### BIBLIOGRAPHY

CAOILE, AGUSDA A. OCTOBER 2012. Consumer Behavior towards Locally Produced Yogurt. Benguet State University, La Trinidad, Benguet.

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### ABSTRACT

The study was conducted in La Trinidad, Benguet to identify the consumers of locally produced yogurt, to identify the behavior of consumers towards locally produced yogurt and to identify the person-related factors, properties of food, and environmental factors affecting consumer behavior. The 90 respondents were grouped into professional, non-professional and student.

The result of the study showed that most of the respondents were from the Cordillera Region with varied occupations.

Most of the respondents were female and have tried locally produced yogurt. They were influenced by several factors like health value of the product, knowledge on the dietary content about yogurt, and curiosity. However, there were factors that hinder respondents to consume locally produced yogurt. This includes: a) disliked the taste, b) high price, c) lack of information about its nutritional value, d) never see any advantage in consuming the product, e) not interested, and f) irregular supply.



Also, majority of the respondents were aware on the dietary content of yogurt but some were unaware. The major reasons of unawareness were the lack of enough information, not interested and have no opinion.

All respondents believed that yogurt consumption helps their body to become fit and healthy, locally produced yogurt has a lot of health benefits, and provides energy.

Further, the entire respondents preferred the health benefits or the nutritional facts of the food products followed by taste, ingredients, appearance, color, and packaging. Most of them preferred most of cookies and creams and strawberry flavors.



#### **RESULTS AND DISCUSSION**

### Socio-Demographic Profile of the Respondents

<u>Age</u>. Table 1 showed that 46.7% of the professional respondents belonged to age bracket of 21-30 years old while 40% are in the age bracket of 31-40 years old. The rest belonged to 41-50 years old and 51 years old and above. Many of the non-professionals (46.7%) are older with ages ranging from 31-40 years old while 33.3% had ages from 21-30 years old and the rest have ages ranging from 41-50 years old and over. Most of the students (76.7%) have ages 20 years old and below while 23.3% belong to the age bracket of 21-30 years old.

<u>Gender</u>. Table 1 presents that majority of the professional (53.3%) are female, similarly with the non-professional (90%) and students (86.7%). On the other hand, there are 46.7% of the professionals are male while lesser respondents from the non-professionals and students are observed. The result implies that women are more interested to yogurts. <u>Religious affiliation</u>. Majority of the professionals (56.7%) are Roman Catholic, followed by Anglican (20%) and the rest belonged to other religious group and similar observations holds true with the non-professionals and students. The result indicates that Roman Catholic is the dominant religion among the respondents.

Educational attainment. All the professionals as expected are all degree holders, while some non-professionals are college undergraduate (23.3%). The rest of the non-professionals have attained high school undergraduate (20%), elementary graduate (6.7%) and vocational (6.7%). As to students, most of them are still in the college level (93.3%). <u>Occupation</u>. The table shows that majority (66.7%) of the professionals are employed in government agencies while many of the non-professionals are housekeepers (46.7%) and



laborers (36.7%). Moreover, there are also professionals and non-professionals that are self-employed.

Profiles	Profes	sionals	Non-Pro	fessionals	Stu	dents
Profiles	F	%	F	%	F	%
Age						
Below 20	-	-	-	-	23	76.7
21-30	14	46.7	10	33.3	7	23.3
31-40	12	40.0	14	46.7	-	-
41-50	2	6.7	5	16.7	-	-
Above 51	2	6.7	1	3.3	-	-
TOTAL	30	100	30	100	30	100
Gender						
Male	14	46.7	3	10.0	4	13.3
Female	16	53.3	27	90.0	26	86.7
TOTAL	30	100	30	100	30	100
Religious Affiliation						
Roman Catholic	17	56.7	18	60.0	16	53.3
Iglesia Ni Cristo	-	-	-	-	1	3.3
Jehova's Witnesses	3	10.0	-	-	1	3.3
Baptist	1	3.3	2	6.7	1	3.3
Anglican	6	20.0	6	20.0	3	10.0
Others	3	10.0	4	13.3	8	26.7
TOTAL	30	100	30	100	30	100
Educational Attainment						
Elementary Graduate	-	-	2	6.7	-	-
Highschool Level	-	-	6	20.0	1	3.3
Highschool Graduate	-	-	13	43.3	-	-
College Level	30	100	7	23.3	28	93.3
College Graduate	-	-	-	-	-	-
Vocational	-	-	2	6.7	1	3.3
TOTAL	30	100	30	100	30	100

Table 1. Socio-demographic profile of respondents

Table 1. Continued...



Profiles	Profes	ssionals	Non-Pro	fessionals	Stuc	lents
Profiles	F	%	F	%	F	%
Occupation						
Farmer	-	-	1	3.3	-	-
Housekeeper	-	-	14	46.7	-	-
Student	-	-	-	-	30	100
Businessman/woman	4	13.3	-	-	-	-
Self-employed	3	10.0	4	13.3	-	-
Government employee	20	66.7	-	-	-	-
Laborer	-	-	11	36.7	-	-
Private employee	3	10.0	-	-	-	-
TOTAL	30	100	30	100	30	100

## Consumers' Behavior toward Locally Produced Yogurt

<u>Respondents who tried locally produced yogurt</u>. Table 2 shows who have tried locally produced yogurt. Most of the respondents have tried locally produced yogurt. On the other hand, lesser number of the respondents never tried yet the locally produced yogurt.

