110)									
b. R Squared = .137 (Adjusted R Squared = .131)									
c. R Squared = .119 (Adjusted R Squared = .113)									
d. R Squared = .107 (Adjusted R Squared = .101)									
e. R Squared = .147 (Adjusted R Squared = .142)									
f. Computed using alpha = .05									

Table 1

Inference: - there is significance difference between the gender and preference of mushroom. Ecofriendly materials, recommend mushroom, pay more and organic mushrooms.

Reliability Statistics	
Cronbach's Alpha	N of Items
.898	5

the tested variables . Ecofriendly materials, recommend mushroom, pay more and organic mushrooms.

Cronbach's alpha is a statistical measure used to assess the internal consistency or reliability of a scale or questionnaire. It quantifies the extent to which items in a scale are measuring the same underlying construct.

In this case, you have a Cronbach's alpha value of 0.898 and a total of 5 items. Generally, Cronbach's alpha ranges from 0 to 1, where higher values indicate better internal consistency. An alpha value of **0.898 is considered quite well and suggests a high level of internal consistency among the items in scale**. This indicates that the items are measuring the same construct reliably. It implies that the items are highly correlated with each other, indicating that they are assessing the same underlying concept or trait.

Having a Cronbach's alpha above **0.7** is often considered acceptable for most research purposes, while values above 0.8 are generally considered very good. In your case, with a Cronbach's alpha of 0.898, you can be confident in the internal consistency of your scale.

It's important to note that Cronbach's alpha is just one measure of reliability, and other factors such as the context and purpose of the study should be taken into account when interpreting the results. Additionally, the number of items in the scale should be carefully considered. With only 5 items, there is a possibility that the Cronbach's alpha might be inflated, and it would be beneficial to have a larger number of items to further ensure the scale's reliability.

FACTOR ANALSYSIS
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	456.621
	df	10
	Sig.	.000

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is a statistic used in factor analysis to determine if the data are suitable for performing the analysis. It assesses the extent to which the variables in your dataset are correlated and whether they are appropriate for factor analysis.

The KMO statistic ranges from 0 to 1, with higher values indicating better sampling adequacy.
The interpretation of KMO values is as follows:

KMO values below 0.5: This indicates that the variables in your dataset are not suitable for factor analysis. It suggests that the correlations between the variables are weak, making it difficult to identify underlying factors.

KMO values between 0.5 and 0.6: This suggests that the variables have a marginal level of sampling adequacy. Factor analysis may still be possible, but the results should be interpreted with caution.

KMO values between 0.6 and 0.7: This indicates a moderate level of sampling adequacy. While factor analysis can be performed, it is advisable to explore ways to improve the sampling adequacy, such as removing variables that have low correlations with others or collecting additional data.

KMO values between 0.7 and 0.8: This represents a good level of sampling adequacy. The variables in your dataset are reasonably correlated, and factor analysis is appropriate.

KMO values above 0.8: This indicates a high level of sampling adequacy. The variables in your dataset are highly correlated, making factor analysis suitable and likely to yield meaningful results.

Communalities		
	Initial	Extraction
I am willing to pay more for mushrooms that are grown locally	1.000	.739
I am more likely to buy mushrooms that are packaged in co-friendly materials	1.000	.711
I prefer to buy mushrooms from a specific brand	1.000	.655
I am more likely to recommend mushroom to family or friends?	1.000	.674
I am willing to pay more for mushrooms that are organic	1.000	.789
Extraction Method: Principal Component Analysis.		

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.567	71.347	71.347	3.567	71.347	71.347
2	.445	8.908	80.255			
3	.390	7.794	88.050			
4	.343	6.861	94.911			
5	.254	5.089	100.000			
Extraction Method: Principal Component Analysis.						

Component Matrix	
	Component
	1
I am willing to pay more for mushrooms that are grown locally	.860
I am more likely to buy mushrooms that are packaged in co-friendly materials	.843
I prefer to buy mushrooms from a specific brand	.809
I am more likely to recommend mushroom to family or friends?	.821
I am willing to pay more for mushrooms that are organic	.888
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

The absolute value of a factor loading indicates the strength of the relationship between a variable and a factor. Larger absolute values (closer to 1) indicate a stronger association, suggesting that the variable is more representative of that factor. Most of factors are near to 1 which means above factors high influence on customer behavior.

CHAPTER – IV
4. IMPLICATIONS AND LIMITATIONS

- 41.3% customers Age Group is 18-24 years,33.8% customers Age Group is 25-34 years,13.1% customers Age Group is 35-44 years,6.3% customers Age Group is 45-54 years,5.6% customers Age Group is 55 and above.
- 68.8% customers are preferring Button mushroom,8.1% customers are preferring other type of mushroom,23.1% customers are preferring oyster mushroom.
- 52.5% customers are purchase mushroom for Health consciousness,9.4% customers are purchase mushroom for other reason,38.1% customers are purchase mushroom for Taste.
- 22.5% customers are buy mushrooms from a farmers' market,51.3% customers are buy mushrooms from a grocery store,18.8% customers are buy mushrooms from an online retailer,7.5% customers are buy mushrooms from other place.
- 9.4% customers' occupation is Homemaker,3.1%customers' occupation is others,38.1% customers' occupation is Professional,4.4% customers' occupation is Retired,45.0% customers' occupation is Student.
- 6.9% customers are Daily buy mushrooms,37.5% customers are Monthly buy mushrooms,18.1% customers are Rarely buy mushrooms,37.5% customers are Weekly buy mushrooms.
- 6.9% customers are considering the Availability while buying mushrooms,11.3% customers are considering the Brand while buying mushrooms,30.0% customers are considering the Freshness while buying mushrooms,10.0% customers are considering the Price while buying mushrooms,41.9% customers are considering the Quality while buying mushrooms.
- 22.5% customers are Neutral to buy mushrooms that are packaged in eco-friendly,18.8% customers are Somewhat likely to buy mushrooms that are packaged in eco-friendly,3.1% customers are Somewhat unlikely to buy mushrooms that are packaged in eco-friendly,54.4% customers are Very likely to buy mushrooms that are packaged in eco-friendly,1.3% customers are Very unlikely to buy mushrooms that are packaged in eco-friendly.

CHAPTER – V
5. CONCLUSION

Customer feedback is a literal study of behavioral pattern of consumer leading their buying preferences & attitude of mushrooms. Consumer purchasing pattern is a dynamic aspect having the potential to magnetize businesses. The main purpose behind marketing a product is to satisfy demands and wants of the Consumers in mushrooms industry. This Study of customer feedback helps to achieve this purpose. This review study was completed broadly under five heads: Factors affecting Consumer Behavior, Factors linked to demography, Consumer Preferences & attitude, Quality & Innovation and existing Models of Consumer Behavior. This comprehensive study has demonstrated the possible facets of understanding consumer behavior. Such studies of customer feedback help marketers to recognize and forecast the purchase behavior of the consumers. It further helps the marketers not only to understand what consumer's purchase, but helps to understand why they purchase it. Thus with the help of the

Recommended model it will be easy to know how the consumer's behavior is influenced and what are the main factors influencing consumers in today's modern era. The advisory notion further supports the momentum of gaining business prospects.

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