

Implementation of the Department of Education; Policy and Guidelines on Healthy Food and Beverage Choices

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Abstract: *The study focused on the extent of the implementation of the policy and guidelines on healthy foods and beverages in secondary schools in the third district of Pangasinan. It also determined the observance of the canteen managers and store owners towards the implementation of the policy and guidelines and the degree of problems they have encountered in its implementation. The study was delimited to canteen managers and store owners inside and outside (five-ten meters away) the school in national high schools' main campus in the Third District of Pangasinan. This study looked into the profile of the stores; extent of the implementation of Department of Education's policy and guidelines on healthy foods and beverages; classification of foods and beverages; problems encountered and the relationships of the extent of the implementation and classification of foods and beverages across variables.*

Keywords: *Healthy Food and Beverages, Policy and Guidelines on Food and Beverage Choices, Classification of food and beverages*

INTRODUCTION

The Department of Science and Technology-Food and Nutrition Research Institute in its 8th National Nutrition Survey in 2014 showed that there are children aged five to ten years old who are 29.1 percent underweight, 29.9 percent stunted, 8.6 percent wasted and 9.1 percent overweight. In line with these concerns, the Department of Education issued a Policy and Guidelines on Healthy Food and Beverage Choices in Schools and in DepEd Offices for the promotion and development of healthy eating habits among the youth and DepEd employees by making healthy, nutritious and affordable menu choices as well as setting food standards. This policy and guidelines aim to make healthier food and beverage choices available and introduce a system of categorizing locally available foods and drinks according to geographical, cultural and religious orientation. Moreover, it also provides guidance in evaluating, selling and marketing foods and beverages served in school canteens which include the purchasing of foods for school feeding [1].

Essentially, a nutrition policy is outlining the school's position regarding food and beverages. The policy sets short, medium and long term goals to make healthy eating and lifestyles an integral part of the school culture. The food policy needs to consider wider range of school foods that promote healthy food intake throughout the year. Teachers and staffs play a key role in ensuring that all direct and indirect nutritional messages are relevant and consistent. Teachers and staff need to be active role models and they should eat healthy foods themselves. In a study [2], selected teachers in Pangasinan have high level of manifestation on decisiveness, resourcefulness, commitment and stress tolerance.

OBJECTIVES OF THE STUDY

This study determined the extent of the implementation of the policy and guidelines on healthy food and beverage (HFAB) in secondary schools in the third district of Pangasinan. It addressed the following concerns regarding (1)

the profile of the stores (2) the classifications of foods and beverages that are being offered/ sold by the stores inside and outside the school using the traffic light system (3) the extent of the implementation of the policy and guidelines on healthy foods and beverages (4) the degree of the problems encountered by the canteen managers and store owners in the implementation of the policy and guidelines on healthy foods and beverages.

MATERIALS AND METHODS

The researcher used a set of descriptive-survey questionnaire as data collection tool. The survey questionnaire was constructed and validated based on the DepEd policy and guidelines on HFAB and the formulated objectives of this study that serves also as interview guide.

The survey-questionnaire was composed of four parts. The first part of questionnaire is the profile of the respondents/stores. The second part is about the classifications of foods and beverages that are being offered/ sold by the canteens, carinderia, ambulant vendors and stores inside and outside the school as observed and evaluated by the canteen managers and vendors/store owners. The third part consists of the extent of the implementation of the policy and guidelines on healthy foods and beverages in secondary schools in the third district of Pangasinan. Lastly, the fourth part comprises of the degree of the problems encountered by the store owners/operators in the implementation of the policy and guidelines on healthy foods and beverages in secondary schools.

RESULTS AND DISCUSSION

This chapter presents the data that were gathered, analyzed and interpreted. The data were presented in tables showing the findings on the implementation of the policy and guidelines on healthy food and beverage in secondary schools in the Third district of Pangasinan.

The respondents of the study were the canteen managers and store owners and operators inside and outside the school in the national high

schools' main campuses in the third district of Pangasinan. Table 1 shows the distribution of food stores, carinderia and their respondents per school sample.