The data implied that there are still people who are not aware about the yogurt locally produced in the area.

<u>Reasons/factors influencing respondents to try locally produced yogurt</u>. Table 3 presents that among those who have tried locally produced yogurts; many of the respondents are perceived and influenced with several factors like the health value of the product and knowledge on the dietary content about yogurt. While the students, many claimed that curiosity influenced them to try locally produced yogurt, followed by the perceived health value of the product. Other reasons are enumerated below.



Particulars	Profes	ssionals	Non-Pro	fessionals	Students		
1 articulars	F	%	F	%	F	%	
Who tried	26	86.7	27	90	26	86.7	
Who have not tried	4	13.3	3	10	4	13.3	
TOTAL	30	100	30	100	30	100	

Table 2. Respondents who tried locally produced yogurt

Table 3. Reasons/factors influencing respondents in trying locally produced yogurt

Reasons	Profes	ssionals	Non-Pro	fessionals	Stu	dents
Reasons	F	%	F	%	F	%
Presentation of product through taste test	5	19.2	2	7.4	5	19.2
Knowledge on the dietary content about yogurt	13	50.0	18	66.7	2	7.7
Presence of the product in the market	7	26.9	3	11.1	3	11.5
Perceived health value of the product	14	53.8	11	40.7	9	34.6
Influenced by classmates/ friends/co-workers	7	26.9	3	11.1	7	26.9
Influence by a family member	5	19.2	1	3.7	5	19.2
Curiosity on the product	5	19.2	1	3.7	10	38.5

\*multiple response

<u>Factors for non-consumption of locally produced yogurt</u>. Table 4 presents how the following factors hinder respondents to consume locally produced yogurt. It shows the professionals claimed that high price (56.3%) and lack of information about the nutritional value (56.3%) hinders them to consume locally produced yogurt. The rest dislike the taste (31.3%), not interested (31.3%) and (25%) never see any advantage about the product. Some answered that the product is of poor quality (25%) and the supply is irregular (25%).



The non-professionals have more or less the same reasons with the professionals. Sixty one point one percent (61.1%) on the students perceived the price of locally produced yogurt is high while the rest dislike the taste (44.4%), lacked information about its nutritional value (16.7%), not interested (16.7%) and the irregular supply (16.7%) in the market.

<u>Types of locally produced yogurt consumed</u>. Table 5 presents the different flavors of locally produced yogurt which was first tried by respondents. It shows that among the professionals that many of them tried the strawberry and blueberry flavor (19.2%) respectively. Other flavors were also been tried and tested. Many of the non-professionals (44.4%) also tried strawberry flavor and the least of them to other flavor. As to students, some have tried ube flavor (26.9%), followed by mango, strawberry, cookies and creams with the same proportion of 19.2% and the least have tested the other flavors like blueberry with raspberry (3.8%) and melon (3.8%).

Factors	Profe	ssionals	Non-Pro	fessionals	Stud	ents
	F	%	F	%	F	%
Dislike the taste	5	31.3	-	-	8	44.4
High price	9	56.3	15	83.3	11	61.1
Lack of information about its nutritional value	9	56.3	5	27.8	3	16.7
Never see any advantage in consuming the product	4	25.0	6	33.3	2	11.1
Not interested	5	31.3	4	22.2	3	16.7
Irregular supply	4	25.0	-	-	3	16.7

Table 4. Factors for non-consumption of locally produced yogurt

\*multiple responses



Tures	Profes	ssionals	Non-Pro	fessionals	Stu	dents
Types	F	%	F	%	F	%
Mango	3	11.5	3	11.1	5	19.2
Ube	3	11.5	1	3.7	7	26.9
Pandan	2	7.7	2	7.4	-	-
Strawberry	5	19.2	12	44.4	5	19.2
Honey	-	-	-	-	-	-
Vanilla	1	3.8	2	7.4	2	7.7
Blueberry	5	19.2	1	3.7	-	-
Blueberry w/ Raspberry	2	7.7	-	-	1	3.8
Cookies & Creams	3	11.5	6	22.2	5	19.2
Melon	2	7.7	-	-	1	3.8

Table 5. Types of locally produced yogurt consumed

\*multiple responses

<u>Present consumers of locally produced yogurt</u>. Table 6 shows that among the professionals who have tasted locally produced yogurt, only 38.5% are still consuming as compared to 61.5% who are not. While the non-professionals, 33.3% still continue to consume as compared to 66.7% who are not consuming. The students, 30.8% of them are still consuming while 69.2% are not. The result implies that yogurts are not considered as a basic food items for them.

<u>Frequency of consumption</u>. Table 7 shows the frequency of consumption of the respondents on locally produced yogurt. Among the professionals, 38.5% have consumed locally produced yogurt once while the others (26.9%) consumed several times, (19.2%) twice and (15.4%) occasionally. Majority (55.6%) on the non-professionals consumed locally produced yogurt several times and the rest consumed once (22.2%) and twice (22.2%). Among the students, locally produced yogurt was consumed twice and several times (34.4%) and others claimed to have consumed it once (26.9%) and occasionally



(3.8%). The data means that yogurt consumption is becoming a food supplement for the respondents.

<u>Average monthly consumption</u>. Table 8 shows the average consumption of respondents monthly. Among the professional, majority of the respondents consumed 10-20 bottles a month (70%), while 55.6% on the non-professionals consumed 1-10 bottles and 62.5% of the students consumed 1-10 bottles. The data implies that the respondents tend to increase consumption thus realize the health benefits derived from yogurts.

