Body Image and Eating Habits of Students Female Student at Vokasi Senior High School Sibolga

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Article Info

ABSTRACT

Adolescence is a critical stage in adolescents' development during the first decade of life, and as a result, body image becomes a concern for adolescents, particularly young women. Body image will cause young women to alter their eating habits to achieve the body image they desire. This study is to ascertain female students at vokasi senior high school body image and eating habits. Method: This research was carried out at vokasi senior high school in Sibolga in June 2016 - March 2017. The population of this study were young women of vokasi senior high school in Sibolga, totalling 449 students in 2016, and the sample is 90 students. Data on eating habits were obtained through a 24-hour food recall questionnaire to see the nutritional intake of adolescent girls. Body image data was obtained by direct interview using a questionnaire tool through the Figure Rating Scale (FRS) method. The results of this study indicate that who have bad eating habits (2.2%), based on filling out the food frequency questionnaire, students who have bad eating habits, namely never having breakfast at all, eating frequency only once a day, In addition, the consumption of foods that are not diverse. This study indicates that the negative body image is 43.3%, and the body image in the negative category is 56.7%. This study concludes that there are still many young women who have a body image in the positive category and have good eating habits. Even though the body image is in the negative category, the eating habits are still in the good category.
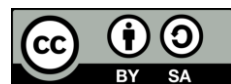
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1. INTRODUCTION

Adolescence is a very important period in building their development in the first decades of life. Adolescence is a period of transition between childhood and adulthood that begins at the age of 9-10 years and ends at 18. At this time, adolescents experience puberty and body development or drastic physical changes. One of the psychological aspects of body changes and physical changes at puberty is that adolescents become very concerned about their body (body image) and build their image of how their body looks, and this is influenced by the environment around them (Sinaga, 2019; Weni, 2019).

Adolescent nutritional status is influenced by various factors (multifactorial). One of the factors that affect the nutritional status of adolescents is body image, which is a person's picture of his body shape and size, which is influenced by body shape and size as well as expectations of the desired body shape and size. If these expectations are not following the actual body condition, it will cause a negative body image (Anggraeni, 2015).

Adolescent nutritional status is influenced by lifestyle (lifestyle). The current lifestyle of adolescents can be seen from eating habits, perceptions of body image, and physical activity, which will affect the amount of food and nutrient consumption intake, which will impact nutritional status and impact health (Siregar, 2020). A negative body image will encourage a person to restrict eating and vomiting intentionally (Serly, 2015). Breakfast has an important role for school children, namely to fulfil nutrition in the morning, where children go to school and have very busy activities at school(Arifin, 2015).

Changes in lifestyle, particularly in urban areas, as a result of dietary changes. The traditional diet, which was high in carbohydrates, high in fibre and low in fat, has changed to a new diet low in carbohydrates, low in fibre and high in fat, thus shifting food quality towards an imbalance. Lifestyle changes in certain groups cause more nutritional problems in the form of overweight and obesity(Fatimah, 2020a). Consumption of food and physical activity carried out by individuals will have an impact on health (P. A. Siregar, 2020)

Unbalanced food intake is a problem that is often associated with nutritional problems. In Indonesia, the prevalence of obesity among adolescents is 10.8 percent, with 7.3 percent being fat, 3.5 percent being very fat (obese), and 11.1 percent being thin, with 3.3 percent being very thin and 7.8 percent being skinny. Changes in the prevalence of obese adolescents in Basic Health Research data from 2010 to 2013, namely that obese adolescents were 1.4 percent in 2010 and 7.3 percent in 2013. This data demonstrates that an increasing number of teenagers are unbalanced in their diet regulation (Kementrian Kesehatan RI, 2018).

