



## Knowledge of Adolescent Girls About Balanced Nutrition

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### **ABSTRACT**

*Adolescent knowledge about nutrition is very important considering that adolescents are an age group at risk for various diseases and health problems, one of which is nutritional problems. The level of knowledge possessed by adolescent girls is one of the factors that influences nutrition. The purpose of this study was to determine the knowledge of adolescent girls about balanced nutrition. The method in this study used quantitative description. The sample size to be used in this study was 84 adolescents. The sampling technique in this study was purposive sampling. The research instrument was about the definition of nutrition, the impact of malnutrition, nutritional needs, and types of nutritious foods, along with how to process nutritious foods. The results of the validity test were 0.361, and the results of the reliability test were 0.700. The analysis in this study was univariate analysis. The results showed that 80% of respondents had good knowledge, a small portion of respondents had sufficient knowledge, as much as 13.8%, and a small portion of respondents, as much as 6.3%, had insufficient knowledge. The conclusion based on the results of this study was that there were still female students whose knowledge was lacking and moderate, so activities such as health education about nutrition were needed, and further research was needed with a larger sample size to obtain maximum results.*

*Keywords: Balanced nutrition, Knowledge, Adolescent girls.*

### **ABSTRAK**

Pengetahuan remaja mengenai gizi sangat penting mengingat remaja merupakan kelompok usia yang beresiko terhadap berbagai penyakit dan masalah kesehatan salah satunya masalah gizi. Tingkat pengetahuan yang dimiliki oleh remaja putri menjadi salah satu faktor yang mempengaruhi gizi. Tujuan pada penelitian ini adalah untuk mengetahui pengetahuan remaja putri tentang gizi seimbang. Metode pada penelitian ini menggunakan deskriptif kuantitatif. Besar sampel yang akan digunakan pada penelitian ini sebanyak 84 remaja. Teknik pengambilan sample pada penelitian ini adalah purposive sampling. Instrumen penelitian tentang pengertian gizi, dampak akibat dari kurang gizi, kebutuhan gizi dan jenis makanan bergizi beserta cara mengolah makanan bergizi. Hasil uji validitas 0,361 dan hasil uji realibilitas 0.700 Analisis dalam penelitian ini yaitu analisis univariat, Hasil menunjukkan responden memiliki pengetahuan baik sebanyak 80%, sebagian kecil responden memiliki pengetahuan cukup sebanyak 13,8% dan sebagian kecil dari responden sebanyak 6,3% memiliki pengetahuan kurang. Kesimpulan berdasarkan hasil penelitian ini didapatkan masih ada siswi yang pengetahuannya kurang dan sedang, maka diperlukan kegiatan seperti pendidikan kesehatan tentang gizi dan diperlukan penelitian lanjutan dengan jumlah sampel yang lebih besar untuk mendapatkan hasil yang maksimal.

Kata Kunci : Gizi seimbang, Pengetahuan, Remaja Putri.

## INTRODUCTION

Based on the 2016 Basic Health Research (Riskesdas) data, the percentage of very thin and thin adolescent girls aged 12-18 years is based on the BMI/U index. In Indonesia, adolescent girls with thin and very thin criteria are 7.5% (1.8% very thin and 5.7% thin). Nationally, the highest prevalence of adolescent girls with thin and very thin criteria is in NTT (East Nusa Tenggara) Province, with a total of 16% (5.2% very thin and 10.8% thin), and the lowest prevalence of adolescent girls with thin and very thin criteria is in Bengkulu Province, with a total of 4.4% (0.0 very thin and 4.4 thin). Meanwhile, West Java Province is ranked 12th out of 34 provinces in Indonesia with a total of 5.7% (1.1% very thin and 4.6% thin) (Riskesdas RI, 2016).

In Garut Regency, the number of female adolescents with thin and very thin criteria (121 very thin people and 1962 people with thin criteria) (Garut Regency Health Office, 2018). According to data from the Garut Regency Health Office, there are 11,408 female adolescents of high school and vocational school age, but the number of female students who have just been recorded in the nutritional status data collection by the Garut Regency Health Office is 9,180 people (Garut Regency Health Office, 2019).

Adolescents are an age group that is vulnerable to various health problems, including nutritional status problems. Nutritional problems that are often found in adolescents include anemia, chronic energy deficiency (CED), protein energy deficiency (CED), and vitamin A deficiency.

Nutrition is something that must be considered; there are many impacts that will be experienced by adolescents when experiencing malnutrition, such as adolescents who are malnourished or too thin will affect their reproductive system, while adolescents who are overweight or obese will be at risk of degenerative diseases such as hypertension, diabetes mellitus, coronary heart disease, and others (Syahfitri, 2017).

Factors that influence adolescent nutrition include poor eating habits, incorrect understanding of nutrition, excessive liking for certain foods, excessive promotion by the mass media, food consumption, education and knowledge, socio-economics, and physical activity (Huriyati, 2009).