Table 6. Present consumers of locally produced yogurt

Particulars –	Profes	sionals	Non-Pro	fessionals	Students		
Faluculais	F	%	F	%	F	%	
Consuming	10	38.5	9	33.3	8	30.8	
Not consuming	16	61.5	18	66.7	18	69.2	

Table 7.	Frequency	of con	sumption
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Particulars	Profes	ssionals	Non-Pro	fessionals	Stu	dents
Faiticulais	F	%	F	%	F	%
Once	10	38.5	6	22.2	7	26.9
Twice	5	19.2	6	22.2	9	34.6
Several Times	7	26.9	15	55.6	9	34.6
Occasionally/Seldom	4	15.4	-	-	1	3.8

\*multiple response

## Table 8. Average monthly consumption

Particulars	Profe	ssionals	Non-Pro	fessionals	Students		
Farticulars	F	%	F	%	F	%	
1-10 bottles	3	30.0	5	55.6	5	62.5	
10-20 bottles	7	70.0	4	44.4	3	37.5	

Product description of locally produced yogurt. Table 9 indicates that majority of the

respondents: professionals (73.1%), non-professional (77.8%) and students (62.9%) agreed



that locally produced yogurt is colorful, while the rest remain to be neutral and others disagreed. Similarly, majority claimed that locally produced yogurt is delicious and attractive. This implies that the respondents have some commonality in perceptions as to what appeals them about yogurts.

<u>Factors influencing locally produced yogurt consumption</u>. Table 10 shows that among the yogurt consumers, most of the respondents are influence to continue yogurt consumption was due to the health value, followed by the presence of the product in the market, preference of family/relatives, low price and suggested by friends. This means that the respondents have more or less the same factors influencing them to consume yogurts.

<u>Time of consumption</u>. Table 11 shows that 60% respondents of the professionals and nonprofessionals and students consumed locally produced yogurt during snack or break time. However majority of the non-professionals 66.7% and students (62.5%) consumed anytime. The table further indicate that consumption of yogurts vary among the different respondents.

Particular		Pr	ofess	sionals	5	Non-Professionals					Students							
S		А		N	Γ	DA		А		N	Γ	DА	1	A	N	1	Γ	DA
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Calarfal	1	73.		26.			2	77.		22.			1			26.		3.
Colorful	9	1	7	9	-	-	1	8	6	2	-	-	8	69.2	7	9	1	8
	1	69.		30.			1	70.		29.			1		1	46.		
Delicious	8	2	8	8	-	-	9	4	8	6	-	-	4	53.8	2	2	-	-
	1	73.		26.			2	74.		25.			1		1	46.		7.
Attractive	9	1	7	9	-	-	0	1	7	9	-	-	2	46.2	2	2	2	7

Table 9. Product description of locally produced yogurt

Legend: A-Agreed; N-Neutral; DA-Disagreed

Table 10. Factors influencing locally produced yogurt consumption

Factors	Profess	sionals	Non-Prot	fessionals	Students	
Tactors	F	%	F	%	F	%



Presence in the market	3	30.0	2	22.2	4	50.0
Low price	2	20.0	-	-	1	12.5
Preferred by family/relatives	3	30.0	1	11.1	-	-
Suggested by friends	1	10.0	1	11.1	1	12.5
Perceived health value	8	80.0	8	88.9	5	62.5

### Table 11. Time of consumption

Particulars	Profes	sionals	Non-Pro	ofessionals	Students	
	F	%	F	%	F	%
Breakfast	2	20.0	-	-	-	-
Lunch	-	-	-	-	1	12.5
Dinner	1	10.0	-	-	-	-
Break time	6	60.0	4	44.4	2	25.0
After physical work-out	2	20.0	-	-	-	-
Anytime	2	20.0	6	66.7	5	62.5

\*multiple response

<u>Market outlet for locally produced yogurt</u>. Table 12 presents the market outlets where the respondents purchased locally produced yogurt. Professional respondents purchased locally produced yogurt at sari-sari store. Some non-professionals and students buy to street vendors. Moreover, students buy in school canteen.

## Table 12. Market outlet for locally produced yogurt

Market Outlets -	Profes	sionals	Non-Pro	fessionals	Students		
	F	%	F	%	F	%	
Sari-sari stores	10	100	6	66.7	7	87.5	
Side-walk /street vendors	-	-	3	33.3	1	12.5	
School canteen	-	-	-	-	2	25.0	

\*multiple response

Person-related Factors Affecting Consumer Behavior

<u>Biological factors</u>. This factor includes the effect of age and body weight on locally produced yogurt consumption.



Table 13 presents the effect of age to yogurt consumption. Many professionals (46.7%) claimed that age has no effect on consumption of locally produce yogurts. While 50% of the non-professionals perceived that age have either effect or no effect to yogurt consumption, while most of the students claimed that age do not affect their consumption. Table 14 shows the perceived effects of consuming yogurts to the body weight. Majority of the respondents claimed that consumption of yogurts has no effect to body weight. However, there are some perceived to have an effect to their body weight. The result implied that consumption of yogurt though it is being considered healthy food does not mean increase in body weight.

