

Original Research

Family revenue relations and amount of pocket money towards the consumption of vegetables and fruits at the primary school level

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ABSTRACT:

State elementary school 191 located in singengu village kec.Kotanopan, is a school that has students with low consumption of vegetables and fruits. This study aims to determine the relationship between family income and the amount of money with the consumption of vegetables and fruits in the elementary school students of SDNegeri 191 Kec.Kotanopan. The type of research used is quantitative with cross sectional research design. The sample in this study was determined by taking the entire population into a research subject, as many as 93 students. The study was conducted at Singengu village Kec.Kotanopan Kab.Mandailing natal from March to April 2018. The results showed that family income has a relationship with the consumption of vegetables and fruit to the students ( P value = 0.030) and the amount of pocket money to students have no relationship with the consumption of vegetables and fruits students (P value = 0.065). It is suggested that the parents should provide vegetable and fruits for student consumption every day. Bring vegetables and fruits to school train students to consume vegetables and fruits during the break time.

Keywords:

Family income, Amount of money pocket, Consumption of vegetables and fruits.

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## INTRODUCTION

Family economic condition affects the food consumption everywhere (Almatsier, 2011). The level of income is one of the factors that affects the consumption of household meal. The higher the number of family members with high household income, the consumption rate of a food is expected to be high (Sugiarto *et al.*, 2005). The pocket money routinely given to children can shape the attitudes and perceptions of children that allowance is their right and they can sue. Lack of parental advice about using an allowance will encourage children to use it freely. On the other hand, the provision of allowance can also affect the habit of snacking in school-age children (Aprilia, 2011). Pocket money has a relationship with the family income, if the income of large families, then yeah money will also be large.

The results of Mohammad and Madanijah (2015) research on the consumption of fruits and vegetables of elementary school age children in Bogor namely SDN cibanteng 01 Bogor and SDN papandayan city Bogor stated that one that affects the consumption of vegetables and fruits is child pocket money. State elementary school 191 located in Singengu village Kotanopan district, is a school that has a low student will consume vegetables and fruits. The results of the preliminary survey on 50 elementary school students in SDN 191 Kotanopan sub-district, interviewed about the consumption behaviour of vegetables and fruits with a guide questionnaire and found that 19 (38%) students consume vegetables every day and 31 (62%) other students do not consume vegetables every day, 16 (32%) students consumed fruits every day and 34 (68%) other students did not consume fruits every day. Therefore, the need for this research to be done in Kotanopan Subdistrict to analyze the relation of family income and the amount of students' snack money by consumption of vegetables and fruits in elementary

school students at SDN 191 Kotanopan subdistrict year 2018 is highly pronounced.

## MATERIALS AND METHODS

The type of research used in this study is quantitative with cross sectional study design.

### Location and time of study

The research was conducted at SD Negeri 191 Kotanopan Sub-district, Mandailing Natal Regency with research time from January 2018 until April 2018.

### Population and sample

Population in this research is all of the elementary school students of SDN 191 Kotanopan sub-district i.e. 93 students. The sample in this study is determined by taking the entire population to be the subject of research, as many as 93 students.

### Method of collecting data

Primary data were collected directly through interviews and observations including family income data and student pocket money. Secondary data was obtained from the report of technical implementation unit head of education office of Kotanopan sub-district about the number of students in SDN 191 Kotanopan sub-district, and reference of books and research results related to the research.

### Variables and operational definition

Variables in this study consisted of independent variables (family income and the amount of pocket money) and dependent variable (consumption of vegetables and fruits). The operational definitions of the research variables are as follows:

1. Family income is calculated by the total income of all family members in one month. Family income is assessed using the average minimum wage Mandailing Natal district (Rp 2.296.250,00)
2. The amount of pocket money is the amount of allowance in a day and the amount of allowance used to buy food snacks in a day.

3. Consumption of vegetables and fruits is the frequency of fruits and vegetables consumed by respondents per day (Table 1).

**Data analysis**

The method of study in this research is as follows:

1. Univariate analysis

This analysis is used to obtain the frequency distribution of each research variable

2. Bivariate analysis

Bivariate analysis is used to prove the hypothesis in this study and is to determine the relationship between independent variables with dependent variable. Data analysis used is chi square test.

**RESULTS AND DISCUSSION**

**Results of univariate analysis**

Distribution of respondents based on the consumption of vegetables and Fruits. Table 2 shows that at SDN 191 Kotanopan sub-district as much as 59.1% or 55 respondents have less vegetable and fruits consumption level and as much as 40.9% or 38 respondents have a sufficient level of vegetable and fruits consumption.

WHO recommended to consume vegetables and fruits as much as 400 g per day or as much as three to five servings a day. The balanced nutrition guide (2014) states that toddlers and school-age children are encouraged to consume vegetables and fruits of 300 to 400 g and 250 g of vegetables (equivalent to 2.5 servings or 2.5 glasses of vegetables after cooking and draining) and 150 g of fruits or equivalent to three medium-size banana or 1.5 medium-sized papaya or three medium-sized oranges.

