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Description Of Eat Pattern And Relationship Between Nutrition Status With Basic Consumption Levels In Children Of School

Miranti Widiayunita

Post-graduate of the Faculty of Biotechnology, Department of Biotechnology, University of Surabaya
Email: mwidiayunita@gmail.com

ABSTRACT

Since the 2016 economic crisis, the number of poor people in Indonesia has increased. One of its impacts was the increasing number of street children. Street children are one of the conditions of children in a difficult situation and vulnerable livelihood, mainly on the aspect of health and their future. The aim of this research is to understand the nutritional status of street children as the scientific basis for further intervention programs. This research utilises the discrete-analytic observation by using quota sampling of 30 street children in the Tembokrejo Village. Nutritional status was assessed using the anthropometric parameters of height according to age and sex and carried out during 48 hours to determine their diet and consumption level. This research concluded that 70% of street children have poor nutritional status and only 6.7% have good nutritional status, most common diet patterns for street children are rice, side dishes and vegetables, level of consumption is still below the Nutritional Adequacy Rate (AKG) and no significant relationship between nutritional status and consumption level. This research suggests that intervention programs on street children need to be implemented to prevent further serious nutritional problems.

Keywords: *street children, economic crisis, nutritional status, tambakrejo*

INTRODUCTION

Since the 1997-1998 economic crisis, statistics show the increase of Indonesian poor population. The crisis had compromised the development budget by 60%, thus dragged tens of millions of families to be put below the poverty line. According to the World Bank, 60 per cent of the country's population is currently below the poverty line (Jonaidi, 2012).

This situation deteriorates health and education services where the children are the most vulnerable populations (Tarigan, 2003). Reducing health and education services has been accelerated at a time when Indonesia should produce healthy children with good education to meet the challenges of globalization and build the post-crisis nation (Amalia, 2017). This crisis has removed most of the benefits of a lost generation; children lost its access to education, good nutrition and health protection. According to the 2003 Human Development Report of the United Nations Development Program, the severity of child malnutrition in Indonesia is increasing (Perdana & Hardinsyah, 2013).

One of the social symptoms as a direct result of the economic crisis is the increasing number of street children (R. F. S. Sari, 2015). According to the 1991 East South Office research on Jakarta's street children, out of 3,420,828 children in Jakarta, 1.46% (9,868) were street children and, based on data obtained from the international conferences on street children in Yogyakarta in the year 1996, it is estimated that the number of street children in Indonesia has reached 3 million children. Moreover, the updated statistic conducted in 1998 in 12 major cities, the number have reached 40 million children. It is estimated that the number of street children will continue to increase in line with the deteriorating Indonesian economy (Susilowati & Suliswanto, 2017).

The severity of life for street children that must be faced with the problem of education and health has not become a primary problem and it can be ascertained that the lives of these abandoned children are very concerning, especially for their health and future, so the

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phenomenon of increasing the number of children is a separate problem in the pediatric community (Lee, Lorch, Sheffler-Collins, Kronman, & Shah, 2010). The data of the East Java social service shows that in the year 2000, the number of street children in the city of Pasuruan had the highest number after Surabaya. We can meet the activities of street children in the city of Pasuruan in the city centre, a red light intersection or in the campus area.

The Tembokrejo sub-district of Pasuruan city is a former place for homeless people relocation including street children and, until now, from the survey results, the street workers have formed their own communities in one settlement. Observing the description above, it is necessary for the empirical data to influence the description of eating patterns and the relationship between nutritional status and the level of consumption in street children aged at the elementary school in Tembokrejo village, Purworejo district, Pasuruan, as part of the Indonesian assets. The objectives of this research are to discover the eating pattern, nutritional status, level of consumption and percentage of Nutrition Adequacy Rate (AKG), and the relationship between nutritional status and consumption levels in street children of primary school age in the Tembokrejo village.

METHOD

This research utilises the discrete-analytic observation (Purwanti, 2012), using quota sampling of 30 street children of the Tembokrejo village. Nutritional status was assessed using the anthropometric parameters of height according to age and sex and there will be a recall as long as 2x24 hours to understand their diet and consumption level. There are 30 respondents that will be examined in this research (Budianita & Prijodiprodjo, 2013).

RESULTS AND DISCUSSIONS

Characteristics of Respondents

Age and Sex distribution

Table 1 indicates that the older the person, the opportunity for a job will be larger because they are physically and mentally stronger to work on the street, knowing that they have to live in a harmful environment. From the interview conducted towards the living-with-parents respondents (80%), it is known that their parents will not give them permission to work by themselves if they are still too young. They will be permitted if the work type given are the ones that more passive, or just being a companion of the older ones. This passive involvement has its own benefits because people will usually feel sorry for them. Another benefit is that the environment will train them once they can work on their own.