Table 13. Effect of age on yogurt consumption

Particulars	Profes	sionals	Non-Pro	fessionals	Students		
Particulars	F	%	F	%	F	%	
Has effect	14	46.7	15	50.0	4	13.3	
No effect	16	53.3	15	50.0	26	86.7	
TOTAL	30	100	30	100	30	100	

Table 14. Effect of yogurt consumption body weight

Particulars	Profes	sionals	Non-Pro	fessionals	Students		
Faiticulais	F	%	F	%	F	%	
Has effect	12	40.0	11	36.7	12	40.0	
No effect	18	60.0	19	63.3	18	60.0	
TOTAL	30	100	30	100	30	100	

<u>Psychological factors</u>. This factor includes the awareness on the dietary content of yogurt, perception towards locally produced yogurt, and reasons on the unawareness on the dietary content of yogurt.



Table 15 presents the awareness on the dietary content of yogurt. Majority of the respondents are aware about the dietary content of yogurts, but there are some that are unaware about the dietary nutrients of the products. This implies that the respondents are not fully aware about the health benefits derived from yogurt consumption.

Table 16 presents the perceptions of respondents about the benefits derived from yogurt consumption. Majority of the respondents claimed that yogurt consumption is good for the health which can be attributed further to the high dietary/nutrient content. But there are some consumers that do not have any idea about health benefits derived from yogurt.

Table 17 shows the reasons of being unaware on the dietary content of yogurt. The data revealed the lack enough information, not interested and have no opinion as the major reasons for non-consumption of yogurt. Therefore, the result indicates the need to promote the product as a supplemental food to many consumers.

Particulars -	Profes	sionals	Non-Pro	fessionals	Students		
r articulars	F	%	F	%	F	%	
Aware	17	56.7	19	63.3	18	60.0	
Not aware	13	43.3	11	36.7	12	40.0	
TOTAL	30	100	30	100	30	100	

Table 15. Awareness on the dietary content of yogurt

### Table 16. Perception towards locally produced yogurt

Perceptions	Profe	ssional s	Non-Pro	fessionals	Students		
	F	%	F	%	F	%	
Has high dietary content	7	23.3	6	20	6	20	
Better for health	19	63.3	15	50	16	53.3	



No idea on locally produced yogurt	9	30	7	23.3	9	30
Homemade product	-	-	4	13.3	-	-
*multiple response						

Table 17. Reasons for unawareness on the dietary content of yogurt

Reasons	Profes	sionals	Non-Pro	fessionals	Students		
Keasons	F	%	F	%	F	%	
Not interested	2	15.4	1	9.1	3	25.0	
Lack of information	11	84.6	10	90.9	8	66.7	
No opinion	2	2 15.4		18.2	3	25.0	

\*multiple response

## Properties of Food Affecting Consumer Behavior

<u>Physiological effects of yogurt consumption</u>. Table 18 showed the perceived physiological effects of yogurt consumption. All the respondents believed yogurt consumption helps their body to become fit and healthy, locally produced yogurt has a lot of health benefits, and provides energy. The results further proved that the respondents are gaining knowledge about the benefits derived from yogurt consumption.

Table 18. Physiological effects of yogurt consumption

		Professionals			N	on-Prot	fession	als		Students			
Particulars	Ag	greed	Disa	greed	Ag	reed	Disa	greed	Ag	greed	Dis	agreed	
	F	%	F	%	F	%	F	%	F	%	F	%	
Helps my body to become													
fit and healthy	30	100	-	-	30	100	-	-	25	83.3	5	16.7	
Gives me lot of health													
benefits	30	100	-	-	30	100	-	-	28	93.3	2	6.7	
Fruit-based products gives													
me energy	30	100	-	-	30	100	-	-	28	93.3	2	6.7	

<u>Sensory evaluation towards locally produced yogurt</u>. Sensory evaluation gives real answer regarding consumer quality according to Mason and Nottingham (2002). It is a science of judging and evaluating the quality of the food by the use of senses as stated by Mabesa



(1986). Caul (1957) also stated that the respondent should be generally healthy. Minor infections of the nose and throat might affect flavor perception. Nutritional health of the individual may also affect sensitivity. Acceptability ratings are as follows: Liked Extremely (LE), liked moderately (LM), neutral (N), disliked moderately (DM), and disliked extremely (DE).

Table 19 presents the evaluation of professionals towards locally produced yogurt. Professional respondents neither liked nor disliked the appearance of commercial yogurt and aroma of blueberry flavor. On the other hand, respondents liked moderately the taste of ube, pandan, strawberry flavors, and the color of cookies & creams flavor.

Table 20 presents the evaluation of non-professionals towards locally produced yogurt. Non-professionals neither like nor dislike the taste of commercial yogurt and aroma of blueberry flavor while they like moderately the aroma of ube and appearance of pandan flavors. Further, respondents liked moderately the taste of strawberry flavor but they neither liked nor disliked the appearance of cookies & creams flavor.

Table 21 presents the evaluation of students towards locally produced yogurt. Students neither liked nor disliked the taste of commercial yogurt, blueberry, ube, and pandan flavors while they liked moderately the taste of strawberry flavor. On the other hand, respondents neither liked nor disliked the color of cookies & creams flavor.



