



INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

Chronic Energy Deficiency and Body Image Perception of Young Women in Integrated Healthcare Center Kesiman Kertalanggu Village

I Gusti Ayu Putri Kusuma Sari^{1*}, Ni Made Dewantari², Pande Putu Sri Sugiani³,
I Wayan Juniorsana⁴

¹ Student of Nutrition Department Polytechnich of Health Denpasar

^{2 3 4} Nutrition Department, Polytechnich of Health Denpasar

*Corresponding author: putri48sari@gmail.com

Article history

Posted : 2023-11-22

Reviewed : 2023-10-22

Received : 2023-10-01

ABSTRACT

Background: Chronic Energy Deficiency (CED) often occurs in young women and is influenced by eating disorder. Eating disorder are influenced by several factors such as teenagers with a negative body image perception will make various efforts to have the desired body shape. The purpose of this study was to find out the description of CED and Body Image Perceptions of Young Women in Integrated Healthcare Center Kesiman Kertalanggu Village. **Methods:** The type of research was observational with a cross-sectional design. Upper arm circumference data were collected using the upper arm circumference tape, eating pattern using the SQ-FFQ form, and body image perception using the BSQ questionnaire. The data were processed and compared with the predetermined cut off point. The number of sample were 20 people. **Results:** Observations showed that the percentage of CED was 35% and as much as 95% consume various foodstuffs. The average consumption level of energy, protein, fat, and carbohydrates were included in the less category. There were 60% samples have a bad eating frequency and 70 % samples have a positive body image perception. Samples that have less consumption levels tend to have a negative body image perception. Samples that have normal upper arm circumference tend to have lower consumption levels. It is recommended for young women to apply the four pillars of balanced nutrition

Keywords: Chronic Energy Deficiency; Body Image Perception; Eating Patterns; Young Women

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

INTRODUCTION

Young women in teenager categories have tend for rapid growth of physical, cognitive and psychosocial development. Peak growth affects the nutritional needs of teenager because it influences changes in body composition. Teenager girls are often vulnerable to adolescent nutritional problems such as obesity, overeating, anemia and malnutrition (CED) (Zaki & Sari, 2019). Chronic energy deficiency refers to lower energy and protein intake compared to the amount of energy and protein needed that lasts for months to years (Ruaida & Marsaoly, 2017).

Based on the results of the Bali Province Basic Health Research (2018) data there were 30.05% of teenager girls experienced chronic energy deficiency. The district that has the highest prevalence rate of CED ie ; Denpasar Regency (13.25%) and Tabanan Regency has the lowest prevalence, ie 7.52%.

CED has a negative impact on young women, including anemia and reduced concentration power, which can reduce young women's learning achievement. CED is greatly influenced by a person's eating habits. Young women often eat the bad diet or do not comply with balanced nutrition guidelines. Based on the results of research by Suarjana, I Made., and friends at SMU or SMK Karangasem Regency. Of the 298 teenage girls, 124 (41.6%) were categorized as having low energy intake. Based on research results, it is known that young women who lack energy intake are more likely to experience CED. Teenagers girls who consume less energy than their needs will have a risk of CED 2,1 times higher than teenagers girls who consume energy according to their needs (Suarjana et al., 2020).

Inappropriate eating habits are influenced by several factors. An example is the large

number of teenagers who are currently very concerned about their body shape, especially young women. Teenagers with negative body image perceptions will make various efforts to get the desired body shape. Perceptions of negative body image have an impact on changes in eating behavior such as skipping meals, replacing main meals with snacks, vomiting, and going on extreme diets. This can have an impact on psychology, triggering eating disorders. Based on the results of research by Dian Purwanti, Annisa., Marlina, Yessi on female students at SMA Muhammadiyah 1 Pekanbaru. Of the 38 students who had bad eating behavior, 19 (57.58%) teenage girls had negative body image perceptions (Purwanti et al., 2023). Based on the background that has been created, researchers are interested to determine the description of chronic energy deficiency and the perception of body image of young women at the youth integrated healthcare center in Kesiman Kertalanggu village.