Table 1
Distribution of Respondents n=63

National High Schools in the Third District of Pangasinan		Number of Stalls inside	Number of Stalls outside (5-10 mtrs. Away from the gate)
San Carlos City	Speaker Eugenio Perez National Agricultural School	4	3
	Pangalangan National High School	1	1
	Abanon National High School	1	2
Bayambang	Bayambang National High School	9	7
	Beleng National High School	1	1
	Tanolong National High School	1	0
	Tococ National High School	1	1
Calasiao	Bued National High School	1	1
	Calasiao Comprehensive School	1	2
Malasiqui	Calbeg National High School	1	1
	Lokeb Norte National High School	1	2
	Lokeb Sur National High School	2	2
	Lunac National High School	1	1
Mapandan	Mapandan National High School	1	3
	Baloling National High School	1	1
	Torres National High School	1	0
Sta. Barbara	Daniel Maramba National High School	3	2
	Tuliao National High School	1	1
Total		32	31

Profile of the Stores on the Implementation of the Policy and Guidelines on Healthy Food and Beverage (HFAB) in Secondary Schools

The data gathered on the profile of the stores is shown in Table 2. This describes the food stores or “carinderia” along location (proximity), ownership, capital and daily sales.

The data on Table 2 shows that half (50.8%) of the food stores in the Third district of Pangasinan are located inside the campus of secondary schools while the other half (49.2%) of the stores are located outside the schools. The result reflects that there is only a slight difference in the number of food stores located inside the campus as compared to the number of stores outside the campus of secondary schools.

Table 2
Profile of the Stores on the Implementation of the Policy and Guidelines on Healthy Food and Beverage in Secondary Schools

Profile Variables	Frequency	Percentage
Location (Proximity)		
Inside	32	50.8
Outside	31	49.2
Total	63	100.0
Ownership		
Sole proprietorship	31	49.2
Vendor	3	4.8
Operator	2	3.2
Corporation	4	6.3
Cooperative	23	36.5
Total	63	100.0
Capital		
₱ 5,000 and below	53	84.1

₱ 5,001-10,000	5	7.9
₱ 10,001-20,000	1	1.6
₱ 20,001 and above	4	6.3
Total	63	100.0

Daily Sales		
₱ 2,000 and below	46	73.0
₱ 2,001-5,000	13	20.6
₱ 5,001 and above	4	6.3
Total	63	100.0

Furthermore, the findings also show that most of the carinderia ownership was sole proprietorship (49.2%) including vendor (4.8%) and operator (3.2%). Some of the food stores, however, are owned and operated through cooperative (36.5%). It also revealed another stores' ownership as corporation (6.3%). Small food stores or carinderia are famous inside and outside the school due to the limited financial capacity of the store owners and operators.

The food store owners' capital of investment ranges from "Php5,000 and below" has obtained the highest percentage with (84.1%). On the other hand, the other capital investments have obtained lower percentages as indicated by the (7.9%) for Php5,001-Php10,000 and (6.3%) for Php20,001 and above. The capital investment of Php10,001-Php20,000 has obtained the lowest percentage as shown by the (1.6%). This suggests that food store owners have limited financial capacity when it comes to capital investments.

Table 2 also reveals the daily sales achieved by the stores both outside and inside the campus of the schools in the Third district of Pangasinan. The daily sales in the amount of Php2,000 and below obtained a percentage of 73.0, followed by Php.2001-Php5,000 which has

20.6 percentage and a very minimal respondent has a daily sales of Php5,001 and above which has 6.3 percentage. The finding reflects that due to the limited capital investments, the store owners gained the lowest value on the daily sales bracket.

Classifications of Foods and Beverages (FB) that are being Offered/ Sold by the Food Stores/Carinderia

Food and Beverage Items that are Sold under Green Category

The result on Table 3 shows that under the green category, the items; fresh buko (79.37%), unsweetened fruit Juice (71.43%), fresh fruits preferably those in season (66.67%), fishes (61.90%), lean meats (61.90%), unsweetened milk (60.32%), boiled egg (55.56%), green leafy and yellow vegetables (55.56%), milled rice (52.38%) and safe and clean water (47.62%), ranked high to foods sold abundantly. It depicts that these items are one of the food choices in the carinderia. And to further elevate the consumption of healthy foods and beverages there are many possible ways that a school can promote healthy behavior such as the creation of a school nutrition working group that intends to help support the schools in healthy eating schemes and healthy school environments with elements on food and nutrition policies [3].