Criteria		R	latings	5		- Mean	DE	Rank
	5	4	3	2	1	Weall	DE	Kalik
Commercial yogurt								
Taste	11	9	7	1	2	3.87	LM	3
Color	11	11	5	3	-	4.00	LM	4
Aroma	10	8	9	3	-	3.83	LM	2
Appearance	7	14	6	2	1	3.80	Ν	1
General acceptability	15	8	5	2	-	4.20	LM	
Blueberry flavor								
Taste	10	12	6	2	-	4.00	LM	2
Color	6	18	6	-	-	4.00	LM	2
Aroma	5	16	8	1	-	3.80	Ν	1
Appearance	9	19	2	-	-	4.23	LM	4
General acceptability	14	14	2	-	-	4.40	LM	
Ube flavor								
Taste	12	12	5	1	-	4.17	LM	1
Color	15	10	4	1	-	4.30	LM	2
Aroma	16	9	3	2	-	4.30	LM	2
Appearance	18	10	2	-	-	4.53	LM	4
General acceptability	16	12	2	-	-	4.47	LM	

# Table 19. Evaluation towards locally produced yogurt by professionals



# Table 19. Continued...

Criterie		F	Ratings	5		Maar	DE	Doult
Criteria	5	4	3	2	1	- Mean	DE	Rank
Pandan flavor								
Taste	10	11	8	1	-	4	LM	1
Color	15	15	-	-	-	4.5	LM	4
Aroma	17	10	2	1	-	4.43	LM	2
Appearance	16	12	1	1	-	4.43	LM	2
General acceptability	16	9	4	1	-	4.33	LM	
Strawberry flavor								
Taste	12	9	7	2	-	4.03	LM	1
Color	15	10	5		-	4.33	LM	3
Aroma	11	12	5	2	-	4.07	LM	2
Appearance	15	12	2	1	-	4.37	LM	4
General acceptability	17	10	2	1	-	4.43	LM	
Cookies & creams flavor								
Taste	15	15	-	-	-	4.5	LM	4
Color	10	11	8	1	-	4	LM	1
Aroma	16	9	3	2	-	4.3	LM	3
Appearance	9	19	2	-	-	4.23	LM	2
General acceptability	15	8	5	2	-	4.2	LM	



Oritoria		Ι	Ratings			- M	DE	D1-
Criteria	5	4	3	2	1	Mean	DE	Rank
Commercial yogurt								
Taste	4	6	11	8	1	3.13	Ν	1
Color	6	10	13	1	-	3.70	Ν	4
Aroma	10	6	8	6	-	3.67	Ν	3
Appearance	5	10	14	1	-	3.63	Ν	2
General acceptability	13	2	13	2	-	3.87	Ν	
Blueberry flavor								
Taste	10	11	8	1	-	4.00	LM	3
Color	9	11	10	-	-	3.97	LM	2
Aroma	9	9	10	1	1	3.77	Ν	1
Appearance	10	11	9	-	-	4.03	LM	4
General acceptability	12	11	7	-	-	4.17	LM	
Ube flavor								
Taste	11	12	5	2	-	4.07	LM	2
Color	13	12	4	1	-	4.23	LM	4
Aroma	10	19	10	1	-	3.93	LM	1
Appearance	12	13	3	1	1	4.10	LM	3
General acceptability	13	12	3	2	-	4.20	LM	

Table 20. Evaluation towards locally produced yogurt by non-professionals



# Table 20. Continued...

Critorio		F	Ratings			- Mean	DE	Domla
Criteria	5	4	3	2	1	Mean	DE	Rank
Pandan flavor								
Taste	11	6	13	-	-	3.93	LM	2
Color	11	8	11	-	-	4	LM	4
Aroma	11	8	11	-	-	3.93	LM	2
Appearance	8	10	12	-	-	3.87	LM	1
General acceptability	8	10	12	-	-	4.03	LM	
Strawberry flavor								
Taste	7	17	5	-	1	3.97	LM	1
Color	9	14	7	-	-	4.07	LM	2
Aroma	11	13	6	-	-	4.17	LM	3
Appearance	12	13	5	-	-	4.23	LM	4
General acceptability	13	11	6	-	-	4.23	LM	
Cookies & creams flavor								
Taste	11	12	5	2	1	4.07	LM	4
Color	8	10	12	-	-	3.87	LM	2
Aroma	13	2	13	2	-	3.87	Ν	2
Appearance	5	10	14	1	-	3.63	Ν	1
General acceptability	13	12	3	2	-	4.2	LM	



		I	Ratings				DE	
Criteria	5	4	3	2	1	Mean	DE	Rank
Commercial yogurt								
Taste	4	7	15	4	-	3.37	Ν	1
Color	5	11	13	1	-	3.67	Ν	4
Aroma	6	9	13	2	-	3.63	Ν	3
Appearance	5	11	11	3	-	3.60	Ν	2
General acceptability	8	13	9	-	-	3.97	LM	
Blueberry flavor								
Taste	7	12	9	2	-	3.80	Ν	1
Color	8	11	11	-	-	3.90	LM	2
Aroma	7	11	11	1	-	3.80	N	1
Appearance	8	14	7	1	-	3.97	LM	3
General acceptability	8	14	7	1	-	3.97	LM	
Ube flavor								
Taste	6	9	19	3	1	3.53	Ν	1
Color	5	15	8	2	-	3.77	Ν	3
Aroma	4	15	10	1	-	3.73	Ν	2
Appearance	6	16	7	1	-	3.90	LM	4
General acceptability	10	12	6	2	-	4.00	LM	

