

# ACCEPTABILITY OF TURMERIC AND TARO PASTA

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## INTRODUCTION

Filipino occasions is not complete without a pasta on the table. It is one of the favorite comfort food of everyone special the young ones'. Filipino pasta always comes with a slice of hotdog or bits of mushroom and carrots and a little bit sweet compare to the traditional pasta that is a bit slightly sour because of tomato.

Infusing local ingredients will definitely enhance the nutritive value of pasta and at the same time it also improve its color. Turmeric has a warm, bitter taste and is frequently used to flavor or color curry powders, mustards, butters, and cheeses. Because curcumin and other chemicals in turmeric might decrease swelling, it is often used to treat conditions that involve pain and inflammation. Turmeric contains curcumin, a substance with powerful anti-inflammatory and antioxidant properties. Most studies use turmeric extracts that are standardized to include large amounts of curcumin. (Gunnars, 2821)

Taro root is a vegetable used in a variety of cuisines around the world. It has a mild, nutty taste, starchy texture, and nutrition benefits that make it a healthier alternative to other root vegetables like potatoes. Taro root is commonly added to savory dishes or fried as a snack, but it can also add a creaminess and purple color to sweet recipes. As one of the world's oldest cultivated plants, taro sometimes goes by different names including arbi, dasheen, and eddoe. Different varieties can be used interchangeably and bring the same nutritional benefits to your meal. (webmd)

The researchers conducted this study to create new variety of pasta using turmeric and taro which often neglected and underutilized despite of its nutritional value. Hence, this study aimed to developed a healthy and nutritious type of Pasta, and asses the level of acceptability of Turmeric and Taro Pasta.

## Statement of the problem

This study conducted in order to produce a pasta using Turmeric and Taro as the major ingredients.

Specifically, it sought to answer the following sub-problems:

1. What are the ingredients, tools, utensils, and procedure in the preparation of Turmeric and Taro Pasta?

2. How do the consumer and expert respondents assessed the level of acceptability of Turmeric and Taro Pasta in terms of:

2.1 Appearance;

2.2 Flavor;

2.3 Aroma;

2.4 Porosity; and

2.5 Texture?

3. Is there any significant difference in the assessment of the respondents in the aforementioned variable?

4. What is result of nutritional analysis of Turmeric and Taro Pasta?

## METHODOLOGY

### Research Method Used

The descriptive method of research is used in the study. The principal purpose of this method is to develop and prepare pasta product as it objectives at the time of the study.

According to William Cohen (2005), descriptive defined as "purposive process of gathering data, analyzing, classifying and tabulating data about prevailing condition, practices, beliefs, process, trend and cause-effect relationship and making an adequate and accurate interpretation about such data with or without the aid of statistical method". Respondents of the Study

This study employed a purposive sampling procedure to represent the groups of respondents used. The researcher's intentions when selecting the people that are to be studied or investigated aimed to create a sample to generalize.

The proponents used a set of survey questionnaire which will identify respondents age, sex, civil status and educational attainment; evaluated the level of acceptability of the finish product by the selected groups of respondents.

The following tables shown are the demographic characteristics of the respondents.

**Table 1**

### **Frequency and Percentage Distribution of Respondents**

Respondents	Population	Percentage
Expert	10	20.00
Consumer	20	80.00
<b>Total</b>	<b>30</b>	<b>100</b>

As shown in table 1, there were twenty or 80 percent consumer respondents and five or 20 percent expert respondent.

**Table 2**

### **Distribution of the Respondents According to Sex**

Sex	Expert		Consumer		Overall	
	f	%	f	%	f	%
Male	6	60	7	35	13	30
Female	4	40	13	65	17	70
<b>Total</b>	<b>5</b>	<b>100</b>	<b>20</b>	<b>100</b>	<b>25</b>	<b>100</b>

As shown in table 2, there were six or 60 percent male expert respondent and 40 percent female expert respondent.

On the other hand, there were seven or 35 percent female consumer respondents and thirteen or 65 percent male.

Generally, there are 13 or 30 percent male respondent and 17 or 70 percent female respondents.

**Table 3**

### **Distribution of the Respondents According to Age**

Age	Experts		Consumers		Overall	
	f	%	f	%	f	%
21-26 years old	1	10	9	45	10	40
27-39 years old	8	80	4	30	12	42
40 years old and above	1	10	7	35	8	18
<b>Total</b>	<b>10</b>	<b>100</b>	<b>20</b>	<b>100</b>	<b>30</b>	<b>100</b>

Table 3 shows that eight or 80 percent expert respondents belong to age range of 27 to 39 years old; 10 percent are belonging to the age range of 21-26 years old and 48 years old and above.

As to consumer respondents, there were four or 28 percent were 27 to 39 years old, nine or 45 percent are 21-26 years old, seven or 35 percent is 48 years old and above.

Generally, there are 10 or 40 percent respondents belong to the age range of 21 - 26 years old; 12 or 42 percent of the respondents belong to the age range of 27 39 years old; and 8 or 18 percent of the respondents are in the age range of 48 years old and above.

Such findings may attribute to the fact that majority of the respondents are at the their middle age.