One of the causes of nutritional problems is the low level of knowledge about balanced nutrition; the fulfillment of balanced nutrition plays an important role in a person's health. One of the factors that can affect a person's nutritional status is nutritional knowledge and its application in everyday life.

Knowledge about good nutrition is very much needed, because balanced nutrition is a daily food composition that contains nutrients in types and amounts according to the body's needs (Marni, 2014). This can avoid the impact of unbalanced nutrition such as obesity, KEK, and anemia. With good knowledge, it is expected to improve good nutrition and prevent the impact of malnutrition (Robertus, 2014).

Adolescent knowledge about nutrition is very important considering that adolescents are an age group at risk for various diseases and health problems, including nutritional problems. Nutritional problems in adolescents can have short-term and long-term impacts, in the short term on the health of adolescent girls, in the long term on reproductive health and future generations, because adolescent girls will conceive and have children and will have an impact on the quality of the children they carry.

Based on a preliminary study in one of the high schools in Garut Regency, most teenagers tend to have insufficient intake and have not received information about balanced nutrition. The purpose of this study was to determine the knowledge of female teenagers about balanced nutrition.

## METHOD

This research is a quantitative descriptive research study conducted at SMA Negeri 14 Garut. The primary data collected consists of data on the characteristics of respondents to the balanced nutrition knowledge questionnaire that has been tested for validity and reliability with valid results ( $r > 0.361$  and reliable knowledge questionnaire = 0.700). The sample used was 84 female students of SMA Negeri 14 Garut with purposive sampling technique, namely the researcher determines the sample according to the criteria and population that has specific and relevant characteristics to provide data in accordance with the research objectives. Univariant data analysis was conducted with the aim of determining the description of adolescents' knowledge about balanced nutrition and the data was presented in the form of a frequency distribution table.

## RESULTS

Table 1. Frequency Distribution of Respondent Characteristics (N=84)

No	Characteristics respondents	Frequency (f)	Percentage %
1.	Age		
	- Early teenager (12-16)	22	27.5%
	- Late teenager (17-25)	58	72.5%
2.	Class		
	- X	11	13.8%
	- XI	30	37.5%
	- XII	39	48.8%
3.	Body Mass Index (BW & BH)		
	- Thin (<17kg/m <sup>2</sup> )	1	1.3%
	- Normal (17-22 kg/m <sup>2</sup> )	65	81.3%
	- Fat (23-27 kg/m <sup>2</sup> )	12	15.0%
	- Obesity (>27 kg/m <sup>2</sup> )	2	2.5%
4.	Parents' Income		
	- <1.8 Million	17	21.3%
	- 1.8 – 5 million	55	68.8%
	- >5 million	8	10.0%
5.	Parental Education		
	- Elementary School	10	12.5%
	- Junior High School	7	8.8%
	- Senior High School	54	67.5%
	- D3	2	2.5%
	- S1	6	6.5%
	- S2	1	1.3%
6.	Fe Tablets		
	- Acquired	41	51.3%
	- Did not acquired	39	48.8%
7.	Consumption of Fe Tablets		
	- Regular	2	2.5%
	- Sometimes	39	48.8%
	- Never	39	48.8%

Based on the table above, most of the respondents (72.5%) are in their late teens (17-25 years), almost half (48.8%) of the respondents are in grade XII, almost all (81.3%) of the respondents' body

mass index is in normal condition (17-22 kg/m<sup>2</sup>), most (68.8%) of the respondents' parents' income is 1.8-5 million, most (67.5%) of the respondents' parents' education is high school, most (51.3%) of the respondents get Fe tablets from school, half of the respondents (48.8%) consume Fe tablets sometimes, and half of the respondents (48.8%) never consume Fe tablets obtained from school..

Table 2. Frequency Distribution of Knowledge of Young Women About Balanced Nutrition (N=84)

<b>Knowledge of young women about balanced nutrition</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
<b>Good</b>	64	80
<b>Sufficient</b>	11	13.8
<b>Insufficient</b>	5	6.3

Based on the table above, the majority of respondents have good knowledge (80%), a small proportion of respondents have sufficient knowledge (13.8%), and a small proportion of respondents (6.3%) have insufficient knowledge regarding balanced nutrition.