The prevalence of nutritional status among adolescents in North Sumatra was determined using body mass index (BMI) values for very thin 3.1 percent, thin 7.8 percent, normal 75.6 percent, fat 11%, and very fat/obese 2.5 percent. Urban areas have a higher prevalence of thinness and obesity than rural areas, at 9.7 percent and 8.06 percent, respectively (Kementrian Kesehatan RI, 2018).This research was conducted at vokasi senior high school in Sibolga, one of the educational institutions in Sibolga, North Sumatra. Middle-aged adolescents were chosen because, according to Riskesdas data from 2013, the prevalence of obesity and thinness among adolescents aged 16-18 years has increased from 2007 to 2013. Due to the inefficiency of the health information system, the district/city health office is frequently unaware of the high number of health problems (Siregar, 2019).

Based on a preliminary study of 35 female students, it was found that 7.4% were thin, 12.5% were fat, 5.7% were obese, and 74.4% were normal. This figure is greater than the national obesity rate for the province of North Sumatra in the adolescent age group. While the perceptions of the 35 female students, as many as 40% of young women think their

bodies are ideal, and 60% think they are not ideal, some feel they are too thin and too fat. The preliminary survey results revealed that 74.1% of young women like to eat snacks while another 25.9% do not like to eat snacks. There are 47% of teenage girls who like to eat fruit and vegetables; the remaining 53% do not like fruits and vegetables.

According to Wati (2017), if there is someone who has positive body thoughts, he will automatically feel satisfied with the condition of his body and accept his body condition as it is. However, if someone has a negative body thought, he will always compare his body with the ideal body of other people and always feel dissatisfied with his body condition. Negative thoughts about body condition are sometimes also very beneficial for overweight and obese teenagers because they will have the awareness to lose weight.

2. RESEARCH METHODE

This research is descriptive with a cross-sectional design. This research was carried out at vokasi senior high school in Sibolga in June 2016 - March 2017. The population of this study were young women of vokasi senior high school in Sibolga, totalling 449 students in 2016. The sampling technique used was proportional stratified random sampling. Samples were taken in classes X, XI, XII in a balanced or comparable manner to obtain a representative sample so that the sample could truly represent the entire population. Sampling from each class was done by simple random sampling with a simple random technique. The minimum sample in this study is 90 samples.

Primary data collection includes respondent characteristics according to age, eating habits collected using question questionnaires, food recall, and nutritional status data by measuring students' weight and height. Individual characteristic data (name, place and date of birth, age) were obtained by direct interview with a questionnaire, adolescent anthropometric data to measure body weight using a stamping scale which has a capacity of 120 kg and a height measuring instrument using a microtome with an accuracy of 0.1 cm. Data on eating habits were obtained through a 24-hour food recall questionnaire to see the nutritional intake of adolescent girls. Body image data was obtained by direct interview using a questionnaire tool through the Figure Rating Scale (FRS) method. Descriptive data analysis in the form of a distribution table by looking at the percentage of the data with the help of computer software.

3. RESULT AND ANALYSIS

The results of the study were carried out on students of vokasi senior high school in Sibolga by filling out food frequency questionnaires, students who had bad eating habits, namely never having breakfast at all, eating frequency only once a day, besides that the consumption of food was not diverse.

Table 1 Distribution of Body Image Frequency with Eating Habits of Students at Vokasi Senior High School in Sibolga

Variabel	f	%
Body Image		
Positive body image	39	43,3
Negative body image	51	56,7
The eating habits		
Good	88	97,8
Bad	2	2,2

The eating habits of students of vokasi senior high school in Sibolga according to the results of research on the variables of eating habits based on questionnaire questions, eating frequency, type of food, and nutritional adequacy. In the table, it can be seen that respondents who have bad eating habits (2.2%), based on filling out the food frequency questionnaire, students who have bad eating habits, namely never having breakfast at all, eating frequency only once a day, In addition, the consumption of foods that are not diverse. This study indicates that positive body image is 43.3% and body image in the negative category is 56.7%.

