

Relationship between body image and breakfast on nutritional status

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ABSTRACT

Each individual has a different perception of himself, positive or negative perception that has an impact on nutritional status. If an individual experiences self-doubt regarding his body shape negatively, he will go on a diet to get the body shape he wants. The purpose of this study was to determine the relationship between body image and breakfast behavior on the nutritional status of students of the Nutrition Study Program at Muhammadiyah University of Bima in 2022. This type of research was a correlation study with a cross-sectional approach. Respondents to this study were all 70 students of the Nutrition Study Program, Faculty of Health, Muhammadiyah University of Bima. Body image data was taken using the Body Shape Questionnaire (BSQ) questionnaire, eating behavior data was taken using the Adolescent Food Habits Checklist (AFHC) questionnaire, student nutritional status data was taken using body index per age (b/u) based on data on weight, height body, and age of the student. The data analysis used was univariate analysis which was used to determine the description of each variable and bivariate analysis was used to determine the relationship between variables with the Spearman test. The results showed that there was a relationship between body image and nutritional status (p -value = 0.000), and there was a relationship between eating behavior and nutritional status (p -value = 0.040).

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INTRODUCTION

Adolescence is the most important time in life. During this period, biological growth and changes occur in adolescents, including an increase in weight and height (Yusinta & Adriyanto, 2021). The adolescent phase the occurrence of puberty is marked by changes in the physique characterized by an increase in height, the development of secondary characteristics, and changes in body structure, namely increased muscle strength in males and increased fat gain in females which will then affect body weight (Agustina, 2020).

The nutritional status of children aged 5-18 years is grouped into three age groups, namely 5-12 years, 13-15 years and 16-18 years. In this study, Muhammadiyah University Nutrition study program students were classified as late adolescents. The nutritional status indicators used for this

age group were based on anthropometric measurements of body weight (BB) and height (TB) which were presented in the form of a height-for-age index (TB/U). and Body Mass Index according to age (BMI/U). The results of the 2018 Basic Health Research data nationally show that adolescents who have a thin nutritional status are 6.8 % and overnutrition status is 11.3%.

Teenagers will begin to feel the search for identity when they enter the age of 14-18 years. Adolescents at this age begin to experience a transition, this results in adolescents not being mature enough to deal with severe problems psychologically, even though adolescents are seen as biologically mature. pay attention to and have a perception of appearance. Teenagers will start many activities in doing new things in their life as an effort to try something new in finding their true identity or identity. Teenagers will look for friends to hang out with in search of identity (Rerung, 2021) . Body image is a person's perceptions, feelings and thoughts about his body shape. With the view that having a slim body will increase their self-confidence, feel popular, and find it easier to get partners and jobs (Sulistyan et al., 2016).

Opinions about appropriate body image will usually influence young women to do everything they can to fulfill a good opinion of their bodies. The phenomenon of depicting a beautiful woman is by having white skin, slim body and long hair and this is true in society today and influences young women to be able to describe this environment (Carlin Tan & Ibrahim, 2020).

The influence of the era of globalization and access to information via the internet has created a culture like the Korean Wave which is very viral today, influencing teenagers to meet the beauty standards of that culture, causing them to think that they have to do anything to meet the ideal standards of their body image (Niswah & Zahro, 2021).

From the results of Sukuco's research (2022) with a negative body image perception they rarely eat breakfast and more respondents with a positive body image have a normal BMI. It is known that 41.1% of respondents who were teenagers in the Usumajaya study had feelings about their weight being more than their actual body weight, where they felt they were fat but were in fact thin, felt they had normal weight but were actually thin, and felt he is fat even though his actual condition is normal (Sukoco et al., 2022) .

Breakfast is an activity of eating and drinking before doing physical activity in the morning. Breakfast contributes to 25% of the total daily nutritional intake which affects the level of health. The state of nutritional status of adolescents is influenced by eating patterns, namely food limitations, limiting themselves to eating, and low breakfast habits. Adolescent girls who are not used to having breakfast have a relationship with the incidence of anemia so an analysis of breakfast habits and knowledge of anemia is carried out (Rahman et al., 2021) .

Information from Hallo Gigles (in CNN Indonesia, 2018) the parts of the body that are most often criticized are the abdomen and legs, as many as 93% of women and 83% of men feel insecure when their body condition is criticized by people in their environment (Safitri & Rizal, 2020) Based on the results of a survey in the LISS magazine which was published in "90% of teens unhappy ", it shows that 90% of 5053 teenagers are unhappy with their body shape. Meanwhile, of the 5053 teenagers, only 19% of them were overweight (Ammar & Nurmala, 2020) .

Eating habits begin when they are toddlers and when they start their teenage years eating habits will begin to be influenced by several factors such as environmental factors , peers, social life, and activities outside the home. Adolescent eating habits are related to the presence of food criteria such as type of food, amount of food, food frequency, and method of food selection (Hafiza et al., 2021) . The pattern of eating habits of adolescents is mentioned from the Global School Health Survey data in the RI Ministry of Health article (2018) it was found that as much as 62.2% of teenagers did not eat breakfast, most teenagers did not consume as much vegetables and fruit (95.5%), teenagers who ate often eat flavorful foods (75.7%) and teenagers do not do physical activity as much (42.5%) (Hafiza et al., 2021).