Tabel 1. Distribution of respondents according to age and sex

Sex / Age	F	M	Amount	%
7-9 y.o.	4	7	11	36,7
10-12 y.o.	9	8	17	56,7
13-15 y.o.	1	1	2	6,7
Total	**14**	**16**	**30**	**100**
%	**46,7**	**53,3**	**100**	

Meanwhile, the table that showed number of 10-12 years old street children are more than the ones who are between 13-15 years old is because the research is focusing on elementary school children age, so that the children on the older side of spectrum are street children who should be graduated from elementary school.

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Based on the table, it can be concluded that from all of the street children being researched, the number of male respondents is more than female respondents (53% and 47% respectively). This is possibly due to males are physically stronger that female so that their parents are more willingly to give permissions for the boys rather than girls.

Age and Type of Work

Table 2 reveals that buskers are the most type of work done by street children (10 or 33.3%) because this type of work can be done by all age groups. According to the results of the interview, it was known that the selection of this type of work was due to the ease of doing the work. In the age group of 7-9 years old, the type of mobile hawkers work is known to also have the same high number as busking i.e. 3 respondents (10%). This is probably because mobile hawkers are relatively not too exhausting compared to other jobs such as scavengers and services.

Table 2. Respondents distribution according to age and type of work

	Type of work				
Age (y. o.)	**Beggars**	**Buskers**	**Scavengers**	**Mobile Hawkers**	**Services**
7-9	2 (6,7)	3(10)	1(3,3)	3(10)	2(6,7)
10-12	3(10)	6(20)	-	2(6,7)	6(20)
13-15	-	1(3,3)	-	-	1(3,3)
Total	5(16,7)	10(33,3)	1(3,3)	5(16,7)	9(30)

Likewise, the age group 10-15 years old, apart from the work of busking and services, are the type of work that has the highest number, namely 1 (3.3%) respondent, this is because they physically feel abler to do the service jobs and the salary is expected to be higher. From the table, it can be concluded that the age of a person will greatly determine the type of work he/she choose because they will physically feel abler to do more to get more income. (Herawati, 2013).

Socio-Economics

Type of Work and Amount of Income

From Table 3, it is known that the most type of work done by the street children is busking (10 respondents, or 33.3%). This is because busking is considered easier to do and does not require any capital. With busking, they only need simple musical instruments made from bottle caps and adequate voice. While the majority of jobs are service workers, namely 9 (30%). It varies from polishing shoes, renting umbrellas, to cleaning public places. According to the results of the interview, they choose to do service work because they feel that it is real work to do rather than just being a beggar or busker.

The smallest number of jobs is the scavenger work, which is done by 1 respondent (3.3%) because this work is considered to be relatively exhausting and requires a lot of energy for children of their age (elementary school age), even though they may receive more income. Food consumption can be influenced by the amount of income because the amount of earned income determines the purchasing power. Based on the income in table 3, it is known that most street children (21 children, or 70% of the respondents) receive income of Rp5.000 or less from jobs such as beggars, buskers, hawkers and services. While the biggest income (more than Rp20.000) is earned from begging (3.3%) and scavenging (3.3%). The table reveals that busking can produce varying amounts of income, as well as other types of work

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as shown in the table, so it can be concluded that the amount of income is not determined by the type of work.

Tabel 3. Respondents Distribution towards type of work and income amount

Jobs / Income (Rp)	Beggars	Buskers	Scavenger	Mobile Hawkers	Service*	Number	%
≤ 5000	3	6	-	4	8	21	70
6000-10000	1	2	-	1	-	4	13,3
11000-15000	-	1	-	-	1	2	6,7
16000-20000	-	1	-	-	-	1	3,3
>20000	1	-	1	-	-	2	6,7
Total	5	10	1	5	9	30	100
%	16,7	33,3	3,3	16,7	30	100	

*Service jobs are polishing shoes, renting umbrellas, and cleaning public places
≤: less than or the same with
>: more than

In this study, it was known that most street children (36.7%) earn low income (Rp5.000 or less) and 26.7% of them who have a higher income (more than Rp5.000) turned out to have the same low level of calorie consumption. It can be concluded that the greater income of the most active street children is not followed by the increase in food consumption level. This situation can be occurred due to the level of consumption that is not only caused by the amount of income, but also due to other factors such as the knowledge level, individual health, and family's role (Sudja & Kusmaningtyas, 2013).