Table 2 Cross Tabulation of Body Image with Eating Habits of Students at Vokasi Senior High School In Sibolga

Variabel	The Eating Habits				N	%	P
	Good		Bad				
	f	%	f	%			
Body Image							
Positive body image	38	42,2	1	1,1	39	43,3	0,847
Negative body image	50	55,6	1	1,1	51	56,7	
Total	88	97,8	2	2,2	90	100	

According to this study, students with a positive body image have 42.2 per cent healthier eating habits, while those who have a negative body image have 1.1 per cent healthier eating habits. Students with a negative body image have 55.6 per cent more healthy eating habits and 1.1 per cent fewer healthy eating habits. This demonstrates that a greater proportion of students with a negative body image have healthy eating habits. The statistical tests results indicated no statistically significant relationship between body image and eating habits ($p = 0.847$).

4. DISCUSS

Eating habits are defined as the behaviour of a person or group of people to meet their food needs that involve attitudes, beliefs, and food choices (Irwan, 2004). The definition of food also affects eating habits and nutritional adequacy; the notion of eating is only intended. According P. A. Siregar, (2021) stated the adequacy of fruit and vegetable eating is determined by the average frequency and portion size of fruit and vegetable consumption over a seven-day period. The amount of fruit consumed by respondents is insufficient when compared to WHO recommendations, which call for 150 grams of fruit per day (equal to three Ambon bananas, one slice of papaya, or three medium-sized oranges). According Fatimah (2020b) stated people, in general, continue to consume veggies since they are still easily accessible to the community and affordable at all socioeconomic levels. Because people are also accustomed to eating vegetables while they eat, it can be assumed that vegetables must be offered when dining.

For rice or processed products derived from rice-based ingredients, such as rice cake. If you have not eaten rice, it is not considered eating any side dishes. Eating habits are inseparable from cultural values, which certainly affect the nutritional condition and health of the community. The description of the diversity of eating habits and food processing is expected to be useful for understanding the nutritional and health conditions of the community as well as for nutrition and public health counselling programs (Saptandari in

Irwan, 2014). A person's perception of something will have an impact on the behaviour they will take (S. F. Siregar, 2020).

The description of the student is eating habits based on the results of research at vokasi senior high school in Sibolga, from 90 students, only 2.2% had bad eating habits; the rest already had good eating habits. Most teenagers at Senior High School 2 Kupang City have good eating habits, 84% (Pantaleon, 2019). However, this study is inversely proportional to the Doloksaribu (2019) study, which showed fewer good eating habits in adolescents at Lubuk Pakam Adventist Middle School, 44.4%. The amount of consumption that is not good for adolescents at Lubuk Pakam Adventist Middle School is caused by an imbalance between daily consumption of carbohydrates, protein, vegetables and fruit. This shows that the actions of adolescents towards food consumption are different. Teenagers have had their own choices of favourite foods. In adolescence, eating habits have been formed.

Based on the study results, it was found that the staple food that is often consumed is mostly rice. This is because rice is still the main staple food in most Indonesia and is consumed more than once a day. Observations at the time of the study showed that teenagers love to snack. The types of snacks consumed are cakes that taste sweet and candies. At the same time, the group of fruits that contain lots of vitamins is rarely consumed. However, some students never eat snacks; this is because they do not like snacks. All teenagers consume rice as a staple food. Rice is consumed more than once per day. These results are related to the livelihoods of the North Bolaang Mongondow residents, where the majority of the population's work (60%) relies on the agricultural and marine sectors (Mokoginta, 2016).

Based on the study results, it was found that the type of food consumed by students was mostly not diverse as much as 63.3%, while the consumption of various foods was only 36.7%. The results showed that most of the foods consumed by students were not varied because they did not eat vegetables or fruit every day. This is because some students think that vegetables and fruit are not food needs that must be met, besides that some other students consume vegetables and fruit, if only available. Though it should be, eating vegetables and fruit is highly recommended at every meal. This is because vegetables and fruits contain high fibre, so it is very good for overweight people.

Based on the study results, it was found that the energy adequacy level of students at vokasi senior high school in Sibolga was mostly not according to the RDA as much as 95.6%. Energy is the main nutritional need for humans because if energy needs are not met following what the body needs, then other nutritional needs are also not met, such as protein and minerals. According to Fatimah (2020b) research, many people ingested fruit (1-2 servings/day) at a rate of up to 82 percent, while just 18 percent of respondents did not take fruit. 96 percent of respondents consume veggies (1-3 servings), whereas 4% do not.