Indonesia has a variety of local vegetables and fruits that are of good nutritional value for health, ranging from spinach, kale, sweet potatoes, bananas, guava, apples and so on. But in reality, the people of Indonesia are classified for consuming vegetables and fruits.

**Distribution of respondents by family income.**

Table 3 shows that at SDN 191 Kotanopan sub-district 72.1% or 67 respondents have low family income level and as much as 27.9% or 26 respondents have high level of family income. Family economic condition affected the food provided (Almatsier, 2011). The level of income is one factor that affects the

**Table 1. Variable, measuring instrument, measuring way, measuring result and measuring scale**

S. No	Variable	Measuring Instrument	Measuring Way	Measuring Result	Measuring Scale
1	Family income	Questionnaire	Interview	1. Low if below average Minimum Wages 2. High if above average minimum wages	Ordinal
2	Total pocket money	Questionnaire	Interview	Low (1000-4000) medium (5000-8000) high (9000-12000)	Ordinal
3	Consumption of vegetables and fruits	Food recall	Interview	1. Simply: when consumption of fruits $\geq 2$ and vegetables $\geq 3$ times a day 2. Less: if the consumption of fruits $< 2$ and vegetables $< 3$ times a day. (Guidelines for balanced Nutrition, 2014)	Ordinal

**Table 2. Distribution of respondents based on consumption of vegetables and fruits**

S. No	Category	Vegetables and fruits consumption	
		n	%
1	Enough	38	40.9
2	Less	55	59.1
Amount		93	100

consumption of a household meal. The higher the number of family members with high household income, the consumption rate of a food is expected to be high (Sugiarto *et al.*, 2005).

#### **Distribution of respondents by total of pocket money**

Table 4 shows that in SDN 191 Kotanopan sub-district 33.33% or 31 respondents have low amount of pocket money, as much as 54.80% or 51 respondents have amount of money for medium snack and 11.90% or 11 respondents have high amount of pocket money. The pocket money routinely given to children can shape the attitudes and perceptions of children that allowance is their right and they can sue. Lack of parental advice about using an allowance will encourage children to use it freely. On the other hand, the provision of allowance can also affect the habit of snacking in school-age children (Aprilia, 2011).

#### **The relationship between family income and consumption of vegetables and fruits.**

Based on chi square test results obtained, chi-square statistical test results between family income

**Table 4. Distribution of respondents by total of pocket money**

S.No	Category	Vegetables and fruits consumption	
		n	%
1	Low	31	33.33
2	Medium	51	54.80
3	Height	11	11.90
Amount		93	100

**Table 3. Distribution of respondents by family income**

S. No	Category	Vegetables and fruits consumption	
		n	%
1	Low	67	72.1
2	Height	26	27.9
Amount		93	100

with consumption of vegetables and fruits obtained (P value = 0.030) could be concluded that there is a significant relationship between family income with consumption of vegetables and fruits (P<0.05).

This study is in line with Andarwangi *et al.* (2016) who studied the household lifestyle of consuming s fruits at bandar lampung, stating that there is a family income relationship with the consumption of vegetables and fruits. In line with that, Sriwahyuni and Abdul (2013) in his research on factors related to the consumption behaviour of vegetables and fruits in the students of SMPN 226 South Jakarta stated that there is a relationship of parental income with the consumption of vegetables and fruits.

Family income plays a role apart from clothing, boards, and meals. Revenue is a factor that determines the quantity and quality of food consumed. The low income earned by the family causes the family often consume staple food that is rice. Family income is one of the factors that influence the consumption of food (Kartasapoetra and Marsetyo, 2010). Direct family income also determines the consumption of food in a family. Increased revenue can increase the opportunity to buy food with better quality and quantity (Son, 2016). **The relationship between the amount of pocket money with the consumption of vegetables and fruits**

Based on chi square test results obtained, chi-square statistical test results between family income with the consumption of vegetables and fruits obtained (P value = 0.065) it can be concluded that there is no

significant relationship between the amount of money with consumption of vegetables and fruits ( $P>0.05$ ).

This research is in line with the research of Paramita (2013) that the allowance or the amount of pocket money has no relation with the consumption of vegetables, ( $P$  value = 0.080). In addition, Mohammad and Madanijah (2015) stated that student's pocket money is not related to the consumption of subject vegetables ( $P>0.05$ ). It can be assumed that most students do not allocate their allowance to buy vegetable and fruits snack for consumption and unfavorable preference for vegetables and fruits.

## CONCLUSION

Low family income retards the consumption of fruits and vegetables.

## SUGGESTIONS

1. Parents should provide vegetables and fruits for students to eat every day.
2. Bring the provision of vegetables and fruits in the school to train students to consume vegetables and fruits during break time.

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