ACCEPTABILITY OF CHICHAROOMS AS AN ALTERNATIVE SNACK

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Abstract

This study aimed to determine the acceptability of chicharooms as an alternative snack. Descriptive type of research was used in this study. Through convenience sampling, one hundred (100) residents of Bustos from barangays Bonga Mayor, Bonga Menor, Poblacion, San Pedro, Tanawan and Tibagan were chosen as respondents of the study. Interview and survey questionnaire were used as research instruments. Results of the study showed that almost half of the respondents were partly vegetarian while the remaining half were non-vegetarian and pure vegetarian. Majority of them have already tasted chicharon and the crunchy texture and taste are the qualities that they most liked in chicharon. In terms of familiarity with chicharooms, more than half of the respondents were familiar with it and have already tasted the product. The crunchy texture ranked 1 as the quality that the respondents most liked in chicharooms. Moreover, taste and nutritional benefits were considered by the respondents in eating chicharooms. Majority of the respondents perceived that chicharooms can contribute for the promotion of food delicacies business in Bustos and has a big possibility to become a big food business someday. Based on the results of the study, it is recommended that continuous growing of mushroom should be done by the raisers/farmers in order to sustain the manufacturing of chicharooms and provide more advertisements and promotions of the product.

Keywords: acceptability, mushroom, alternative, snacks, chicharooms

The food industry comprises a complex network of activities pertaining to the supply, consumption, and catering of food products and services across the world. Finished food products and partially prepared 'instant' food packets are also a part of the food industry. The food industry employs a massive number of skilled and unskilled workers. In 2006 alone, the food industry accounted for over 1.5 million jobs in the US and 4 million jobs in Europe. However, the food industry excludes subsistence farmers who use their produce for self-consumption. The food industry is highly diverse and comprises several important components. Each component adds distinct value to the whole food chain by improving sustainability and producing better products (Economy Watch, 2010).

Food manufacturing, food retail and food service sectors of the food industry have a key role to play in helping address the challenges that are being faced by the global food system. These sectors have the ability to influence both the supply and demand for food, owing to their close interactions with primary food producers and consumers. Many food businesses have accepted the challenge and identified their role in ensuring a sustainable global food supply for future generations. Most of these businesses have outlined their priorities for action in this area in corporate responsibility plans, many of which are publicly available, and have put substantial resources into research and development. Many have also instigated food- and nutrition-related initiatives to make their products more appealing to the consumers (Nutrition Bulletin, 2011).

According to Miltner (2015), more mature snacks lover are at the age 60 and older, are seeking for healthier and not empty calorie foods that will ward off arthritis and keep their

bones and other body parts healthy. The fallout over the chips craze of five years ago has demonstrated that just about any fruit or vegetable can be made into a chip. Mushrooms are one of the more interesting things from the fresh produce section that can be baked into a snackable chip. At once crunchy, light on the stomach yet deep and intensified in earthy flavor, these chips have a Cinderella effect on simple white button mushrooms, and elevate slightly more pedigreed fungi such as portobellos and King Oysters into an otherworldly realm. They are a good source of some B vitamins, selenium, antioxidants, fiber and vitamin D. They provide these nutrients with very few calories and practically no fat. The fat you add to bake them is the good kind, but don't go overboard with it. There are a couple secrets to super-crisp mushroom chips: uniformly thin slices and then haste in eating them before they once again grow limp with moisture.

Based on the official website of NDTV Food (2017), mushrooms make for a lovely ingredient in a vegetarian meal and they can be used in so many ways. There are different ways you can add mushrooms in your daily cooking affair. Toss them in fresh salads, combine with rice or meat, stuff them with flavorful mixtures, bake them or simply cook them Indian style. You can sauté them as is or roast them to bring out the sweetness or turn them into a delicious soup. But it is not easy to cook a wholesome vegetarian meal as it looks. It is extremely important to strike a balance between nutrition and taste. One thing that is great about vegetable is that you can take an advantage of their versatility, mix and match them to arrive at something new every day.

According to Dinglasan (2016), when it comes to snacks, it is getting harder and harder to find a delicious yet healthy

option. Snacks are usually either tasty and unhealthy or healthy but unappetizing. JA Lees Farms concocted a healthy and tasty alternative snacks using organic oyster mushrooms (Pleurotus ostreatus). Mushroom chicharon started by growing various vegetables in their farm in Indang, Cavite. This was where JA Lees Farms became convinced that there was an opening in the Philippine snack market for a healthier option. Everything began with original flavor, spicy, and garlic; but they soon expanded with flavors like wasabi, peri-peri, and hickory BBQ, which are quickly becoming popular, as well. Oyster mushrooms have a mild taste, cook quickly and absorb flavors well, making them popular choices in Asian cuisine and in this case, the mushroom chicharon. Even if the mushrooms are heavily flavored, you will still be able to taste the earthiness of the oyster mushrooms. Best served heated (microwave on high for 1 minute or bake for 5 minutes at 250°C) and like other chicharons, it is accompanied with your favorite vinegar and you can have it as a snack.