Knowledge level and knowledge sources on nutrition

Poor nutrition problems arise because of the main problems of poverty and lack of education. Besides being influenced by the amount of income level, Nutritional knowledge also influenced by the environment also greatly affects the type of food to be consumed. With the proper level of knowledge, a person can be more careful and selective in making choices about the type of food to be consumed. In addition, the habits and pleasures or children's favours for certain types of food can affect their diet. (Indrianawati & Soesatyo, 2015; Laraeni, Sofiyatin, & Yuanita, 2015).

Table 4. Respondents distribution according to nutritional knowledge

Knowledge category	Amount	%
Good	-	-
Adequate	10	33,3
Poor	20	66,6
Total	30	100

Table 4 reveals that 20 respondents (66.7%) have poor nutritional knowledge and none of the respondents has a good level of nutritional knowledge. It was found that the increase in the knowledge level of street children is not followed by improvements in their diet. Of the majority who have a poor and moderate level of nutritional knowledge (23.3% and 26.7% respectively), it turns out that their most frequently consumed diet patterns are the same. This situation is due to the fact that most street children (80%) still live with their parents so that their diet will follow the one provided by their parents.

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Table 5. Respondents distribution according to knowledge source on nutrition

Knowledge Sources	Amount	%
Parents	10	33,3
School	13	43,3
Friends	2	6,7
Media	4	13,3
Other	1	3,3
Total	**30**	**100**

Most of the knowledge source about nutrition for street children are from school (43.3%), while the second most are from parents. The lack of nutritional knowledge of most street children can be caused by the knowledge obtained from school is not adequate, due to its very brief explanation during some subjects in school (mainly Natural Science and Sports), while the knowledge gained from parents may also inadequate because of the low level of education.

Matters related to nutritional status

Nutritional status, besides being influenced by the staple foods consumed every day, also influenced by other food consumption habits obtained from snacks, if the snacks consumed contains high nutritional value. School-age children sometimes prefer to buy meals with friends at school because this often adds to their appetite (Amini, 2014). In the population of street children, the opportunity to buy food and snacks outside the home increases because of their time outside the house.

Habit of purchasing snacks and types of snacks usually consumed

From this study, it is known that only 1 street children (3.3%) that are not accustomed to buying snacks, while the rest claims to be used to buy snacks, from table 6, it reveals that most snacks that they used to consume are heavy snacks such as noodles, meatballs, bread, deep-fried foods, and then followed by biscuit and chocolate groups (33.3% each).

Table 6. Respondents distribution according to the habit of buying snacks and type of snacks that used to consume

Frequency	Accustomed					Not accustomed	Total
	1	2	3	4	5		
Amount	10	10	3	5	1	1	30
Percentage	33,3	33,3	10	16,7	3,3	3,3	100

Information: 1= Heavy snacks (noodles, meatballs, bread, and deep-fried food); 2= Biscuits and chocolate; 3= Crackers group; 4= Candy or other sweets; dan 5 = Other

The heavy snacks are foods that contain nutrients such as carbohydrates, fats, and/or proteins. Well-chosen daily food will provide the nutrients needed. The table concludes that the consumption of snacks in good quality can provide improved nutrition for street children.

Income handed to parents

Table 7 reveals that most of the street children give all of their income to their parents (11 respondents or 52.4%) and only 9 (30%) street children whose income is not given to the parents at all.

Table 7. Respondents distribution according to the amount of income handed to parents

Amount of income handed to parents	Amount	%
All are handed	7	23,3
Mostly handed	11	52,4
Handed in small portion	3	10
Not handed	9	30
Total	**30**	**100**

From the statistics, it can be concluded that the greater the income or the share of income obtained by street children, there is a greater tendency to buy heavy snacks. Purchasing power factors confirmed to affect the quantity and quality of food consumed, even though the pleasure factor for certain types of food also influences.

Diseases than often suffered

Table 8 shows that upper respiratory tract infection is a disease often suffered by most street children (21 or 70%), while the second most is diarrhoea (6 or 20%).

Table 8. Respondents distribution according to the type of disease suffered in the last three months

Type of disease	Amount	%
Upper respiratory tract infection	21	70
Head-related	1	3,3
Skin-related	1	3,3
Diarrhoea	6	20
Other	1	3,3
Total	**30**	**100**

The occurrence of this disease is probably caused by exposure to pollution when they working on the streets, lack of personal hygiene, or lack of nutritional status. The type of disease suffered can have several effects such as the decrease in appetite, disturbance in the digestive organs, et cetera. A condition of malnutrition can cause a person susceptible to disease (M. R. Sari, 2009).