Table 3. Knowledge of female adolescents about balanced nutrition per sub-variable (N=84)

Knowledge of young women about balanced nutrition	Frequency (f)	Percentage (%)
Knowledge of balanced nutrition		
- Good	60	75%
- Sufficient	17	21.3%
- Insufficient	3	3.8%
Impact due to nutrition intake less than requirements		
- Good	59	73.8%
- Sufficient	14	17.5%
- Insufficient	7	8.8%
Nutrition needs in adolescents		
- Good	58	72.5%
- Sufficient	14	17.5%
- Insufficient	8	10%
Knowing the types of nutritious food and how to prepare nutritious food		
- Good	39	48.8%
- Sufficient	32	40%
- Insufficient	09	11.3%

Based on the table above, it can be seen that the results of the study from the respondents mostly have good knowledge about the concept of nutrition as much as 75%, a small part has sufficient knowledge as much as 21.3% and the rest of the respondents as much as 3.8% have less knowledge about the concept of nutrition. Respondents' knowledge about the impact of nutrition is less than the needs of the majority; 73% have good knowledge, as much as 17.5% have sufficient knowledge, and the rest of the respondents, as much as 8.8%, have less knowledge about the impact of nutrition than the needs. Respondents' knowledge about nutritional needs for adolescents: most of the respondents have good knowledge, as much as 72.5%; a small part has sufficient knowledge, as much as 17.5%; and the rest of the respondents, as much as 10%, have less knowledge about nutritional needs for adolescents. The last knowledge about the types of nutritious foods and how to process food, most of the knowledge is good, most of the knowledge is sufficient, and 11.3% have less knowledge

## DISCUSSION

The Indonesian Ministry of Health (Depkes RI) defines adolescents as those aged 10-19 years and unmarried (Widianti, 2012). Respondents in this study were in early and late adolescence, during which adolescents experience rapid growth in weight and height (Marmi, 2013). Various factors can influence nutrition in adolescence, including poor eating habits, erroneous understanding of nutrition, excessive liking for a food, excessive promotion from social media, socio-economic, physical activity, education and knowledge, one of which is parental education, most of the parents of the respondents were at the high school level, namely 67.4%, while the least were at the S2 level of education as much as 1.3%, so a person's level of education will affect their level of knowledge, parents who have a higher level of education will better understand and choose quality food for daily consumption, the selection of nutritious and balanced foods is expected to influence optimal nutritional status (Marmi, 2013). Teenagers need energy/calories, protein, calcium, iron, zinc, and vitamins to fulfill physical activities such as school activities and daily activities. Every teenager wants a healthy body condition to be able to fulfill physical activities; energy consumption comes from food, and the energy obtained will cover the energy intake expended by a person's body (Winarsih, 2018).

From table 4.3 above regarding the nutritional knowledge of female adolescents about balanced nutrition, it can be seen that almost all female students are in the good category, as many as 64 people (80%), and a small number of respondents are in the sufficient category (13.8) and lacking as many as (6.3%). On average, respondents have good knowledge criteria in the sub-variable of knowledge about nutrition, sufficient knowledge criteria in the sub-variable of the impact of poor nutrition from knowledge and nutritional needs in adolescents, and the criteria of poor knowledge possessed by respondents are in the sub-variable of knowing the types of nutritious foods and how to process nutritious foods. Knowledge of balanced nutrition is a factor that indirectly affects nutritional status. According to Damayanti (2016), the better the nutritional knowledge, the better the food consumption pattern, and vice versa, the less nutritional knowledge, the less food consumption pattern. Knowledge is very important because knowledge will affect a person's attitude and behavior in implementing balanced nutrition in their daily lives; in addition, knowledge also influences a person's decision-making in determining an action or behavior towards fulfilling nutritional needs in adolescents (Emilia, 2009). The results of Emilia's research (2009) showed that nutritional knowledge can be used as provisions for teenagers on how to choose healthy foods and understand that food is closely related to nutrition and health. Knowledge can be obtained internally and externally and through learning. Based on the results of the study, it turns out that there are still female students who are in the sufficient and insufficient categories regarding general knowledge of balanced nutrition. This is due to the lack of counseling and education on general knowledge of balanced nutrition. Without knowledge, a person has no basis for making decisions and determining actions regarding the problems faced.

At this time, adolescent girls tend to ignore their nutritional status on the grounds of maintaining an ideal body shape, so that adolescent girls are at higher risk of experiencing anemia compared to adolescent boys. Anemia in adolescence will have a negative impact on their immune system so that it is possible that adolescent girls will experience various diseases caused by decreased immune system (Indartanti, 2014). Other researchers say that adolescent girls have a tenfold greater risk of experiencing anemia compared to adolescent boys. This is because adolescent girls menstruate every month and are still growing, so adolescent girls need more iron intake compared to adolescent boys. The limit of Hb (hemoglobin) levels in adolescent girls to diagnose anemia is if the Hb level of adolescent girls is less than 12 g/dl. (Tartowo, 2010). Conclusion: Based on the results of the study, it shows that most, 80%, of female students have knowledge about balanced nutrition in the good category. Suggestions are expected that further researchers can examine nutritional status at the Senior High School (SMA) level, not only for female adolescents. And with a larger sample size.

## **CONCLUSION**

Based on the results of the study, it shows that most, 80%, of female students have knowledge about balanced nutrition in the good category. Suggestions are expected that further researchers can examine nutritional status at the Senior High School (SMA) level, not only for female adolescents. And with a larger sample size,

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