Based on the preliminary survey, the nutritional status of students of the Faculty of Health, Nutrition Study Program, University of Muhammadiyah Bima, class of 2022, which was conducted

by researchers, was found to be underweight 10%, normal 60%, overweight 10%, obesity I 10% and obesity II 10%. Students of the Nutrition Study Program class of 2022 are still classified as late teenagers. Based on the preliminary study, it was also found that 35 respondents had a negative body image (50%) and the rest had a positive body image (50%). In the breakfast habit, it was found that 35 respondents (50%) rarely had breakfast, 15 respondents (20%) often had breakfast and the remaining 20 respondents (30%) always had breakfast in the morning. The purpose of this study was to analyze the relationship between body image and breakfast behavior on nutritional status in students of the Nutrition Study Program, University of Muhammadiyah Bima.

RESEARCH METHOD

Data collection was carried out in November-December 2022. The number of research samples that met the inclusion and exclusion criteria was 70 respondents.

Characteristics of Respondents

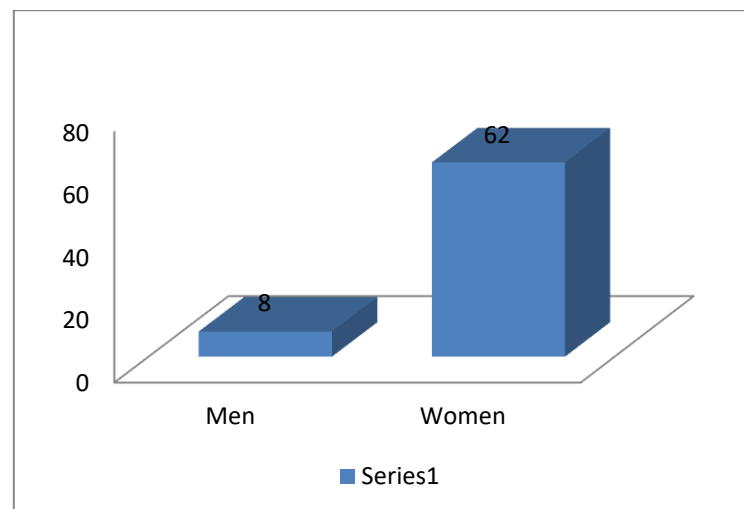


Figure 1. Characteristics of Respondents by Gender

Based on Figure 1, the majority of respondents were female as many as 62 people (88.6 %), while there were 8 men (11.4%).

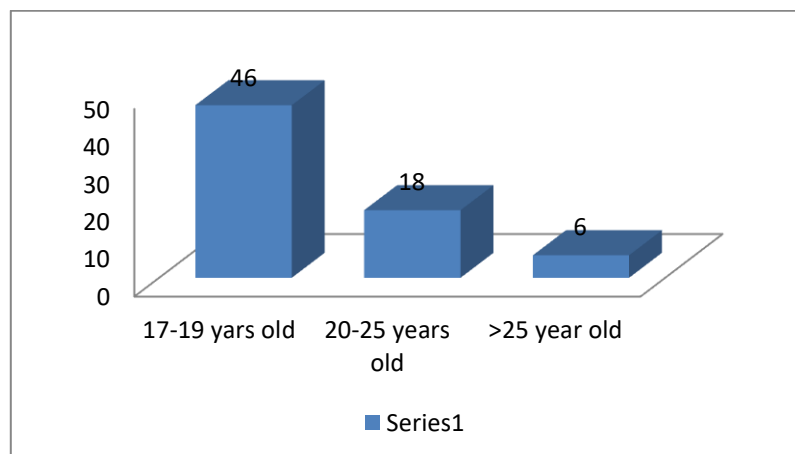


Figure 2. Characteristics of Respondents by Age

Based on Figure 2, the majority of respondents aged 17-19 years were 46 people (65.70%), aged 20-25 years were 18 people (25.72%), and the least were aged > 25 years as many as 6 people (8.58%).

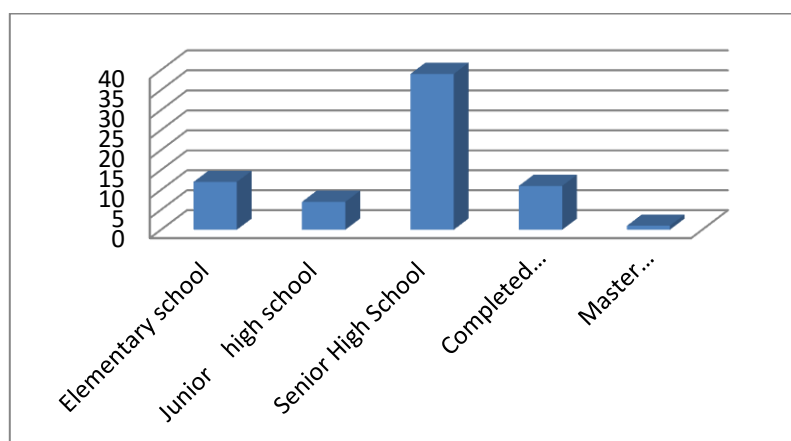


Figure 3. Characteristics of Respondents based on Father's Education

Based on Figure 3, the majority of respondents' fathers had high school education with 39 people (55.7%), and the least was Masters/S3 education with 1 person (1.4%).