Table 4

Distribution of the Respondents According to Educational Attainment

Educational Attainment	Experts		Consumers		Overall	
	f	%	f	%	f	%
College graduate	4	80	6	85	10	75
Master's graduate	2	20	1	15	3	25
<b>Total</b>	<b>20</b>	<b>100</b>	<b>20</b>	<b>100</b>	<b>30</b>	<b>100</b>

It could be gleaned in Table 5 that is only four or 80 percent of expert respondent is a college graduate and 2 or 28 percent earned their master's degree.

As to consumer respondents, there were six or 85 percent are college graduate, one or 15 percent are master's graduate holders. In general, there are 10 or 75 percent bachelor's degree and 3 or 25 percent earned their master's degree.

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary of Findings

The following are the salient findings of the study.

**1. On the ingredients, tools, utensils and procedure in the preparation and development of the Turmeric and Taro Pasta.**

**Ingredients.** The following are the ingredients used in Turmeric and Taro

Pasta: 1 tsp. turmeric juice, 2 cups semolina flour, X cup all purpose flour, % cup taro root, 1 piece egg yolk, pinch of salt, 1 tbsp. olive oil and 1/3 cup water.

**Tools and Utensils.** The following are the tools and utensils

used: 1 piece filler, 1 piece grater, 1 piece knife, 1 piece chopping board, 1 piece rolling pin, 1 unit pasta machine, 1 piece cookie sheet, 1 set measuring cup, 1 set measuring spoon, 4 pieces mixing bowl, and 4 pieces gloves.

**Procedure in the Preparation of Turmeric and Taro Pasta.** First, assemble all the ingredients that will be used in the preparation of Turmeric and Taro Pasta. In a bowl combine all the dry Ingredients then put all over the liquid ingredients to the dry ingredients then mix until well combine an form into dough. Knead the dough until smooth. Let it at rest or put it in the refrigerator for about 30 minutes.

Divide the dough into slices. Work with one section at a time and cover the rest. Lightly flour the dough on both sides and use the rolling pin for lightly press before using the pasta roller. Using a pasta roller or machine, flatten the dough around 3-4 mm. Once flatten, mold into ribbon shape. Dry the pasta using a dehydrating machine or arrange in a tray or cookie sheet and air dry, once dry pack in an airtight container or zip lock.

**2. On the respondent assessment in the level of acceptability of Turmeric and Taro Pasta.** The expert and consumer respondents generally assessed the level of acceptability of Turmeric and Taro Pasta, rank no. 1 is variable 1 which is "appearance" rated highly acceptable as backed-up by the composite weighted mean of 4.55. Rank no. 2 is variable 5 which is "porosity" rated highly acceptable as evidenced by the composite weighted mean of 4.33. Rank no. 3 is variable 2 which is "flavor" rated highly acceptable as sustained by the composite weighted

mean of 4.25. Rank no. 4 is variable 3 which is "aroma" rated acceptable as proven by the composite weighted mean of 4.18. Rank no. 5 is variable 4 which is "texture" rated acceptable as indicated by the composite weighted mean of 4.00. This signifies that Turmeric and Taro Pasta was highly acceptable to the expert and consumer respondents in terms of its appearance, flavor, texture, aroma, and porosity as reinforced by the overall weighted mean of 4.26.

**3. On the significant difference on the assessment of respondents on the level of acceptability of Turmeric and Taro Pasta.** The results of the significant difference in the assessment of the consumer and expert respondents on the acceptability of Turmeric and Taro a Pasta, it obtained a computed t value of 2.49116 which is greater than the tabular value of 2.048 at five percent level of significance with 28 degrees of freedom and verbally interpreted significant resulted to the rejection of the null hypothesis. Since we reject the null hypothesis, there is a strong indication that there is a significant difference on the assessment of the expert and consumer and respondents on the of acceptability of Turmeric and Taro Pasta in terms of appearance, flavor, texture, aroma, and porosity.

**4. On the results of moisture analysis of Turmeric and Taro Pasta.**

Based on the moisture analysis result, it has 29.203% of moisture per 5.00 grams of Turmeric and Taro Pasta at 110 C heating process.

As to the nutritional analysis through happy forks.com Turmeric and Taro pasta contains 14% carbohydrates, 18% dietary fiber, 15% protein, 8% cholesterol, 10% iron, 4% total fat, 2% saturated fat and 1% calcium at 74 grams per serving.

## **Conclusions**

Based on the findings of the study, the following are the conclusions:

1. Turmeric and Taro can be used as the main ingredients in the preparation and development of Pasta..

2. Turmeric and Taro Pasta was highly acceptable to the expert and consumer respondents in terms of its appearance, flavor, texture, aroma, and porosity.

3. The expert and consumer respondents perceived different evaluation on the variables presented under the level of acceptability of Turmeric and Taro Pasta in terms of its appearance, flavor, texture, aroma, and thickness.

4. Turmeric and Taro Pasta is rich in important nutrients while moisture analysis result revealed that the product has a standard moisture content comparable to commercial pasta. Recommendations

Based on the findings and conclusions of the study, it is recommended that:

1. Turmeric and Taro Pasta has to undergo further research

standardized the recipe and to improve its quality.

3. Similar study may be conducted using other root crops.

4. The results of the study should be taken as reference future related study.