Table 3

Classifications of Foods and Beverages that are Sold by the Food Stores/Carinderia in Green Category

Green Category	Sold Abundantly	Sold Moderately Abundant	Sold Sparingly/ Scarcely	Not Sold
1. Milk (Unsweetened)	38 (60.32%)	11 (17.46%)	11 (17.46%)	3 (4.76%)
2. Safe and clean water (nothing added)	30 (47.62%)	17 (26.98%)	1 (1.59%)	15 (23.81%)
3. Fresh buko water (unsweetened)	50 (79.37%)	2 (3.17%)	11 (17.46%)	0 (0.0%)
4. Milled rice	33 (52.38%)	9 (14.29%)	7 (11.11%)	14 (22.22%)
5. Brown rice or iron-fortified rice	1 (1.59%)	0 (0.0%)	8 (12.70%)	54 (85.71%)
6. Corn (Boiled)	1 (1.59%)	12 (19.04%)	7 (11.11%)	43 (68.25%)
7. Oatmeal (Boiled)	0 (0.0%)	6 (9.52%)	2 (3.17%)	55 (87.30%)
8. Whole wheat bread	1 (1.59%)	8 (12.70%)	4 (6.35%)	50 (79.37%)
9. Boiled Cassava (kamoteng kahoy)	0 (0.0%)	10 (15.87%)	7 (11.11%)	46 (73.02%)
10. Boiled sweet potato (kamote)	3 (4.76%)	11 (17.46%)	5 (7.94%)	44 (69.84%)
11. Boiled saging na saba	5 (7.94%)	14 (22.22%)	5 (7.94%)	39 (61.90%)
12. Boiled peanuts	2 (3.17%)	11 (17.46%)	5 (7.94%)	45 (71.43%)
13. Suman	0 (0.0%)	7 (11.11%)	10 (15.87%)	46 (73.02%)
14. Buto	4 (6.35%)	12 (19.04%)	5 (7.94%)	42 (66.67%)
15. Fishes	39 (61.90%)	5 (7.94%)	10 (15.87%)	9 (14.29%)
16. Shellfish	2 (3.17%)	8 (12.70%)	7 (11.11%)	46 (73.02%)
17. Small shrimps	0 (0.0%)	2 (3.17%)	9 (14.29%)	52 (82.54%)
18. Lean meats	39 (61.90%)	5 (7.94%)	8 (12.70%)	11 (17.46%)
19. Chicken without skin	6 (9.52%)	11 (17.46%)	8 (12.70%)	38 (60.32%)
20. Nuts (Boiled)	1 (1.59%)	7 (11.11%)	6 (9.52%)	49 (77.78%)
21. Egg (Boiled)	35 (55.56%)	16 (25.40%)	3 (4.76%)	9 (14.29%)
22. Fresh fruits, preferably those in season	42 (66.67%)	14 (22.22%)	3 (4.76%)	4 (6.35%)
23. Green, leafy and yellow vegetables	35 (55.56%)	15 (23.81%)	2 (3.17%)	11 (17.46%)
24. Fruit Juice (unsweetened)	45 (71.43%)	5 (7.94%)	9 (14.29%)	4 (6.35%)

Food and Beverage Items that are Sold under Yellow Category

As shown in Table 4, the results reveal that biscuits (34.92%) ranked first in the items sold under the yellow category. It was followed by banana que, turon, maruya (20.63%); Bread using white refined flour (20.63%); 100% Fresh fruit juices with sugar (11.11%); Camote que (11.11%) and stir-fried vegetables (11.11%). This implies that there are few yellow category foods and drinks that are sold as evident in the canteens or stores inside the school campus. However, yellow FB are more evident outside the campus. As shown on Appendix A on pages 71-80 and in figures 2-6, 8-13, 15, 18 and 19, more yellow foods are sold outside the campus.