METHOD

The type of research carried out was observational using a cross sectional design. Observations were carried out from January 2023 to March 2023. These observations involved 20 teenage girls aged 13 to 18 years as observation samples. Measuring the picture of chronic energy deficiency is done by measuring the adolescent's upper arm circumference using an upper arm circumference tape or medline. Dietary pattern measurement was carried out by interview using the SQ-FFQ form. And measurements of body image perception are obtained from filling out a body shape questionnaire. Data processing and analysis is carried out by comparing the measurement results with standard standards and then



INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

presenting them in tabular form and analyzing them descriptively.

RESULTS

1. Sample Characteristics

Sample characteristics consist of age and education of the sample which can be seen in the table 1 below.

Table 1. Sample Characteristics

Variable	Category	Result	
		f	%
Age	13-15 year	16	80
	16-18 year	4	20
Total		20	100
School	Elementary School	3	15
	Junior High School	14	70
	Senior High School	3	15
Total		20	100

From the 20 young women who were observed, the following results were obtained. based on the table above, most of the sample (80%) was aged 13 to 15 years and the remainder

2. Chronic Energy Deficiency

Based on the research results, the distribution of chronic energy deficiency can be seen in table 2 below.

(20%) was aged 16 to 18 years. It is known that the majority of the sample (70%) is in junior high school, 15% is in elementary school and 15% is in high school.

Table 2. Distribution of Chronic Energy Deficiency

Upper Arm Circumference	f	%
<23,5 cm (CED)	7	35
≥23,5 cm (Normal)	13	65
Total	20	100

Base on the table above, most of the samples (65%) had normal upper arm circumference

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmajs>

values and the remaining 35% have an upper arm circumference < 23.5 cm, which means they have chronic energy deficiency.

3. Dietary Habits

Eating habits consist of the diversity of food ingredients, level of consumption, and frequency of eating

a. Diversity of Food Ingredients

Based on observations, the diversity of sample food ingredients can be seen in table 3 below.

Table 3. Distribution of Food Diversity

Diversity of Food Ingredients	f	%
Not Diverse (≤ 5 type)	1	5
Diverse (> 5 type)	19	95
Total	20	100

Base on the table above, most of the samples (95%) consumed a variety of food ingredients and 5% of the sample did not consume a variety of foods.

b. Consumption Level

The consumption levels studied consisted of energy, protein, fat and carbohydrate consumption levels which can be seen in table 4 below

Table 4. Consumption Level

Consumption Level		Category	Result	
			f	%
Energy Consumption Rate	Less ($< 80\%$)		12	60
		Enough or more ($> 80\%$)	8	40
	Total		20	100
Protein Consumption Rate	Less ($< 80\%$)		10	50
		Enough or more ($\geq 80\%$)	10	50
	Total		20	100
Fat Consumption Rate	Less ($< 80\%$)		17	85
		Enough or more ($\geq 80\%$)	3	15
	Total		20	100
			Less ($< 80\%$)	17
				85



INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

Carbohydrate Consumption Rate	Enough or more ($\geq 80\%$)	3	15
	Total	20	100

Base on the table above, most of the samples (60%) have low levels of energy consumption and and 40% of the sample had sufficient energy consumption levels or more. For protein consumption levels, half of the samples (50%) had less protein consumption levels and the rest had sufficient or more protein consumption levels. For fat consumption levels,

most of the samples (85%) had less fat consumption and the rest (15%) had sufficient or more fat consumption. For carbohydrate consumption levels, half of the samples (50%) had less carbohydrate consumption levels and the rest had sufficient or more carbohydrate consumption levels.

c. Eating Frequency

Based on observations, distribution of eating frequency can be seen in table 5 below.

Table 5. Distribution of Eating Frequency

Eating Frequency	f	%
Not Good (< 5 times per day)	12	60
Good (≥ 5 times per day)	8	40
Total	20	100

Base on the table above, most of the samples (60%) were in the bad eating frequency category and the remainder (40%) have good eating frequency

4. Body Image Perception

Based on observations, distribution of body image perception can be seen in table 6 below.