Insufficient energy intake in young women because a small proportion of young women have poor eating habits. This is known from the results of interviews with students, which show that, in general, students often consume food in an unbalanced amount compared to their needs for fear of obesity. Teenagers eat an average of no more than three times a day; some even eat only two times a day. Fear of becoming fat causes adolescents to skip meals, which is considered the first step to losing weight. In addition to dinner, adolescents often skip breakfast (breakfast).

The factors that directly contribute to overnutrition and obesity are eating patterns that consume a large amount of food (more than the number of nutritional requirements) and high energy, fat, carbohydrate, and fibre intake (Adinda, 2020). Purwandani (2017) research demonstrates that low fruit consumption in schools, such as in the canteen, affects children's fibre consumption .

The protein consumption of most of the students was in the category not according to the RDA, which was 71.1%. This study is in line with Sofiatun (2017) ; as many as 87.8% of adolescents in Pulo Barring Lompomakassar have less protein consumption. The body, especially adolescents, need protein consumption because the body experiences rapid growth and development during adolescence. Lack of protein intake for a long time will cause PEM disease and poor nutritional status. Lack of protein will impact poor growth, decreased immune system, more susceptibility to disease, and decreased creativity and work power. Food consumption will be related to the disease experienced by the individual (Susanti, 2020).

The nutritional status of SMP Negeri 13 Pekanbaru students is very thin as much as 1%, underweight nutrition as much as 7%, obese nutrition as much as 23% and obesity nutritional status as much as 10% (Fitriatun, 2019). Students with <normal nutritional status have a higher proportion in the diet group < 3 times a day (35.3%), compared to <normal nutritional status in the eating pattern group ≥ 3 times a day (22%) (Suhartini, 2017).

Obesity in school children is inextricably linked to the high consumption of snacks and lack of physical activity at school (Adinda, 2019). Obesity results from consuming an excessive amount of carbohydrates, fats, and proteins combined with a lack of physical activity. Childhood obesity is a significant predictor of adult obesity (Aprilia, 2015).

The results of Marpaung (2015) research showed that 31 students (51.6%) who were overweight and obese had an unhealthy diet, namely fast food that was high in carbohydrates and fats such as KFC, hamburgers, and pizza. A lack of physical activity accompanies factors causing overweight or obesity in students. According Wulandari (2015) stated the physical activity of young women tends to spend their time watching TV and playing with gadgets. The shift in lifestyle in rural areas that previously had more mobile activities became less.

The students' carbohydrate intake based on the study results was not according to the RDA as much as 91.1%. Based on the interview results from the 1x24 hour food recall sheet, it is known that the majority of respondents' carbohydrate intake comes from rice consumption. In addition, the respondent's carbohydrate intake was also obtained from the consumption of other processed foods such as noodles, bread, and so on. One of the functions of carbohydrates is as a protein saver; that is, if there are insufficient dietary carbohydrates, then protein will be used to meet the body's energy needs by defeating its main function as a builder.

The fat intake of female students based on the study results showed that half of the female students had a fat intake that did not match the RDA as much as 87.8%. Based on the research results from the food recall sheet, it is known that the respondents' fat intake mostly comes from foods fried in fat or oil, namely fried foods. In addition, the respondents' fat intake also came from the consumption of meat, eggs, milk, and nuts. The human body requires dietary fats and essential fatty acids for normal growth and development (Savitri, 2015). The results of Sugiarto (2019) research show that children with poor nutritional status are more likely to have diarrhoea than those with good nutritional status.

Body Image

In Indonesian culture, obese/fat children are considered cute. They even believe that obese children are healthy and adequately fed. Parents do not consider obese children to be a health risk because they consider them normal and healthy children. Even in the mother's mind, obese children are considered overweight, not obese. Christiana (2018) research findings indicate that many teachers continue to believe that obese children are adorable; teachers are unconcerned about the obese child .