This result contrasted the findings that there is a considerable amount of unhealthy

foods and drinks sold at canteens and depicted a bigger consumption of unhealthy foods and drinks in all student levels as compared to the consumption of healthy foods and drinks [4].

Table 4
Classifications of Foods and Beverages that are Sold by the Food Stores/Carinderia in Yellow Category

Yellow Category	Abundant	Moderately Abundant	Sparingly Scarcely	Not Sold
1. 100% Fresh fruit juices with sugar	7 (11.11%)	14 (22.22%)	6 (9.52%)	36 (57.14%)
2. Fried rice	3 (4.76%)	7 (11.11%)	8 (12.70%)	45 (71.43%)
3. Bread (using white refined flour)	13 (20.63%)	23 (36.51%)	2 (3.17%)	25 (39.68%)
4. Biscuits	22 (34.92%)	24 (38.10%)	1 (1.59%)	16 (25.40%)
5. Banana que, turon, maruya	13 (20.63%)	17 (26.98%)	4 (6.35%)	29 (46.03%)
6. Camote que	7 (11.11%)	15 (23.81%)	5 (7.94%)	36 (57.14%)
7. Cassava cake	2 (3.17%)	13 (20.63%)	2 (3.17%)	46 (73.02%)
8. Pancakes	6 (9.52%)	14 (22.22%)	2 (3.17%)	41 (65.08%)
9. Waffles	1 (1.59%)	13 (20.63%)	2 (3.17%)	47 (74.60%)
10. Chamorado	1 (1.59%)	11 (17.46%)	3 (4.76%)	48 (76.19%)
11. Pancit	6 (9.52%)	22 (34.92%)	1 (1.59%)	34 (53.97%)
12. Arroz caldo	4 (6.35%)	22 (34.92%)	1 (1.59%)	36 (57.14%)
13. Soup (w/o MSG)	6 (9.52%)	13 (20.63%)	2 (3.17%)	42 (66.67%)
14. Sandwiches (cheese, egg, chicken filling, etc.)	3 (4.76%)	15 (23.81%)	6 (9.52%)	39 (61.90%)
15. Butter, margarine, mayonnaise (use sparingly)	5 (7.94%)	18 (28.57%)	1 (1.59%)	44 (69.84%)
16. Processed foods such as meats/fish, hotdogs, sausage, burger patties, chicken nuggets, tocino, tapa, etc.	3 (4.76%)	12 (19.05%)	6 (9.52%)	40 (63.49%)
17. Stir-fried vegetables	7 (11.11%)	14 (22.22%)	4 (6.35%)	41 (65.08%)

Food and Beverage Items That are Sold under Red Category

Table 5 illustrates that soft drinks (19.04%) rank first in the items sold under red category. It was followed closely by powdered juice drinks (17.46%), chips or chichiria and other heavily salted snacks (17.46%).

Chocolates, hard/chewy candies, chewing gums, marshmallows, lollipops, and yema (14.29%) occupied the fourth rank. As shown in appendix A on pages 71-79 and in figures 2-6, 8, 9, 12, 13-16 and 18, more red foods are sold outside the campus.

The result depicts the interview outside the school. These items on the red category are fast-moving and preferred mostly by which concluded that most of the foods chosen by the respondents were junk foods, soft drinks, juice, lemon juice, bread, chocolates, cookies, sandwiches, burgers and banana. Moreover, age is significantly correlated with junk foods as well as income of parents with cakes as choices for their snacks [5].

Table 5
Classifications of Foods and Beverages that are Sold by the Food Stores/Carinderia in Red Category