Table 6. Distribution Of Body Image Perceptions

Body Image Perception	f	%
Negative (Score > 48)	6	30
Positive ($\text{Score} \leq 48$)	14	70
Total	20	100

Base on the table above, most of the samples (70%) has a positive body image perception and the remainder (30%) has a negative body image perception.

Based on the research results, it was found that there is a relationship between

consumption levels and perceived body image and a relationship between chronic energy

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

deficiency and consumption levels which can be seen in tables 7 and 8 below

Table 7. Distribution of Consumption Levels Based on Body Image Perception

Body Image Perception	Consumption Rate			
	Less (<80%)		Enough or more (>80%)	
	f	%	f	%
Negative (Score >48)	6	40	0	0
Positive (Score ≤ 48)	9	60	5	100
Total	15	100	5	100

Base on the table above, from 15 samples with lower consumption levels, 40% had negative body image perceptions, while of the 5 samples with sufficient/more consumption

levels there were no samples with negative body image perceptions. Therefore, samples that have lower levels of consumption tend to have negative body image perceptions.

Table 8. Distribution of Chronic Energy Deficiency Based on Consumption Levels

Consumption Rate	Upper Arm Circumference			
	CED (<23,5 cm)		Normal (≥23,5 cm)	
	f	%	f	%
Less (<80%)	5	71	10	77
Enough or more (≥80%)	2	29	3	23
Total	7	100	13	100

Base on the table above, from 7 samples who have chronic energy deficiency, 71% had underconsumption levels, while of the 13 samples with normal upper arm circumference, 77% of the samples had underconsumption levels. Therefore, samples with normal upper arm circumference tend to have lower consumption levels.

DISCUSSION

A total of 7 samples (35%) were classified as having chronic energy deficiency and 13 samples (65%) were classified as normal. Adolescent girls have normal upper arm circumference values, this can be caused by consumption of varied foodstuffs. According to the Indonesian Ministry of Health, more diverse types of food consumed, the easier it is to meet nutritional needs. A variety of food ingredients will make it easier for the body to obtain other substances that are beneficial for health, so consuming a variety of

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmajs>

food ingredients is one of the important recommendations for achieving balanced nutrition (KEMENKES RI, 2014). This is proven by research conducted at SMAN 6 Bogor by Wardhani. There were 81 adolescent girls who did not experience CED, 68 (57.6%) consumed a variety of food ingredients. From the results obtained, it can be said that there is a relationship between various types of food and the incidence of chronic energy deficiency in adolescent girls (P. I. Wardhani, dkk., 2020). This is also in line with research conducted by Ertiana and friends at SMAN 2 Pare, Kediri Regency. There were 96 samples who did not experience CED, 88 (71.5%) samples consumed a variety of food ingredients. From the results obtained, it can be said that there was a relationship between the type of food intake and CED. The people who has the habit of consuming a variety of food ingredients can reduce the occurrence of CED in teenagers. A varied diet can influence a person's growth and development process and can maintain body tissue (Ertiana, dkk., 2019).

Diet patterns are reviewed from 3 categories, namely diversity of food ingredients, level of consumption, and frequency of eating. Diet patterns in terms of the diversity of food ingredients are classified by looking at the number of types of food consumed by the sample. Based on the results of observations, it is known that 1 sample (5%) consumed a variety of food ingredients and 19 samples (95%) consumed a variety of food ingredients. On average, the sample consumed 8 types of food, ie starchy foods, green vegetables, fruit and vegetables sources of vitamin A, other fruit and vegetables, meat and fish, eggs, nuts and seeds, as well as milk and processed products.