Based on the results of the study, it is known that more students have negative body images, namely 56.7%. Research conducted in Jakarta also showed that as many as 52.9% experienced body image distortion (Savitri, 2015). Sahputri (2015) research also shows that 52.5% of young women at senior high school 3 Cimahi have a negative body perception. This shows that there are still many students who have a negative body image. Research Widianti (2016) shows that as many as 40.3% of teenage girls at Theresiana High School Semarang are dissatisfied with their body shape; some think their bodies are too fat and too thin. This shows that although the subjects already have an ideal body, they tend to judge their body size to be larger than their actual size. The same thing is also shown in Lingga's research (2014) which states that most young women choose picture number 3 to image the ideal body shape.

Based on this, it can be concluded that for individuals who are still in their teens, the body image factor is an important factor that gets quite a lot of attention. As seen in every age of adolescent development, the body image of these young women tends to be negative. Early adolescent girls go through the stages of puberty accompanied by weight gain. In addition to weight gain, other stages experienced by young women are negative body images and the desire to manage their weight and do a diet program (Issom, 2018). Women in the late adolescent phase are not satisfied with their body shape, an attractive appearance is important, and they try to adjust their appearance to their social environment. Based on these studies, it can be concluded that body image gets serious attention for teenagers.

This shows that the perception of the ideal body for young women is the perception of the body that tends to be thin. The influence of the environment that considers a thin body is beautiful has influenced young women's perception towards the ideal body shape. Obesity is often identified with unpretentiousness, unattractiveness and inflexibility in activities. Young women choose pictures 1 to 5 to perceive the body shape expected by themselves. The images that young women mostly choose are images number 2 and 3. This is in line with Isnani (2014) research that the image that most students choose as their expected body is image number 3. This means that Most young women expect a body shape that tends to be thin. The nutritional status of SMP Negeri 13 Pekanbaru students is very thin as much as 1%, underweight nutrition as much as 7%, obese nutrition as much as 23% and obesity nutritional status as much as 10% (Fitriatun, 2019). Students with <normal nutritional status have a higher proportion in the diet group < 3 times a day (35.3%), compared to <normal nutritional status in the eating pattern group ≥ 3 times a day (22%) (Suhartini, 2017).

According to Putri (2015), who examined the factors related to female students' consumption patterns in Jakarta, there was no relationship between body image and female consumption patterns. The consumption patterns studied were the consumption of energy, protein and fat intake. There is no relationship between body image and food intake, which shows that the more negative the perception of adolescent body image is, the adolescents do not necessarily reduce their food consumption (Nisa, 2018).

5. CONCLUSION

This study concludes that there are still many young women who have a body image in the positive category and have good eating habits. Even though the body image is in the negative category, the eating habits are still in the good category. The statistical tests results indicated no statistically significant relationship between body image and eating habits.

6. REFERENCES

Adinda, D. (2019). Relationship of Teacher's Role and Nutrient Intake with Obesity in Elementary School Student at Medan Maimun Sub-district, Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *2*(4), 537–544.

Adinda, D. (2020). Peran Guru Dan Kejadian Obesitas Pada Siswa Sekolah Dasar Di Kota Medan. *Jurnal Kesehatan, 13*(1), 14–20. https://doi.org/10.24252/kesehatan.v13i1.10898

Anggraeni, S. D. (2015). Hubungan Antara Body Image dengan Frekuensi Makan, Jenis Makanan dan Status Gizi Remaja Putri di SMA Negeri 7 Surakarta. *Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Surakarta.*

Aprilia, A. (2015). Obesitas pada Anak Sekolah Dasar. *Majority, 4*(7), 45–48.

Arifin, L. A. (2015). Hubungan Sarapan Pagi dengan Konsentrasi Siswa di Sekolah. Surabaya. *Jurnal Pendidikan Olahraga Dan Kesehatan, 3*(1), 203–207.