Eating pattern

Oftenly consumed food

Table 9 reveals that their most frequent eating patterns are rice, side dishes, and vegetables, which consumed by 13 (43.4%) respondents and only 1 (3.3%) who consume rice, side dishes, vegetables, fruit, and milk.

Table 9. Respondents distribution according to the frequency of eating pattern

Eating pattern	Amount	%
Rice + side dishes	10	33,3
Rice + vegetables	3	10
Rice + side dished + vegetables	13	43,3
Rice + side dishes + fruit	1	3,3
Rice + vegetables + fruits	1	3,3
Rice + side dishes + vegetables + fruits	1	3,3
Rice + side dishes + vegetables + fruits + milk	1	3,3
Total	**30**	**100**

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This situation shows that the diet of most street children still does not meet the balanced diet as recommended. Consumption of fruit as a producer of vitamins, minerals and milk consumption as a protein producer that has high biological value tends to be abandoned. As we know, a balanced diet or a healthy four-menu pattern is perfect when analyzed in nutritional science so that the composition of these foods with suitable combinations and amounts can provide all the nutrients needed by the body to achieve optimal health status. Nasution (2004) reveals that consumption of various types of food every day has guaranteed the balance of nutrients because each of these foods can complement the nutrients they contain.

Unbalanced eating patterns can be made possible because of the lack of knowledge of street children and their families regarding balanced nutrition general guidelines, this can be seen from the results of research, namely on the questions about the best diet, found 80% of respondents are answered rice, side dishes and vegetables. These street children may still assume that the consumption of fruit and milk do not have to be fulfilled or the income earned causes limitations in fulfilling a balanced diet.

Distribution of respondents according to the frequency of Respondents' foodstuffs istribution according to food type frequency

For basic food consumption, rice is a type of staple food consumed by all respondents with the highest frequency of consumption by twice a day and more than three times a week.

Table 11. Respondents distribution according to the weekly frequency of staple consumption

Frequency of Consumption	Type of staple			
	1(%)	2(%)	3(%)	4(%)
1 x /week	-	4(13,3)	4(13,3)	5(16,7)
2 x /week	-	2(6,7)	-	6(20)
3 x /week	-	2(6,7)	2(6,7)	4(13,3)
>3 x /week	30(100)	1(3,3)	1(3,3)	6(20)

Information: 1 = Rice; 2 = Corn; 3 = Bread; 4 = Noodle

Whereas the second majority is noodles, due to its convenience in cooking. Besides, noodles are foods that are easier to get during their work time due to its relatively cheaper price that can be purchased at roadside street vendors around their “workplace”.

From this study, it was found that 20 street children (66.7%) only ate twice a day. And also it was known that they mostly missed breakfast (56.7%) and they preferred to buy snacks at school with the arguably low quality and quantity. As we all know, the staple food is a source of carbohydrates needed in producing calories for daily activities. If the need for carbohydrates as the main producer of calories is unfulfilled, then the fat and protein needed for growth will be broken down into calories so that the main function of protein for growth cannot go well (Hastuti & Zulaekah, 2009; Siregar, 2014).

Table 12. Respondents distribution according to the daily staple’s consumption frequency

Consumption frequency	Types of staple			
	1 (%)	2(%)	3(%)	5(%)
1 x/day	-	-	1(3,3)	6(20)
2 x/day	20(66,7)	1(3,3)	-	-
3 x/day	10(33,3)	-	-	-
Total	**30(100)**	**1(3,3)**	**1(3,30**	**6(20)**

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For the consumption of side dishes, tempeh is the most consumed side dish by some street children (86.7%) with the highest frequency of consumption of more than three times a week and consumed twice a day. The second most consumed side dish is egg and then tofu. But in terms of quantity, tofu is more often consumed than eggs. Whereas 8 (26.7%) respondents consumed chicken and the meat is only consumed by 3 (10%) respondents with the highest frequency of consumption of once a week and consumed once a day, while the rest claimed to only consume chicken and meat on feast days (see Table 13).