The average consumption level of the sample was in low category. With an energy

consumption level of less than 12 samples (60%). Energy is one of the results of carbohydrate, protein and fat metabolism. Energy functions in carrying out basal metabolism, in carrying out activities, growth and temperature regulation. An imbalance between energy intake and energy needs can affect a person's nutritional status (Fitriani, 2020).The level of protein consumption was less by 10 samples (50%). Protein is a macronutrient that acts as a building material for the body and a source of energy in the body. Muscle mass is also influenced by the level of protein consumption so that if someone consumes less protein than their needs, they will suffer from malnutrition and vice versa (Telisa & Eliza, 2020). The level of fat consumption was less than 17 samples (85%). Fat is a source of energy for the body. Fat intake has a major influence on energy balance. If someone has a fat intake that is less than their needs, it will cause their body's metabolism to be disturbed. Fat acts as a source of essential fats needed for growth and also as a transporter of fat-soluble vitamins (Lupiana et al., 2022). The level of carbohydrate consumption was less by 10 samples (50%). Carbohydrates are a type of macronutrient that is really needed by the body. Because carbohydrates are the main source of energy for the body. Someone whose carbohydrate intake is less than their needs will be at greater risk of malnutrition compared to someone who consumes carbohydrates according to their needs. Adequate carbohydrate intake is important to support the physical activity of young women who are quite busy (Mawaddah & Muniroh, 2021). Insufficient consumption levels can be caused by meal frequency. Based on the results of observations, it is known that the sample has an average frequency of bad eating, ie 12 samples (60%).

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs>

The ideal eating habit is a frequency of 3 main meals and 2 snacks. Often young women only eat 2 main meals and 1 snack or 3 main meals without snacks. If the frequency of eating is poor or less than required, the nutrients obtained from food cannot meet the body's nutritional needs and if left to continue, it will cause nutritional problems, namely chronic energy deficiency (Ertiana et al., 2019).

Teenagers is a phase where a person begins to show concern about their body shape according to the desired body image. Body image perception is an action or behavior that leads to an individual's evaluation of their physical appearance (Intantiyana et al., 2018). The results obtained by the sample who had a positive body image perception were 14 people (70%) and 6 people (30%) who had a negative body image perception. So it can be said that the majority of the sample has a positive body image perception. Positive body image perception can be interpreted as meaning that the subject has feelings of liking, positivity, or likes which are shown by accepting the shape of the body they have. This is in line with research conducted by Ripta and friends on MAS Amaliyah Medan High School students. Of the 90 samples, the majority of 68 samples (75.6%) had positive body image perceptions and the remaining 22 samples (24.4%) had negative body image perceptions. Most of the sample had a positive body image perception because they felt satisfied with their current body, were confident with their body and were not afraid of getting fat (Ripta et al., 2023).

Perception of body image has a very important role for teenagers because it is closely related to a person's eating patterns. Usually teenagers who have a positive body image perception will not mind limiting their food

consumption because they think their body shape is not a problem and conversely, teenagers who have a negative body image perception will feel dissatisfied with their body shape so they go on a strict diet. control their weight. dropped quickly (Yuni Kartika et al., 2022). The results obtained from 15 samples with insufficient consumption levels, as many as 40% had negative body image perceptions, while of the 5 samples with sufficient consumption levels or more there were no samples with negative body image perceptions. Thus, samples that have lower levels of consumption tend to have negative body image perceptions. This is proven by research conducted by Paramitha and Suarya at SMAN 1 Denpasar. Of the 80 samples, it is known that the alternative hypothesis was accepted based on the correlation coefficient value of the research results of 0.419 with a significance level of 0.001 (<0.05) which shows that body image can influence a person's eating behavior. The impact of body image perception is very dependent on a person's condition (Paramitha & Suarya, 2018). The perception of negative body image in young women who have poor or normal nutritional status will affect a person's eating patterns and will affect their nutritional status. Meanwhile, if teenagers who experience excessive nutritional status or obesity and poor nutritional status have a positive perception of body image then this will have a negative impact, young women will feel confident and not think about their weight. Body weight will increase in those who are obese and will decrease in those who are malnourished. This will cause the health of these young women to be disturbed (Ripta, dkk., 2023).