Arisman. (2010). *Gizi dalam Daur Kehidupan: Buku Ajar Ilmu Gizi.* EGC Penerbit Buku Kedokteran.

Christiana, M. (2018). Persepsi Guru Penjas Sekolah Dasar terhadap Anak Gemuk di Kecamatan Semarang Tengah. *Dinamika Sosial Budaya, 20*(1), 57–65.

Doloksaribu, L. G. (2019). Gambaran Pola Makan Dan Status Gizi Remaja Di Smp Advent Lubuk Pakam. *SSRN Electronic Journal, 5*(564), 1–19. https://doi.org/10.4324/9781315853178

Fatimah, P. S. (2020a). Konsumsi Buah, Sayur Dan Ikan Berdasarkan Sosio Demografi Masyarakat Pesisir Provinsi Sumatera Utara. Uin Sumatera Utara. *Contagion : Scientific Periodical of Public Health and Coastal Health, 2*(1), 51–63. https://doi.org/10.30829/contagion.v2i1.7630

Fatimah, P. S. (2020b). Pola Konsumsi Buah dan Sayur Dengan Kejadian Diabetes Mellitus Pada Masyarakat Pesisir. *Bali Health Published Journal, 2*(1), 26–36.

Fitriatun, E. (2019). Gambaran Status Gizi Siswa Siswi SMP Negeri 13 Pekanbaru Tahun 2016. *Journal of Chemical Information and Modeling, 53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Issom, F. L., & Putra, P. P. C. (2018). Gambaran Body Image Pada Atlet Remaja Di Sekolah Smp/Sma Negeri Ragunan Jakarta. *JPPP - Jurnal Penelitian Dan Pengukuran Psikologi, 7*(1), 36–45. https://doi.org/10.21009/jppp.071.05

Kementrian Kesehatan RI. (2018). *Riset Kesehatan Dasar Tahun 2018.*

Marpaung. (2015). Hubungan pengetahuan, pola makan, dan aktivitas fisik dengan kejadian gizi lebih pada Mahasiswa Fakultas Kesehatan Masyarakat Universitas Sumatera Utara Tahun 2015. *Jurnal Kesehatan Masyarakat, 1*(2), 1–13.

Mokoginta, F. S., & Manampiring, A. E. (2016). Gambaran Pola Asupan Makanan pada Remaja di Kabupaten Bolaang Mongondow Utara Kandidat Skripsi Fakultas Kedokteran Universitas Sam Ratulangi Manado. *Jurnal E-Biomedik, 4*(2), 1–10.

Nisa, N. C., & Rakhma, L. R. (2018). *Faktor-Faktor Yang Berhubungan Dengan Pola Konsumsi Makan Pada Siswa Madrasah Ibtidaiyah Unwanul Huda Di Jakarta Selatan Tahun. 2*, 1–13.

Pantaleon, maria goreti. (2019). Hubungan pengetahuan gizi dan kebiasaan makan dengan status gizi remaja putri di SMAN 2 Kota Kupang. *Chmk Health Journal, 53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Purwandani, L. (2017). *Keterkaitan Lingkungan Sekolah dengan Konsumsi Pangan dan Aktivitas Fisik pada Anak Sekolah yang Obes.* Institut Pertanian Bogor.

Putri, A. Y. (2015). Faktor-Faktor Yang Berhubungan Dengan Pola Konsumsi Makan Pada Siswa Madrasah Ibtidaiyah Unwanul Huda Di Jakarta Selatan Tahun 2015. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 16*(2), 39–55. https://doi.org/10.1377/hlthaff.2013.0625

Sahputri, L. D. (2015). *Hubungan Antara Status Gizi dan Gambaran Tubuh Remaja Putri di SMA Negeri 3 Cimahi Oleh.*

Savitri, W. (2015). Hubungan Body Image, Pola Konsumsi Dan Aktivitas Fisik Dengan Status Gizi Siswi Sman 63 Jakarta Tahun 2015. *Acta Universitatis Agriculturae et Silviculturae*

Mendelianae Brunensis, 16(2), 39–55. https://doi.org/10.1377/hlthaff.2013.0625

Serly, Vicennia; Sofian, Amru; Ernalia, Y. (2015). Hubungan Body Image , Asupan Energi Dan Aktivitas Fisik Dengan Status Gizi Pada Mahasiswa Fakultas Kedokteran Universitas Riau Angkatan 2014. *Jurnal FK, 2*(2), 1–14.