Table 13. Respondents distribution according to weekly consumption frequency of side dishes

Consumption frequency	Type of side dishes (%)								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1x/week	1 (3,3)	4 (13,3)	5 (16,7)	1 (3,3)	5 (16,7)	1 (3,3)	1 (3,3)	4 (13,3)	2 (6,7)
2x/week	1 (3,3)	3 (10)	4 (13,3)	-	5 (16,7)	-	3 (10)	3 (10)	4 (13,3)
3x/week	1 (3,3)	1 (3,3)	3 (10)	-	7 (23,3)	1 (3,3)	4 (13,3)	1 (3,3)	2 (6,7)
>3x/week	-	-	-	-	4 (13,3)	16 (53,3)	18 (60)	6 (20)	3 (10)
Total	**3 (10)**	**8 (26,7)**	**12 (40)**	**1 (3,3)**	**24 (80)**	**20 (66,7)**	**26 (86,7)**	**16 (53,3)**	**13 (43,3)**

Information: 1. Beef; 2. Chicken; 3. Fish (Mackerel tuna); 4. Salted fish; 5. Egg; 6. Tofu; 7. Tempeh; 8. Fritters; 9. Meatball

Respondents distribution according to weekly consumption frequency of side dishes (see Table 14) shows that tempeh is the most commonly eaten side dished, as many as 18 respondents (60%), whereas 16 respondents eat tofu (53.3%). From the table, there is also evident that tempeh and tofu are mostly eaten no more frequent than twice a week.

Table 14. Respondents distribution according to daily frequency consumption of side dishes

Consumption frequency	Type of side dishes (%)								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1x/day	-	-	-	-	2 (6,7)	4 (13,3)	7 (23,3)	5 (16,70	2 (6,7)
2x/day	-	-	-	-	-	8 (26,7)	8 (26,7)	1 (3,3)	-
3x/day	-	-	-	-	-	4 (13,3)	3 (10)	-	-
Total	**-**	**-**	**-**	**-**	**2 (6,7)**	**16 (53,3)**	**18 (60)**	**6 (20)**	**2 (6,7)**

Information: 1. Beef; 2. Chicken; 3. Fish (Mackerel tuna); 4. Salted fish; 5. Egg; 6. Tofu; 7. Tempeh; 8. Fritters; 9. Meatball

From the statistics, it can be seen that protein consumption of street children comes mostly from vegetable protein rather than animal protein, which has higher biological value than vegetable protein (Ernawati, Prihatini, & Yuriestia, 2016). This situation can occur because vegetable protein is more affordable than animal protein 18, but actually, these street children can fulfil the type of protein as found in animal protein by consuming a combination of types of beans and rice or other types of cereal (Setiawan, 2006).

Table 15 (respondents' distribution according to weekly consumption frequency of vegetables) reveals that spinach is the most consumed vegetable which is equal to 23

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respondents (76.7%) with the highest consumption frequency of more than 3 times a week, followed by water spinach and cabbage which both shares 12 respondents (40%) each.

Table 15. Respondents' distribution according to weekly consumption frequency of vegetables

Consumption frequency	Types of vegetables (%)								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1x/week	4 (13,3)	1 (3,3)	1 (3,3)	2 (6,7)	1 (3,3)	5 (16,7)	3 (10)	2 (6,7)	2 (6,7)
2x/week	6 (20)	1 (3,3)	1 (3,3)	-	2 (6,7)	6 (20)	3 (10)	-	-
3x/week	6 (20)	-	-	-	2 (6,7)	1 (3,3)	6 (20)	-	1 (3,3)
>3x/week	7 (23,3)	4 (13,3)	-	-	3 (10)	-	-	-	-
Total	**23 (76,7)**	**6 (20)**	**2 (6,7)**	**2 (6,7)**	**8 (26,7)**	**12 (40)**	**12 (40)**	**2 (6,7)**	**3 (10)**

Information: 1. Spinach; 2. Young Jackfruit; 3. Water lettuce; 4. Soup; 5. Mustard greend; 6. Water spinach; 7. Cabbage; 8. Long beand; 9. Beans

Table 16 that contains respondents' distribution according to daily consumption frequency of vegetables reveals that spinach is the most consumed vegetables (7 respondents or 23.3%) with the most consumption frequency of twice a day.

Tabel 16. Private distribution according to the frequency of vegetable consumption per day

Consumption frequency	Types of vegetable (%)								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1x/day	3 (10)	2 (6,7)	-	-	1 (3,3)	-	-	-	-
2x/day	4 (13,3)	2 (6,70	-	-	2 (6,7	-	-	-	-
3x/day	-	-	-	-	-	-	-	-	
Total	**7 (23,3)**	**4 (13,3)**	**-**	**-**	**3 (10)**	**-**	**-**	**-**	**-**

Information: 1. Spinach; 2. Young Jackfruit; 3. Water lettuce; 4. Soup; 5. Mustard greend; 6. Water spinach; 7. Cabbage; 8. Long beand; 9. Beans

Vegetables are necessary because they are the source of vitamin A, vitamin C, folic acid, magnesium, potassium, and fibre. It also not contains fat and cholesterol. Vegetable consumption is also known for enhancing the digesting process. The recommended vegetable consumption per day is 150-200 grams or 1.5 - 2 cups per day. From the statistics, it can be concluded that vegetable consumption of street children is still far from the recommended value.