Red Category	Abundant	Moderately Abundant	Sparingly Scarcely	Not Sold
1. Softdrinks	12 (19.04%)	8 (12.70%)	0 (0.0%)	43 (68.25%)
2. Alcoholic drinks	3 (4.76%)	1 (1.59%)	0 (0.0%)	59 (93.65%)
3. Sports waters and sports drinks	2 (3.17%)	4 (6.35%)	1 (1.59%)	56 (88.89%)
4. Flavoured mineral waters and sweetened waters	4 (6.35%)	1 (1.59%)	2 (3.17%)	56 (88.89%)
5. Energy drinks	3 (4.76%)	5 (7.94%)	0 (0.0%)	55 (87.30%)
6. Powdered juice drinks	11 (17.46%)	8 (12.70%)	1 (1.59%)	43 (68.25%)
7. Palamig, sagot gulaman	8 (12.70%)	9 (14.29%)	5 (7.94%)	41 (65.08%)
8. Any product containing caffeine	2 (3.17%)	3 (4.76%)	0 (0.0%)	58 (92.06%)
9. Any processed fruit/vegetable juice with added sugar of more than 20 grams or 4 teaspoons per serving	0 (0.0%)	1 (1.59%)	2 (3.17%)	60 (95.24%)
10. Any jelly, ice crushes and slushies	1 (1.59%)	0 (0.0%)	2 (3.17%)	60 (95.24%)
11. Cakes and slices, donuts, sweet biscuits and pastries and other sweet bakery products	4 (6.35%)	5 (7.94%)	0 (0.0%)	54 (85.71%)
12. All types including chocolates, hard/chewy candies, chewing gums, marshmallows, lollipops yema, etc.	9 (14.29%)	11 (17.46%)	3 (4.76%)	40 (63.49%)
13. French fries, nuggets, etc.	1 (1.59%)	1 (1.59%)	4 (6.35%)	57 (90.48%)
14. Bicho-bicho, buchi, camote que, banana que, etc.	2 (3.17%)	3 (4.76%)	6 (9.52%)	52 (82.54%)
15. Fried chips	2 (3.17%)	1 (1.59%)	1 (1.59%)	59 (93.65%)
16. Popcorns	1 (1.59%)	3 (4.76%)	2 (3.17%)	57 (90.48%)
17. Instant noodles	2 (3.17%)	4 (6.35%)	1 (1.59%)	55 (87.30%)
18. All types of heavily salted snacks such as chips or chichirya	11 (17.46%)	7 (11.11%)	2 (3.17%)	43 (68.25%)
19. Chicharon	0 (0.0%)	2 (3.17%)	1 (1.59%)	60 (95.24%)
20. Chicken skin	0 (0.0%)	0 (0.0%)	0 (0.0%)	63 (100.00%)
21. Bacon	1 (1.59%)	0 (0.0%)	0 (0.0%)	62 (98.41%)
22. Deep-fried foods including fish balls, kikians, etc.	3 (4.76%)	0 (0.0%)	3 (4.76%)	54 (85.71%)
23. Fruits canned in heavy syrup	0 (0.0%)	0 (0.0%)	0 (0.0%)	63 (100.00%)
24. Sweetened fruits or vegetables or deep-fried	0 (0.0%)	0 (0.0%)	1 (1.59%)	62 (98.41%)

Extent of the Implementation of the Policy and Guidelines on Healthy Food and Beverage in Secondary Schools in the Third District of Pangasinan

The extent of the implementation of the policy and guidelines of HFAB in secondary schools in the Third district of Pangasinan is presented in Table 6. This reveals that the policy and guidelines on Healthy food and beverages are “always” (41.7%) implemented as shown by the indicators.

A high level of implementation of policies is due to the relatively strong policy framework for the education sector in the Philippines [6]. Table 6 clearly states that “carinderia” owners “always” encourages students to buy healthy food (61.9%); promotes consumption of HFAB (47.6%); endorses food intake of unsweetened milk, clean water and others (39.7%); limit the serving of foods with fats (39.7%); prohibits selling of beverages which are high in sugar (38.1%); limit serving of food high in salt (39.7%); encourages personnel to attend health talks (44.4%); encourages teachers to talk about healthy food and beverages in the class (50.8%); encourages selling of green labelled foods (47.6%); however, placing yellow and red labelled foods in inconspicuous area to limit its selling is “sometimes”, “seldom”, to “very seldom” was implemented (17.5%). This latter statement contradicts the study that, store owners have highlighted other in-store strategies that can have a direct impact on sales, “special” display stands for green FB and placing green FB in prime locations while a special display stand, in conspicuous place for yellow FB or within or at the end of the aisle, has been found to be especially effective for selling green and yellow FB [7]. The implementation of such strategies has the potential to promote or delimit sales of healthy food items in small food stores.