Upper arm circumference is a reflection of the availability of nutrients in the muscles and fat under the skin. Energy reserves can be stored in

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmajs>

the form of adipose tissue in the fat under the skin, one of which is in the upper arm circumference. So upper arm circumference can be used as an indicator to see a person's nutritional intake history in the past. Muscle mass was influenced by the level of adequate energy and protein. Insufficient levels of energy and protein consumption will cause a decrease in muscle mass. According to research conducted by Telisa and Eliza on female students at SMA Muhammadiyah 1 Palembang. There were 36 teenagers who experienced CED, 57% had an average level of underconsumption. From the results obtained, it can be said that there was a significant relationship between macronutrient intake and chronic energy deficiency (Telisa & Eliza, 2020). This was not in line with research conducted by researchers, based on the results of research conducted by researchers, results were obtained from 7 samples who experienced chronic energy deficiency, as many as 71% had sufficient consumption levels, while from 13 samples with normal upper arms. waist circumference, as many as 77% of the sample had low consumption levels. Thus, samples with normal upper arm circumference tend to have lower consumption levels.

CONCLUSIONS AND SUGGESTIONS

Based on the research that has been carried out, it can be concluded that:

1. As many as 35% of young women are classified as suffering from CED and as many as 65% are classified as normal.
2. Most young women consume a variety of food ingredients, ie 95% and the remaining 5% consume food items that are not diverse. The average consumption level of female adolescents is included in the deficit

category. With an energy consumption level of 60%, a protein consumption level of 50%, a fat consumption level of 85%, and a carbohydrate consumption level of 50%. More than half of young women have not good eating frequency, 60% and the remaining 40% have good eating frequency.

3. Most of the young women at the Youth Integrated Healthcare Center in Kesiman Kertalangu Village have a positive body image perception and the remaining 30% have a negative body image perception.
4. Samples who have low levels of consumption tend to have negative body image perceptions.
5. Samples that have normal upper arm circumference tend to have lower levels of consumption.

Suggestions that can be given in this research are:

Young women who have a positive body image perception and do not experience a chronic lack of energy are expected to be able to maintain their body image without having to go on a strict diet so that teenagers can appear attractive and confident. For teenagers who have a negative perception of body image, experience a chronic lack of energy, and have low levels of consumption, it is hoped that they can change their thought patterns and eating habits by implementing the 4 pillars of balanced nutrition, namely consuming foods that are nutritionally balanced. variety of food ingredients, getting used to a healthy lifestyle, exercising diligently, and maintain ideal body weight.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmajs>

ACKNOWLEDGMENT

We would like to express our deepest gratitude to the Denpasar City Health Service and Integrated Healthcare Center Kesiman Kertalanggu Village for their assistance in this research. We also thankful to all research participants who gave their valuable time, actively participated, and filled out the questionnaires. Thanks are also expressed to the Denpasar Health Polytechnic Nutrition Department for supporting this research. The authors did not receive any funding for this research.