Table 21. Evaluation towards locally produced yogurt by students



# Table 21. Continued...

Critorio		I	Ratings			Maan	DE	Deals
Criteria	5	4	3	2	1	- Mean	DE	Rank
Pandan flavor								
Taste	5	9	12	4	-	3.5	Ν	1
Color	6	12	8	4	-	3.67	Ν	3
Aroma	5	14	7	4	-	3.67	Ν	3
Appearance	6	10	10	4	-	3.6	Ν	2
General acceptability	9	10	8	3	-	3.83	LM	
Strawberry flavor								
Taste	8	13	7	2	-	3.9	LM	1
Color	13	10	7	-	-	4.2	LM	3
Aroma	11	14	4	1	-	4.17	LM	2
Appearance	11	15	4	-	-	4.23	LM	4
General acceptability	13	12	5	-	-	4.27	LM	
Cookies & creams flavor								
Taste	10	12	6	2	-	4	LM	4
Color	5	11	13	1	-	3.67	Ν	1
Aroma	4	15	10	1	-	3.73	Ν	2
Appearance	8	14	7	1	-	3.97	LM	3
General acceptability	6	16	7	1	-	3.9	LM	



### Environment Factors Affecting Consumer Behavior

Economic factor. Table 22 presents that 40% of the professionals have an income ranging from 16,000-20,000 pesos, 20% with higher income bracket at 21,000-25,000 pesos and the rest are either to have lower or higher income bracket. Majority of the non-professionals have income bracket of 6,000-10,000 pesos (66.7%) while 30% have less than 5,000 pesos. Monthly income of the students is based on their allowances. Majority of them have income/allowance of 5,000 or less (73.3%) and some with over 6,000 pesos. This means that the professionals have higher income as compared to non-professionals. Thus, they may have budget to buy and consume yogurt. The finding further supports the frequency or time of consuming yogurts.

<u>Cultural factor</u>. Table 23 revealed that the culture regardless of their affiliation does not affect their locally produced yogurt consumption.

Income (PhP)	Profes	sionals	Non-Pro	fessionals	Students		
meonie (i m )	F	%	F	%	F	%	
less than 5,000	-	-	9	30.0	22	73.3	
6,000-10,000	4	13.3	20	66.7	6	20.0	
11,000-15,000	5	16.7	1	3.3	2	6.7	
16,000-20,000	12	40.0	-	-	-	-	
21,000-25,000	6	20.0	-	-	-	-	
above 25,000	3	10.0	-	-	-	-	
TOTAL	30	100	30	100	30	100	

Table 22. Household monthly income



Particulars	Profes	sionals	Non-Pro:	fessionals	Students		
	F	%	F	%	F	%	
Affected	-	-	-	-	-	-	
Not affected	30	100	30	100	30	100	
TOTAL	30	100	30	100	30	100	

Table 23. Effect of culture on locally produced yogurt consumption

<u>Marketing factor</u>. Table 24 shows the different factors affecting/influencing individuals to buy yogurts. Majority of the respondents agreed that all the factors identified influenced them to buy locally produced yogurts, and only few disagreed to the factors mentioned. This means that the respondents tend to buy, patronize locally produce products in the market.

Table 24.	Factors	affecting	respondent	s in l	buving	locally	produced	vogurt
							P	J ~ 0 ·····

		Profes	sion	als	N	on-Pro	fessi	onals		Stu	dents	
Factors	Ag	Agreed		Disagreed		greed	Dis	agreed	Ag	greed	Disagreed	
	F	%	F	%	F	%	F	%	F	%	F	%
Locally known product	27	90.0	3	10.0	29	96.7	1	3.3	22	73.3	8	26.7
Readily available in the market	25	83.3	5	16.7	24	80.0	6	20.0	22	73.3	8	26.7
Guaranteed satisfaction	28	93.3	2	6.7	25	83.3	5	16.7	22	73.3	8	26.7
Products are registered	28	93.3	2	6.7	29	96.7	1	3.3	29	96.7	1	3.3
Local products (yogurt) are cheaper	26	86.7	4	13.3	21	70.0	9	30.0	17	56.7	13	43.3
Local products (yogurt) are freshly processed	28	93.3	2	6.7	28	93.3	2	6.7	23	76.7	7	23.3



### Consumer Decision Process

<u>Need recognition</u>. Table 25 shows the different factors considered before buying local yogurts. All the professionals and non-professionals agreed that yogurt products must be accessible and available to the market outlets. Moreover, majority of the respondents agreed that all the other factors identified are considered before buying yogurts such as: the complete information about the product; affordability of the prices, suggestion of friends, family members, and other trusted people; curiosity with the product; and it depends on my sensory evaluation. For the low income people, they prefer quality products with an affordable price. The result therefore reveals that the respondents are becoming more aware about the different factors influencing characteristics products.

		Professionals				on-Pro	fessi	onals		Stu	dents	
Factors	Ag	greed	Disagreed		Ag	greed	Dis	agreed	Ag	greed	Disagreed	
	F	%	F	%	F	%	F	%	F	%	F	%
Accessible market outlet	30	100	-	-	30	100	-	-	26	86.7	4	13.3
Complete information about the product	28	93.3	2	6.7	30	100	-	-	25	83.3	5	16.7
Affordable price	29	96.7	1	3.3	30	100	-	-	26	86.7	4	13.3
Suggestions of friends, family members	28	93.3	2	6.7	28	93.3	2	6.7	24	80	6	20
Curiosity	25	83.3	5	16.7	23	76.7	7	23.3	23	76.7	7	23.3
Depends on my sensory evaluation	29	96.7	1	3.3	24	80	6	20	28	93.3	2	6.7

Table 25. Factors considered before buying local yogurts



<u>Search for information</u>. Table 26 presents the sources of information about locally produced yogurt. Greater portions (70%) on the professional group had known the products from friends/relatives while 52.6% on the non-professionals (66.7%) had known it through advertisements and their friends/relatives. There are respondents have known the products through agricultural magazines.