Table 6
Extent of the Implementation of the Policy and Guidelines on Healthy Food and Beverage in Secondary Schools in the Third District of Pangasinan

Indicators	Extent of the Implementation										
	Always		Often		Sometimes		Seldom		Very Seldom		
	F	%	F	%	F	%	F	%	F	%	
The store...											
1. Encourages students to buy healthy food and beverages by selling these in the canteen.	39	61.9	5	7.9	15	23.8	2	3.2	2	3.2	
2. Promotes the consumption of healthy food and beverages among the students.	30	47.6	9	14.3	17	27.0	4	6.3	3	4.8	
3. Serves fruits and vegetables, legumes, whole grains and nuts in the canteen/store.	16	25.4	12	19.0	17	27.0	3	4.8	15	23.8	
4. Endorses the increase of food intake of unsweetened milk, safe and clean water, and unsweetened fresh buko water among the students by making it readily available in the canteen/store.	25	39.7	12	19.0	12	19.0	4	6.3	10	15.9	
5. Limit the serving of foods that are high in saturated fats such as processed foods like hotdogs, tocino, burger patties, etc.	25	39.7	10	15.9	15	23.8	7	11.1	6	9.5	
6. Prohibits the selling of food and beverages that are high in free sugars such as cakes, chocolates, soft drinks, powdered juice drinks ice creams, etc.	24	38.1	6	9.5	10	15.9	15	23.8	8	12.7	
7. Limits the serving of food that are high in salt (sodium) like French fries, instant noodles, salted snacks such as chips or chichirya, etc.	25	39.7	6	9.5	14	22.2	12	19.0	6	9.5	
8. Motivates its personnel to participate in wellness and nutrition activities in school such as Nutrition month, etc.	29	46.0	4	6.3	6	9.5	5	7.9	19	30.2	
9. Encourages its personnel to attend health talks conducted by the school.	28	44.4	7	11.1	4	6.3	5	7.9	19	30.2	
10. Persuades its personnel to engage in moderate to vigorous intensity physical activity daily.	23	36.5	8	12.7	7	11.1	5	7.9	20	31.7	
11. Encourages teachers to talk about Healthy Food and Beverage in their class.	32	50.8	2	3.2	5	7.9	4	6.3	20	31.7	
12. Encourages the selling of green labelled foods	30	47.6	6	9.5	8	12.7	8	12.7	11	17.6	
13. Encourages teachers to monitor the students in buying Healthy Food and Beverage.	27	42.9	8	12.7	6	9.5	3	4.8	19	30.2	
14. Prepares menu that caters to the Healthy Food and Beverage policy.	23	36.5	10	15.9	8	12.7	10	15.9	12	19.0	
15. Places the yellow labelled foods in inconspicuous area to limit the selling.	18	28.6	12	19.0	11	17.6	11	17.6	11	17.6	
Overall Extent of the Implementation	41.7% - Always										

Degree of the Problems Encountered by the Store Owners Inside and Outside the School in the Implementation of the Policy and Guidelines on Healthy Food and Beverage in Secondary Schools

Table 7 shows the problems encountered by the store owners in the implementation of the policy and guidelines on healthy food and beverage which were ranked accordingly. As manifested in the table, “students prefer to buy unhealthy foods and beverages because of its cheaper price” and “students prefer to eat fish balls, kikiam, ice creams, and etc.” rank first and second on the list which were considered as “very serious problems”. This table reveals that (1) students’ preference, (2) amount of allowance, (3) minimal capital and (4) low daily sales are the top most problems among carinderia owners. This suggests that healthy green food and beverages are good but students prefer cheap yellow and red FB. Researchers have documented that low-income groups lack stores

that offer healthy food options. Instead, these areas have a greater number of small food stores, which are more likely to sell only beverages, snack foods, and other convenience foods at cheap prices [7].

The finding is also supported by the study that the Philippines with its rapid economic growth, urbanization and globalization have a significant impact on its food supply where an array of ultra-processed foods and drinks are readily available at low cost [6].