REFERENCE

1. Ertiana, D., Suryani Wahyuningsih, P., Studi, P. S., Karya Husada Kediri, S., Timur, J., & Studi DIV Kebidanan, P. (2019). Asupan Makanan dengan Kejadian CED pada Remaja Putri di SMAN 2 Pare Kabupaten Kediri. *Jurnal Gizi KH*, 1(2), 2460–6855.
2. Fitriani, R. (2020). Hubungan Antara Pengetahuan Gizi Seimbang, Citra Tubuh, Tingkat Kecukupan Energi dan Zat Gizi Makro dengan Status Gizi pada Siswa SMA Negeri 86 Jakarta. *Journal Health & Science : Gorontalo Journal Health and Science Community*, 4(1), 29–38. <https://doi.org/10.35971/gojhes.v4i1.5041>
3. Intantiyana, M., Widajanti, L., & Zen, M. (2018). Hubungan Citra Tubuh, Aktivitas Fisik Dan Pengetahuan Gizi Seimbang Dengan Kejadian Obesitas Pada Remaja Putri Gizi Lebih Di Sma Negeri 9 Kota Semarang. *Jurnal Kesehatan Masyarakat*, 6(5), 2356–3346.
4. KEMENKES, RI. (2014). *PMK No 41 Tahun 2014 Tentang Pedoman Gizi Seimbang*. 85(1).
5. Lupiana, M., Sutrio, S., & Indriyani, R. (2022). Hubungan Pola Makan Remaja Dengan Indeks Massa Tubuh Di Smp Advent Bandar Lampung. *PREPOTIF : Jurnal Kesehatan Masyarakat*, 6(2), 1135–1144. <https://doi.org/10.31004/prepotif.v6i2.4376>
6. Mawaddah, N., & Muniroh, L. (2021). Jurnal Keperawatan Muhammadiyah Bengkulu. *Sereal Untuk*, 8(1), 51.
7. Paramitha, N. M. K., & Suarya, L. M. K. S. (2018). Hubungan Antara Citra Tubuh Dan Perilaku Makan Intuitif Pada Remaja Putri Di Denpasar. *Jurnal Psikologi Udayana*, 5(2), 360–369.
8. Purwanti, A., & Marlina, Y. (2022). Body Image Perception , Knowledge of Balanced Nutrition ,. *Jurnal Kesehatan Komunitas*, 8(2), 257–267.
9. Ripta, F., Siagian, M., Wau, H., Manalu, P., Kedokteran, F., Indonesia, U. P., & Utara, S. (2023). *PERSEPSI BODY IMAGE DAN STATUS GIZI PADA REMAJA BODY IMAGE PERCEPTION AND NUTRITIONAL STATUS ON*. 19(1). <https://doi.org/10.19184/ikesma.v19i1.116>
10. Ruaida, N., & Marsaoly, M. (2017). Tingkat Konsumsi Energi dan Protein dengan Kejadian Kurang Energi Kronik (CED) Pada Siswa Putri di SMA NEGRI 1 KAIRATU. *Global Health Science*, 2(2), 87–90.
11. Suarjana, I., Nursanyoto, H., & Astika Dewi, N. N. (2020). Kurang Energi Kronik (CED) Remaja Putri Pelajar SMU/SMK di Kabupaten Karangasem Propinsi Bali. *Jurnal Sehat Mandiri*, 15(1), 41–51. <https://doi.org/10.33761/jsm.v15i1.106>
12. Telisa, I., & Eliza, E. (2020). Asupan zat gizi makro, asupan zat besi, kadar haemoglobin dan risiko kurang energi kronis pada remaja putri. *AcTion: Aceh Nutrition Journal*, 5(1),

INTERNASIONAL CONFERENCE ON MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE

VOLUME 1 TAHUN 2023, ISSN 3032-4408 (Online)

<https://ejournal.poltekkes-denpasar.ac.id/index.php/icmajs>

80. <https://doi.org/10.30867/action.v5i1.241>

13. Wardhani, P. I., Agustina, & Ery, M. (2020). Hubungan Body Image dan Pola Makan dengan CEDurangan Energi Kronis (CED) pada Remaja Putri SMAN di Jawa Barat. *Jph Recode*, 3(2), 127–139.

14. Yuni Kartika, K., Kusuma Negara, I., Sarah, & Wulandari. (2022). Hubungan Antara Body Image Dengan Pola Makan Remaja Putri Kelas XI Di SMK PGRI 4 Denpasar. *Jurnal Riset Kesehatan Nasional*, 5 No. 2. <https://www.ptonline.com/articles/how-to-get-better-mfi-results>

15. Zaki, I., & Sari, H. P. (2019). Edukasi Gizi Berbasis Media Sosial Meningkatkan Pengetahuan Dan Asupan Energi- Protein Remaja Putri Dengan Kurang Energi Kronik (CED). *Gizi Indonesia*, 42(2), 111. <https://doi.org/10.36457/gizindo.v42i2.469>