Consumption frequency of fruit per week (see Table 18) reveals that banana, papaya, guava, and watermelon are mostly consumed fruits, which consumed by four respondents for each fruit (13.3%).

For fruits, banana, papaya, guava, and watermelon consumption are the most commonly consumed fruits (13.3% each) with the highest frequency of consumption only once a day. The fruit is a source of vitamins A, C, potassium, and fibre which is needed by the body. The recommended consumption of fruit is 2-3 slices per day (Handajani, Roosihermiatie, & Maryani, 2010). From the statistics, it can be concluded that the consumption level of street children is still less than recommended.

Table 17. Respondents' distribution according to weekly consumption frequency of fruits

Consumption frequency	Types of fruit						
	1(%)	2(%)	3(%)	4(%)	5(%)	6(%)	7(%)
1x/week	1(3,3)	-	-	1(3,3)	1(3,3)	-	-
2x/week	1(3,3)	2(6,7)	-	-	1(3,3)	1(3,3)	-
3x/week	1(3,3)	2(6,7)	-	1(3,3)	-	1(3,3)	1(3,3)
>3x/week	1(3,3)	-	1(3,3)	-	2(6,70	2(6,7)	-
Total	**4(13,3)**	**4(13,3)**	**1(3,3)**	**2(6,7)**	**4(13,3)**	**4(13,3)**	**1(3,3)**

Informations: 1. Banana; 2. Papaya; 3. Apple; 4. Oranges; 5. Guava; 6. Watermelon; 7. Pineapple

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Table 18. Respondents' distribution according to daily consumption frequency of fruits

Consumption frequency	Types of fruit						
	1(%)	2(%)	3(%)	4(%)	5(%)	6(%)	7(%)
1x/day	1(3,3)	-	1(3,3)	-	2(6,7)	2(6,7)	-
2x/day	-	-	-	-	-	-	-
3x/day	-	-	-	-	-	-	-
Total	**1(3,3)**	**-**	**1(3,3)**	**-**	**2(6,7)**	**2(6,7)**	**-**

Informations: 1. Banana; 2. Papaya; 3. Apple; 4. Oranges; 5. Guava; 6. Watermelon; 7. Pineapple

Respondent distribution according to weekly consumption frequency of milk is revealed that the most consumption is less than three times a week, which is done by 3 respondents (10%).

Table 19. Respondents' distribution according to weekly consumption frequency of milk

Consumption frequency	Amount	%
1x/week	2	6,7
2x/week	1	3,3
3x/week	-	-
>3x/week	3	10
Total	**6**	**20**

Respondent distribution according to daily consumption frequency of milk is revealed that the most consumption is once a day, which is done by 3 respondents (10%) (see Table 20).

Table 20. Respondent distribution according to daily consumption frequency of milk

Consumption frequency	Amount	%
1 x/ day	3	10
2 x/ day	-	-
3 x/ day	-	-
Total	**3**	**10**

Milk consumption is only carried out by a small proportion of street children, which is 6 respondents (20%) with the highest frequency of more than three times a week and consumed once a day. Most essential nutrients are in milk are biologically high protein value, calcium, phosphorus, vitamin A, and thiamine. The recommended portion of milk is 2-3 glass a day (Handayani & Wahyuningsih, 2013). Therefore, milk consumption frequency of street children is still far from recommended.

Although the consumption of fruit and milk for street children is lacking, with the proper consumption of staple foods, side dishes, and vegetables, the adequacy of the nutrients can be achieved, because all nutrients contained in fruit and milk, if observed, can also be found in staple foods, side dishes, and fruit.

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Consumption level

From the average percentage of AKG of all age groups as shown in Table 21, the highest calories reached 79.3%, the highest protein consumption only reached 65.4%, the highest carbohydrates 84,9%, and the highest fat consumption only reached 66.8%. Those highest percentages are gathered from 13-15 years old age group.

Table 21. Average of consumption level and percentage of AKG

Age	7-9 y.o.				10-12 y.o.				13-15 y.o.			
Substance	∑	SD	% AKG	SD	∑	SD	% AKG	SD	∑	SD	% AKG	SD
Energy (calories)	977,5	381,5	54,3	18,8	1077,5	100,8	70,8	26,9	901	432	79,3	50,3
Protein (gram)	21,7	7,4	62,5	24	25,2	1,4	64,6	28,6	20,7	9,8	65,4	33,5
Carbohydrate (gram)	180,1	63,9	69,8	22	193,4	12,2	83,8	23,9	164,1	67,3	84,9	32
Fat (gram)	15	5,7	50,1	20,2	16,7	3,2	63,1	30,3	15,2	10,7	66,8	47

The table reveals that for all types of substances the level of consumption of street children is categorized as poor (<80%), except carbohydrates which have a slightly higher percentage of AKG and even then only in the category of moderate AKG (> = 80% - <100%).