<u>Evaluation</u>. This includes the attributes preferred by respondents, final evaluation of locally produced yogurt, affordability of locally produced yogurt, and acceptability of the packaging of locally produced yogurt.

Table 27 presents the respondents' preference to yogurt attributes of products. Entire respondents in each groups preferred the health benefits or the nutritional facts of the food products they are buying or consuming followed by taste, ingredients, appearance, color, and packaging.

Table 28 presents the final evaluation of respondents in terms of satisfaction. Majority of the respondents rated locally produced yogurts as satisfactory and some as excellent. But there are also respondents rated the products the need for improvements. The finding therefore suggests that the producers/processors need to continue to develop, improve the quality of the products.

Table 29 presents the perceived price acceptability of yogurts. Majority of the respondents claimed that the price is not affordable while only few claimed to be affordable. This means that the respondents might be interested to buy but they are constraints with the high price. Therefore, the producers/processors need to evaluate the cost of production to determine its pricing more acceptable to the buyers.



Table 30 presents the acceptability of packaging the products. Most of the respondents claimed to accept the packaging materials used, but there are also some that claimed not acceptable to them especially those concerns waste management. Therefore, the findings implied the need to look for alternative packaging materials that are more environmentally friendly.

Particulars	Profes	sionals	Non-Pro	fessionals	Students		
	F	%	F	%	F	%	
Agricultural magazines	3	17.6	2	10.5	2	11.1	
Shared by friends/relatives	12	70.6	9	47.4	12	66.7	
Advertisements	11	64.7	10	52.6	12	66.7	
Y							

Table 26. Sources of information about locally produced yogurt

\*multiple response

Table 27. Attributes of yogurt preferred by respondents

Attributes	Pro	ofession	als	Non-	Professio	onals		Students			
Attributes	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank		
Color	4.07	1.780	5	4.53	1.737	5	4.40	1.499	5		
Taste	3.07	1.363	2	2.97	1.033	2	2.87	1.634	2		
Packaging	4.80	1.157	6	4.90	1.029	6	4.50	1.717	6		
Appearance	3.40	1.610	4	3.77	1.675	4	4.37	1.351	4		
Ingredients	3.23	1.331	3	3.43	1.073	3	2.90	1.185	3		
Health											
benefits	2.37	1.903	1	1.47	1.106	1	2.10	1.269	1		



Particulars	Profes	Professionals		fessionals	Students		
Faiticulais	F	%	F	%	F	%	
Excellent	3	10.0	3	10.0	2	6.7	
Satisfactory	24	80.0	17	56.7	23	76.7	
Unsatisfactory	-	-	2	6.7	-	-	
Poor	-	-	-	-	1	3.3	
Needs improvement	3	10.0	8	26.7	4	13.3	
TOTAL	30	100	30	100	30	100	

Table 28. Final evaluation towards locally produced yogurt

Table 29. Price affordability of yogurts

Particulars	Profes	Professionals		Non-Professionals		Students	
	F	%	F	%	F	%	
Affordable	10	33.3	7	23.3	7	23.3	
Not affordable	20	66.7	23	76.7	23	76.7	
TOTAL	30	100	30	100	30	100	

Table 30. Acceptability towards the packaging of locally produced yogurt

Particulars	Profes	Professionals		Non-Professionals		Students	
	F	%	F	%	F	%	
Acceptable	28	93.3	30	100.0	29	96.7	
Not Acceptable	2	6.7	-	-	1	3.3	
TOTAL	30	100	30	100	30	100	

<u>Choice</u>. This includes the preferences of respondents towards type locally produced yogurt and willingness of respondents to increase consumption.

Table 31 presents the preferences of respondents towards locally produced yogurt according to the different flavors. It shows that each group had preference to cookies and creams flavor, and strawberry flavor. The data further reveals that the least preference is blueberry and commercial yogurt. Moreover, all other flavors were rank similarly. The



result implies that sweet taste preference over the other flavor, hence the processors should take into consideration to increase production of the preferred flavor.

Table 32 shows the willingness of respondents to increase consumption. Majority (60%) on the professionals are willing to increase as compared to 40 % who are not willing to increase. From the respondents who are willing, 66.7% have decided to increase consumption to 10% and others (33.3%) will increase to 5%. While those who are not willing have decided to just maintain their present consumption. As to non-professionals, all of them are not willing to increase present consumption but decided to maintain their present consumption. On the other hand, there are students (37.5%) that are willing to increase their present consumption and out of this, 66.7% will increase to 5% and 33.3% will increase to 10%. However, those students (62.5%) who are not willing to increase have decided to maintain their present consumption.

Non					
Professionals		Professionals		Students	
Mean	Rank	Mean	Rank	Mean	Rank
4.80	6	5.07	6	5.07	6
4.00	5	3.40	5	3.57	5
3.63	3	3.23	3	3.17	4
3.90	4	3.50	4	3.10	2
2.60	2	3.03	2	3.10	2
2.03	1	2.87	1	3.07	1
	Mean 4.80 4.00 3.63 3.90 2.60	4.80       6         4.00       5         3.63       3         3.90       4         2.60       2	Professionals         Professionals           Mean         Rank         Mean           4.80         6         5.07           4.00         5         3.40           3.63         3         3.23           3.90         4         3.50           2.60         2         3.03	Professionals         Professionals           Mean         Rank         Mean         Rank           4.80         6         5.07         6           4.00         5         3.40         5           3.63         3         3.23         3           3.90         4         3.50         4           2.60         2         3.03         2	Professionals         Professionals         Study           Mean         Rank         Mean         Rank         Mean           4.80         6         5.07         6         5.07           4.00         5         3.40         5         3.57           3.63         3         3.23         3         3.17           3.90         4         3.50         4         3.10           2.60         2         3.03         2         3.10