Table 7
Degree of the Problems Encountered by the Store Owners in the Implementation of the Policy and Guidelines on Healthy Food and Beverage in Secondary Schools

Indicators	4		3		2		1		Sum	Rank
	F	%	F	%	F	%	F	%		
1. Students prefer to buy unhealthy foods and beverages because of its cheaper price.	24	38.1	21	33.3	13	20.6	5	7.9	190	1
2. Students do not have sufficient allowance to buy expensive healthy foods and beverages.	19	30.2	19	30.2	20	31.7	5	7.9	178	3
3. Students prefer to eat fish balls, kikiam, ice cream, etc.	24	38.1	17	27.0	13	20.6	9	14.3	182	2
4. Minimal capital.	16	25.4	15	23.8	23	36.5	9	14.3	164	4
5. There are limited fresh sources of foods and beverages in the market.	6	9.5	12	19.0	25	39.7	20	31.7	130	10
6. Do not have enough knowledge on what to serve every day.	6	9.5	9	14.3	27	42.9	21	33.3	126	13
7. Lack of financial and human resources to prepare food that are Healthy Foods and Beverages.	11	17.6	13	20.6	25	39.7	14	22.2	147	7
8. Lack of planning of Healthy Foods and Beverages.	5	7.9	11	17.6	30	47.6	17	27.0	130	10
9. Lack of dissemination of the policy and provision.	3	4.8	13	20.6	28	44.4	19	30.2	126	13
10. Low daily sales.	10	15.9	18	28.6	29	46.0	6	9.5	158	5
11. Difficulty in language to explain the policy on Healthy Food and Beverage.	5	7.9	11	17.6	29	46.0	18	28.6	129	12
12. Lack of information about listing of Healthy Food and Beverage by stall/store owners/vendors	9	14.3	13	20.6	23	36.5	18	28.6	139	8
13. Expensive materials in preparing Healthy Food and Beverage.	10	15.9	10	15.9	36	57.1	7	11.1	149	6
14. Low intensity of implementation of DepEd Order No. 13 by school heads and barangay officials.	5	7.9	15	23.8	29	46.0	13	20.6	136	9
15. Others, please specify and rate your problem.	0	0	0	0	0	0	0	0	0	15

CONCLUSION AND RECOMMENDATION

Based from the findings of the study, the following conclusions were drawn:

There are more stores inside the campus; are owned and operated through sole proprietorship; majority of the stores' capital or investment and daily sales are low.

Majority of food and beverage items under green category are sold and offered inside the school. However, additional yellow and red food and beverages are evident outside the school carinderia.

The policy and guidelines on the healthy FB in secondary schools in the Third district of Pangasinan is "always" implemented inside the campus however, it is seldom implemented outside the campus.

There is a significant relationship between the extent of the implementation of the policy and guidelines on healthy FB in the secondary schools and the profile variables along location, ownership and daily sales except "capital".

Green, yellow and red food and beverages have significant relationship with location of the carinderia, ownership and daily sales, such that more green food and beverages are strictly sold inside the school and owned by single proprietor with low daily sales.

There are very serious to serious problems encountered by carinderia owners. Serious problems dealt with students' preferences, low allowance to buy cheap food and beverages and minimal capital.

On the basis of the foregoing findings and conclusions, the following recommendations are drawn:

The government should strengthen and assists small and medium enterprises such as the stores and canteens outside the school premises in order to provide them the needed capital in order to expand the stores' and canteens' capability.

There should be a strict monitoring of policy and guidelines on healthy FB choices inside and outside the school by school and barangay officials.

Implementation of proper food selection and nutrition should be strengthened, sustained and emphasized to both students and store owners.

Store and canteen owners should have an additional capital in order to provide healthy food and beverage options to the students.

Recommendation for further studies about implementation of the department of education's policy and guidelines on healthy food and beverages.

Store owners and canteen managers should find ways on how to provide alternatives for cheap red FB like fish balls, kikiam and ice creams to an affordable but nutritious food. Further research should be done for nutritious snack foods.

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