From the Table 22, it can be seen that the percentage of AKG in the poor category has entered the value of deficit because it is still less than 70% including protein which is very necessary for growth.

Table 22. Average data of consumption level and percentage of good, moderate, and poor AKG

Substance	Good		Moderate		Poor	
	% AKG	SD	% AKG	SD	% AKG	SD
Energy (calorie)	127,5	17,8	89,3	7,3	53,1	15,1
Protein (gram)	105,2	11,5	86,4	4,6	57,8	16,7
Carbohydrate (gram)	100	13,2	93,7	3,9	44,4	12,5
Fat (gram)	112,7	0	86,6	6,8	50,4	16,2

The quality of adolescent growth and development is largely determined by meeting nutritional needs. The sustained state of declining consumption levels and the percentage of AKG of street children will cause a stunting growth, especially the lack of protein consumption because protein is a nutrient that is needed in body's development and growth (Devi, 2010).

Nutritional status

Distribusi responden menurut status gizi Respondents' distribution according to nutritional status

As seen in Table 23, 21 (70%) respondents have poor nutritional status and only 2 (6.7%) respondents have good nutritional status. A person's nutritional status can be influenced by many factors and has very complex dimensions. Factors that influence nutritional problems can come from food consumption and individual health, while food

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consumption is influenced by income, education, availability of food ingredients, and the ability to process food.

Table 23. Respondents' distribution according to nutritional status

Nutritional status	Amount	%
Good	2	6,7
Adequate	7	23,3
Poor	21	70
Total	**30**	**100**

The lack of nutritional status of the most street children can be caused by multifactorial causes, including income amount, availability of food, the size of knowledge, and the level of health.

Relationship between nutritional status and consumption level

Table 24 reveals that 14 respondents (46.7%) have a lack of nutritional status and calorie adequacy rate. Besides, there are also some children with poor nutritional status but have a good calorie adequacy rate and vice versa. On this table, it reveals that on the poor nutritional status, it is also related to the lack of energy, carbohydrate, fat, and protein consumption. Whereas another fact also found children with good nutritional fact but with poor consumption level of energy, carbohydrate, fat, and protein. This fact gives two possibilities that it can be found a meaningful relationship between nutritional status with the level of energy consumption, carbohydrate, fat and protein or no meaningful connection is obtained.

Table 24. Respondents' distribution according to nutritional status and calorie adequacy rate

Calorie / Nutritional status	Good	Moderate	Poor
Good	-	-	2(6,7)
Moderate	-	1(3,3)	5(16,7)
Poor	2(6,7)	6(20)	14(46,7)

To prove this possibility, a statistical test of the relationship between nutritional status and energy, carbohydrate, fat, and protein levels has been conducted. According to the statistical test, in Table 24, it is known that there is no significant relationship between nutritional status and the level of consumption of calories, carbohydrates, fats, and proteins in street children. This has been proven by obtaining a value of $p > 0.05$.

Conditions that are not significant from the relationship above can be caused by the level of consumption of calories, carbohydrates, fats and proteins in street children that still far from the recommended figure. This can be seen from the percentage of RDA achieved for all types of substances, which are still below 100%. The possibility of carbohydrates, fats, and proteins consumed by street children is still processed into calories allocated to meet the activity needs of street children.

Based on the Table 25, 9 respondents (30%) have poor nutritional status and carbohydrate adequacy rate. Besides, 8 respodents (26.7%) have poor nutritional status and good carbohydrate AKG.

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Table 25. Respondents' distribution according to nutritional status and carbohydrate adequacy rate

Nutritional status / Carbohydrate	Good	Moderate	Poor
Good	-	1(3,3)	8(26,7)
Moderate	-	3(10)	3(10)
Poor	2(6,7)	4(13,3)	9(30)

Table 26. Respondents' distribution according to nutritional status and fat adequacy rate

Nutritional status / Fat	Good	Moderate	Poor
Good	-	1(3,3)	4(13,3)
Moderate	-	1(3,3)	3(10)
Poor	2(6,7)	5(16,7)	14(46,7)

Table 26 reveals that 14 respondents (46.7%) have poor fat adequacy rate. Besides, there are also some children with poor nutritional status but have a good fat adequacy rate, and vice versa.