Table 31. Preferences of respondents towards locally produced yogurt



Particulars –	Profe	Professionals		Non-Professionals		Students	
	F	%	F	%	F	%	
Willing	6	60.0	-	-	3	37.5	
5%	2	33.3	-	-	2	66.7	
10%	4	66.7	-	-	1	33.3	
Not willing	4	40.0	9	100.0	5	62.5	
Maintain consumption	4	100.0	9	100.0	5	100.0	

Table 32. Willingness of respondents to increase consumption

### Chi-Square Values of the Product to the Respondents

Table 33 presents the correlation of the product to the respondents. Correlation analysis shows that the relationship of the product to the respondents is not significant which means that the difference in terms of preferences (like or disliked) is negligible. The difference also among the different sets of taste panel is not significant, which means that whether the taste panels were professionals, non-professionals and students the difference is negligible or no difference at all. As to commercial yogurt, blueberry, ube, pandan, and strawberry flavors, there is no significant correlation with the respondents. The products are not affected whether what respondent group the consumer belonged. Cookies and creams flavor has a highly significant correlation with the respondents. It shows that the respondents differ in terms of their preferences (liked or dislike).

Result implies that commercial yogurt, blueberry, ube, pandan, and strawberry flavors were not affected by the respondents, while cookies and creams flavor was affected as to their respondent groups.

Table 33. Chi-square values of the product to the respondents

Products	Chi-Square Values	Probability	Mean
Commercial yogurt	0.795 <sup>NS</sup>	0.672	5.07
Blueberry flavor	2.306 <sup>NS</sup>	0.316	3.40
Ube flavor	1.182 <sup>NS</sup>	0.554	3.23
Pandan flavor	3.918 <sup>NS</sup>	0.141	3.50
Strawberry flavor	1.269 <sup>NS</sup>	0.53	3.03
Cookies & creams flavor	9.691**	0.008	2.87

Legend:

\*\*highly significant (probability <0.05) NS-not significant (probability>0.05)



#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

The study was conducted to identify the consumers of locally produced yogurt, to identify the behavior of consumers towards locally produced yogurt and to identify the person-related factors, properties of food, and environmental factors affecting consumer behavior.

The 90 respondents of the study were group into professional, non-professional and student. The distribution of structured questionnaire was used as a tool in gathering data. The data gathered were examined and analyze using descriptive method like frequency, percentage and chi-square value analysis.

Findings showed that most of the respondents were from the Cordillera Region with varied occupations and are consumers of locally produced yogurt.

It was observed that most of the respondents were female. Most of them were influenced by several factors like health value of the product, knowledge on the dietary content about yogurt, and curiosity. There were certain factors that hinder respondents to consume locally produced yogurt. These are: a) disliked the taste, b) high price, c) Lack of information about its nutritional value, d) Never see any advantage in consuming the product, e) Not interested, and f) Irregular supply.

In addition, many of the respondents have claimed that age, body weight and culture has no effect on consumption of yogurts.

On the awareness on the dietary of yogurts, majority of the respondents were aware but some were unaware. The major reasons of unawareness were the lack of enough information, not interested and have no opinion.



Consumers claimed that yogurt consumption is good for the health but some do not have any idea about health benefits derived from yogurt.

Results further showed that respondents believed yogurt consumption helps their body become fit and healthy, locally produced yogurt has a lot of health benefits, and it provides energy.

Health benefits or the nutritional facts was most preferred by the entire respondents followed by taste, ingredients, appearance, color, and packaging. In addition, majority claimed that the price was not affordable while only few claimed to be affordable.

Moreover, respondents preferred most of cookies and creams flavor and strawberry flavor while the least preferred is blueberry and commercial yogurt.

## Conclusions

Based on the findings of the study, the following conclusions were made:

- 1. Most of the respondents in each group are female. This emphasized that women are most interested to yogurts.
- 2. The factors influencing respondents to try locally produced yogurt are the following: a) perceived health value of the product, b) knowledge on the dietary content and c) curiosity on the product.

3. Factors for non-consumption of locally produced yogurt includes: a) respondents dislike the taste, b) the high priced of the product, c) the lack of information about the nutritional value, and d) respondents never see any advantage in consuming the product.

4. The perception of consumers towards locally produced yogurt is better for health.



5. Most of the consumers are aware in the dietary content of yogurt; however, some are not aware.

6. Health benefits or the nutritional fact of food products is most preferred by consumers.

### **Recommendations**

Based from the above conclusions, the following are recommended.

1. Promote consumption of yogurt especially for locally produced yogurt as a nutritious drink. Promotional measures could be done on trade fairs and festive community occasions.

2. Information dissemination about the health benefits of locally produced yogurt should be administered.

3. Make locally produced yogurt available in canteens, sari-sari stores, fast food chains, restaurants or snack house for consumers.

4. For entrepreneurs who are planning to go into production and marketing of locally produced yogurt should take into consideration the behavior and perception of target consumers or market. A thorough promotion of the product as a nutritious healthy drink should be given an emphasis.

5. Marketing prospects should be developed promptly. It is also recommended that feasibility should be done to identify the profitability of locally produced yogurt.



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