According to Lasco (2016), chicharon is usually seen as an unhealthy food because of its high fat content. But actually, recent studies have shown that sugar not fat is the major culprit of many of our health problems. On this register, cholesterol has high marks as it is actually a *zero carbohydrate* food. Also, if you look at the kind of fat present in chicharon, you will find that a good proportion is actually mono unsaturated, the same healthy kind of fat found in olive oil, avocados, and macadamias. Some kinds of chicharon have as high as 40% of this *heart healthy* fat. Moreover, each 0.5 oz. serving of chicharon contains 8-9 grams of protein, comparable to the protein content of Greek yoghurt. Chicharon in the Philippines is usually consumed with vinegar, and this condiment also has health benefits, being a fat and carbohydrate free liquid.

Fried mushroom or better known as "chicharoom" is one of the most popular and bestselling products of Bulacan. Bulakeños are known for their skills in making and giving uniqueness to their foods and one of those is chicharon. It is usually made with different cuts of pork, but sometimes are made with mutton. On the other hand, chicharon can also be high in sodium, and too much sodium should be avoided if you're prone to high blood pressure. Portion control is important if the consumer wants to stay healthy while enjoying favorite snack.

According to Carson (2017), oyster mushrooms have been used for thousands of years as a culinary and medicinal ingredient. The white mushrooms resemble oysters, and can be found growing in the wild on dead trees or fallen logs. They have a rich history in traditional Chinese medicine from as early as 3,000 years ago, particularly as a tonic for the immune system. Consuming oyster mushrooms as part of a healthy diet contributes to recommended nutritional requirements. They said that if you want to try this new business venture, there are some tips to help you start it out. Straw mushroom is the most suitable type of mushroom for business. A cheap way of growing straw mushroom is through the use of rice straw or banana leaves as bedding material

Ms. Geline Manlapaz, the original manufacturer of chicharooms from Bulacan, made an alternative for chicharon because of the unhealthy consequences in can bring to a person's body. Instead of using pork, she used mushroom as the main ingredient and named it "chicharooms". She is known for her original chicharooms which is made up of freshly harvest mushrooms which she made crispy and tasty. She researched about mushroom and found out that it has 11 health benefits to

the body. Aside from its Vitamin D, Vitamin C, potassium, calcium, iron, fiber and selenium content, it is an ideal low-energy diet for diabetics. Ergothioneine, a powerful antioxidant present in mushrooms, provides protection from free radicals and boosting the immune system. Chicharooms are now part of the typical "pasalubong" of a modern Filipino like pastillas de leche, pastillas de yema, pastillas de ube, macapuno/ ube balls, minasa, chicharon, inipit, ensaymada, cassava/rice cakes, puto, kalamay, suman, etc. The growing of mushrooms has a lot of business potentials because of the increasing demand for gourmet mushrooms and even the famous chicharooms (Baliwag News, 2017).

Given the abovementioned information, this research study sought to determine the acceptability of chicharooms as an alternative snack. Specifically, the researchers sought to answer the following sub-problems:

- 1. How may the respondents be categorized as food eaters?
- 2. How may the acceptability of chicharooms be described in terms of:
 - 2.1 texture;
 - 2.2 taste;
 - 2.3 appearance; and
 - 2.4 nutritional benefits
- 3. How do respondents perceive the acceptability of chicharooms as an alternative snack?

Through this study, the respondents will be able to appreciate the use of local and healthy ingredient such as mushroom in making the so called "chicharooms" as an alternative snack.

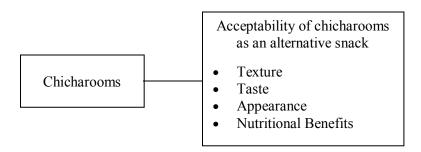


Figure 1. shows the perceived acceptability of chicharooms as an alternative snack

Method

Descriptive type of research was utilized in this study. A survey instrument was designed by the researchers to gather the perceptions, views and other information related to the study of the acceptability of chicharooms as an alternative snack. The first part of the survey instrument included items about the profile of the respondents such as gender and age, while the second part were evaluation questions which identified the acceptability of chicharooms as an alternative snack considering the product's texture, taste, appearance and nutritional benefits. Survey questionnaires were distributed to the selected 100 respondents from barangays Bonga Mayor, Bonga Menor, Poblacion, San Pedro, Tanawan and Tibagan using convenience sampling technique.

The responses to every item in the questionnaire were tabulated and transmitted into percentages. The percentage of responses to every item was determined by dividing the total number of responses by the total number of respondents.