Table 27. Respondents' distribution according to nutritional status and protein adequacy rate

Nutritional status / Protein	Good	Moderate	Poor
Good	-	1(3,3)	2(6,7)
Moderate	-	1(3,3)	5(16,7)
Poor	2(6,7)	5(16,7)	14(46,7)

Table 27 reveals that 14 respondents (46.7%) have poor protein adequacy rate. Besides, there are also some children with poor nutritional status but have a good protein adequacy rate, and vice versa.

Protein is responsible for the function of growth, but if the caloric needs are met from carbohydrates but fat is still insufficient, then the protein consumed will be broken down to produce calories. If this situation occurs, the growth and development process cannot run well. In this population (street children respondents), the protein that is expected to play a role in growth, in reality, the highest fulfilled average AKG percentage is classified into deficit (AKG percentage of less than 70 % (65.4%$\pm$33.5%) and this small amount of protein is possibly still has to be metabolised into calories due to poor adequacy of the highest calories obtained, which is also still less or the same with the percentage of AKG of 70% to 80% (79.3%$\pm$50.3%).

From here it can be seen that the food consumed by street children still does not support maximum growth and the food consumed so far is only allocated for the fulfilment of calories for activities. Beside being caused by a minimum level of consumption, a non-significant relationship of nutritional status and consumption level can also be caused by the type of illness suffered. Table 8 reveals that the types of diseases that many street children suffer from are upper respiratory tract infections and diarrhoea, the types of diseases they suffer can cause decreased appetite and even impaired food absorption in

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the gastrointestinal tract so that the absorbed nutrients are not optimal and the condition will affect nutritional status.

Tabel 28. Statistical Test Results
The Relationship Between Nutritional Statusand Level of Result Consumption of statistical experiment ofthe relationship between the nutritional status and consumption level

Nutritional status and type of substance	P Fisher value
Nutritional status and calories	0,8
Nutritional status and carbohydrate	0,4
Nutritional status and fat	0,6
Nutritional status and protein	0,8

According to the statistical analysis, in Table 28, it is known that there is no significant relationship between nutritional status and the level of consumption of calories, carbohydrates, fats, and proteins in street children with the value of p> 0.05.

In this study, the nutritional status obtained by using the anthropometric measure of height according to age, sex, and height, which is a process that takes place in a long period of time. It is continuous and its formation is influenced by various factors that influence growth and growth which include genetic, prenatal, and postnatal factors. The prenatal conditions included include maternal health and nutrition, radiation and toxic substances during pregnancy or hormonal disorders. While postnatal factors include nutrition, illness, and the environment. So it can be concluded that the non-significant relationship between nutritional status and consumption level can also be caused by the aforementioned various factors. (Wisundari, 2018).

CONCLUSION AND RECOMMENDATION

Conclusion

The research concludes that of the 30 street children who were assessed for their nutritional status, they mostly have poor nutritional status. It is also found that the most frequent diet patterns of street children are rice, side dishes and vegetables, and the second most is rice and side dishes. For consumption of staple food, rice is mostly consumed, followed by noodles. For the consumption of side dishes, tempeh is the most consumed side dish and followed by eggs and tofu. The highest vegetable consumption was spinach and followed by water spinach and cabbage. While the highest fruit consumption is banana, papaya, guava and watermelon. Milk is known to be consumed by only 20% of the respondents. The average percentage of RDA for all types is still far from the recommended value which is below 100.

From the results of statistical analysis, it is known that the relationship between nutritional status and the level of energy, carbohydrate, fat, and protein consumption did not have a significant relationship (p> 0.05). This can be caused by the level of consumption of street children still far from the AKG so that the substances consumed are still allocated for energy in activities while for growth is still lacking or can also be caused by diseases suffered and genetic factors. The amount of income and level of knowledge may play a role in determining the level of consumption and diet of individuals, but this is, of course, inseparable from other factors such as the role of parents, appetite, pleasure factors and socio-cultural conditions.

Recommendation

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The researcher suggests that efforts need to be made in order to increase knowledge about nutrition in street children such as counselling. There is also needs to implement a nutrition intervention program for street children such as supplementary food programs (PMT). The involved actors (government, NGO, et cetera) should also work together to improve the quality of human resources in the community of street children by providing education and skills to increase independence with the hope that street children can improve their economic and health degrees, and can use this research as a scientific basis for intervention programs to prevent further nutritional problems. Besides, this research should be complemented by further research with larger sample size and the wider population. The need for further research is also should be conducted based on the relationship between the factors underlying the nutritional status of street children, such as illness, the environment, and others.

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