Sinaga, A. S. (2019). Knowledge and Exposure Information of Adolescents about Reproductive Health. *Contagion : Scientific Periodical of Public Health and Coastal Health, 1*(2), 97–107. https://doi.org/10.30829/contagion.v1i2.7210

Siregar, P. A. (2020). Aktivitas Fisik, Konsumsi Makanan Asin dan Kejadian Hipertensi Masyarakat Pesisir Kota Medan. *Jurnal Ilmiah Kesehatan (JIKA), 2*(1), 1–8. https://doi.org/doi.org/10.36590/jika.v2il.34

Siregar, P. A. (2021). Analysis of Characteristics, Frequency of Eating Fruit and Vegetables in Diabetes and Non Diabetes Patients. *Darussalam Nutrition Journal, 5*(1), 61–69. https://doi.org/10.21111/dnj.v5i1.5562

Siregar, S. F. (2020). The Effect Of Fear Perceptions On Cigarette Pack Image Messages On The Intention To Stop Smoking Students Faculty Of Sharia And Law. *International Archives of Medical Sciences and Public Health, 1*(2), 96–106.

Sofiatun, T. (2017). Gambaran Status Gizi, Asupan Zat Gizi Makro, Aktivitas Fisik, Pengetahuandan Praktik Gizi Seimbang Pada Remaja Di Pulau Barrang Lompomakassar. *Palliative Care Research, 25*(1), 9–14. https://doi.org/10.1016/j.jpainsymman.2017.04.009

Sugiarto. (2019). Faktor Risiko Kejadian Diare Pada Balita. *Jurnal Contagion, 1*(1), 47–57. https://doi.org/10.30829/contagion.v1i01.4434

Suhartini, & Ahmad. (2017). Analisis Faktor Yang Berhubungan Dengan Status Gizi Remaja Putri Padasiswi Kelas Viismpn 2 Desa Tambak Baya Kecamatan Cibadak Kabupaten Lebak Tahun 2017. *Jurnal Medikes, 5*(1), 72–82.

Susanti, N. (2020). Sensitivitas Dan Spesifisitas Titik Potong RLPTB Sebagai Prediktor Kejadian Hipertensi Pada Orang Dewasa di Dusun Sido Waras Desa Kwala Begumit. *Contagion : Scientific Periodical of Public Health and Coastal Health, 2*(2), 65–75. https://doi.org/10.30829/contagion.v2i2.7083

Wati. (2017). Citra Tubuh Pada Remaja Perempuan Gemuk Dan Tidak Gemuk: Studi Cross Sectional. *Jurnal Kesehatan Masyarakat Universitas Airlangga, 1*(4), 398–405.

Weni, L. (2019). Determinan Pemilihan Metode Kontrasepsi Jangka Panjang Pada Akseptor KB Aktif di Puskesmas Pedamaran. *Contagion : Scientific Periodical of Public Health and Coastal Health, 1*(1), 9–16. https://doi.org/10.30829/contagion.v1i01.4819

Widianti, N., & Kusumastuti, A. C. (2016). Hubungan Antara Body Image Dan Perilaku Makan Dengan Status Gizi Remaja Putri Di Sma Theresiana Semarang. *Journal of Nutrition College, 1*(1), 398–404. https://doi.org/10.14710/jnc.v1i1.379

Wulandari. (2015). Asupan Energi Dan Aktivitas Fisik Berhubungan Dengan Z-Score Imt/U Anak Sekolah Dasar. *Media Gizi Indonesia, 10*(1), 51–56.