Frequency counts and weighted means were used to determine the possibility of chicarooms in becoming a big food business. The weighted mean was obtained by dividing the total weighted product (WP) by the total frequency (f). The weighted product was obtained by multiplying the total number of responses by the degree of response, which was 5 for Extremely Possible, 4 for Very Possible, 3 for Somewhat Possible, 2 for Slightly Possible and 1 for Not at All Possible. The sum total of the weighted product was divided by the frequency and the result was rounded off to the nearest hundredths. The mean responses were tabulated and interpreted using the following scale:

4.21-5.00 – extremely possible

3.41-4.20 – very possible

2.61-3.40 – somewhat possible

1.81-2.60 – slightly possible

1.00 -1.80 – not at all possible

Results

Table 1

Respondents' Preference as Food Eater

Respondents' Preference as Food Eater	f	%
Pure Vegetarian	15	15
Partly Vegetarian	51	51
Non Vegetarian	34	34
Total	100	100%

Table 1 shows that 51% of the respondents were partly vegetarian, 34% were non vegetarian and only 15% of them were pure vegetarian.

Table 2

Respondents Who Already Tasted Chicharon

Respondents Who Already Tasted Chicharon	f	%
Yes	92	92
No	8	8
Total	100	100%

As shown in Table 2, almost all of the respondents have already tasted chicharon.

Table 3

Respondents' Acceptability of Chicharon

Acceptability Factors of Chicharon	f	%
Crunchy	70	41.4
Salty Flavor	30	17.8
Tasty/Delicious	60	35.5
Appearance	2	1.2
Healthy	7	4.1
Total	169	100

Table 3 shows that the crunchy texture and taste were the qualities that the respondents most liked in chicharon with 41.4%

and 35.5% responses respectively. It was followed by salty flavor with 17.8% responses and nutritional benefits with 4.1% responses. According to Dinglasan (2016), people are more likely to eat snacks with good taste/flavor, texture and nutritional benefits.

Table 4

Familiarity with Chicharooms

Familiarity with Chicharooms	f	%
Familiar	69	69%
Not Familiar	31	31%
Total	100	100%

Table 4 shows that 69 respondents were familiar with chicharooms while 31 respondents were not familiar with chicharooms.

Table 5

Respondents Who Already Tasted Chicharooms

Respondents Who Already Tasted Chicharooms	f	%
Yes	53	53%
No	47	47%
Total	100	100%

Table 5 revealed that 53 respondents have already tasted chicharooms, while 47 answered No.

Table 6

Respondents' Acceptability of Chicharooms

Acceptability Factors of Chicharooms	f	%	Rank
Crunchy	43	36.4	1
Tasty/Delicious	29	24.6	2
Healthy	28	23.7	3
Salty Flavor	11	9.3	4
Packaging	7	5.9	5
Total	118	100	100

Based on the results of the study, the crunchy texture ranked 1 as the quality that the respondents most liked in chicharooms followed by its tasty/delicious flavor which ranked number 2. Moreover, nutritional benefits were also considered by the respondents in eating chicharooms. Very few identified good packaging as an important factor in eating chicharooms.

Table 7

Respondents Who Will Patronize Chicharooms Instead of Chicharon

Patronize Chicharoom Instead of Chicharon	f	%
Yes	83	83
No	17	17
Total	100	100

As shown in Table 7, 83% of the respondents will patronize chicharooms while 17% will not patronize the product.

Table 8

Respondent's Perceptions on the Contribution of Chicharooms in Promoting Food Delicacies Business in Bustos

Contribution of Chicharooms in Promoting Food Delicacies Business in Bustos	f	%
Yes	80	80
No	20	20
Total	100	100

Table 8 shows that 80% of the respondents perceived that chicharooms can contribute for the promotion of food delicacies business in Bustos

Table 9

Respondents' Perceptions on the Chicharooms Possibility of Becoming a Big Food Business

5 (EP)	4 (VP)	3 (SWP)	2 (SP)	1 (NAP)	WA	Ι
26	45	23	5	1	3.9	Very Possible

Table 9 shows that 45 of the respondents perceived that chicharooms is very possible to become a big food business, while 26 and 23 respondents perceived that is extremely possible

and somewhat possible respectively. Based on the result of the study, it is very possible that the product will become a big food business someday.

Conclusions

- 1. Almost half of the respondents were partly vegetarian while the remaining were non- vegetarian and pure vegetarian.
- 2. Based on the results of the study, crunchy texture and taste were the qualities that the respondents most liked in chicharon.
- 3. Based on the results of the study, crunchy texture ranked 1 as the quality that the respondents most liked in chicharooms followed by its tasty/delicious flavor which ranked number 2. Moreover, nutritional benefits were also considered by the respondents in eating chicharooms.

Recommendations

- 1. Continuous growing of mushroom should be done by the raisers/farmers in order to sustain the manufacture of chicharooms.
- 2. Provide more advertisements and promotions of the product.
- 3. Marketing research must be conducted to evaluate the taste and food preferences of the consumers.

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