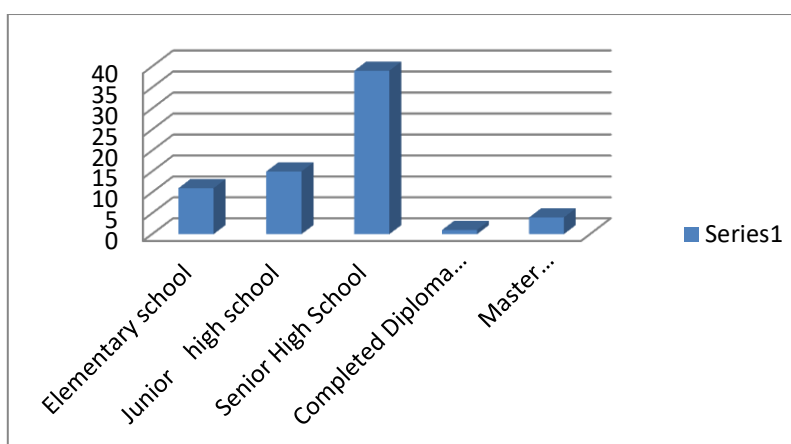


Figure 4. Characteristics of Respondents based on Mother's Education

Based on Figure 4, the majority of the respondent's mother's education is high school with as many as 39 people (55.7%), and the least is D4 education with 1 person (1.4%).

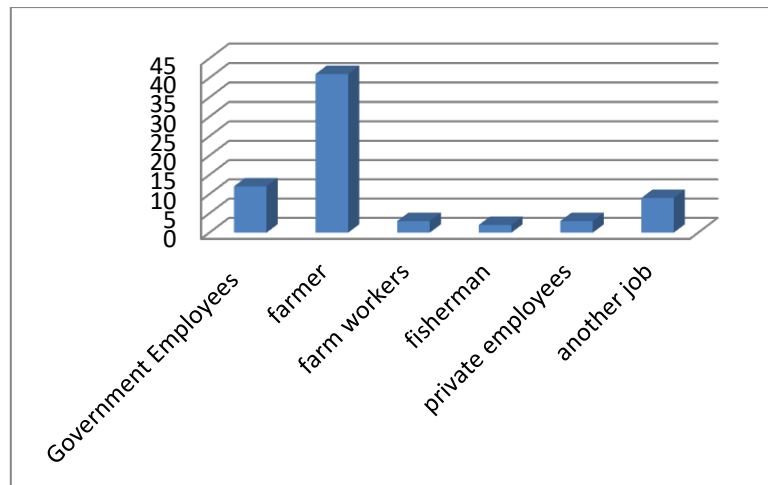


Figure 5. Characteristics of Respondents based on Father's Occupation

Based on Figure 4, the majority of the respondents' fathers were farmers with 41 people (58.6%), and the least were fishermen with 2 people (2.9%).

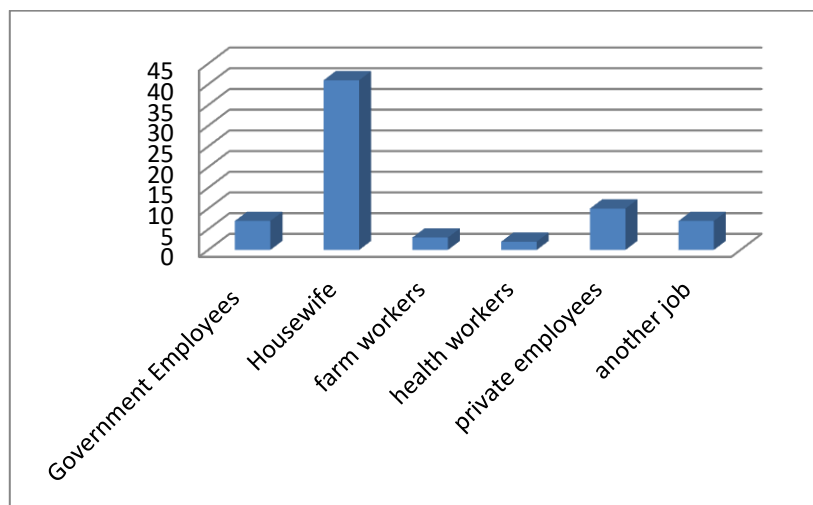


Figure 6. Characteristics of Respondents based on Mother's Occupation

Based on Figure 6, the majority of the respondents' fathers were houeswife with 41 people (58.6%), and the least were health workers with 2 people (2.9%).

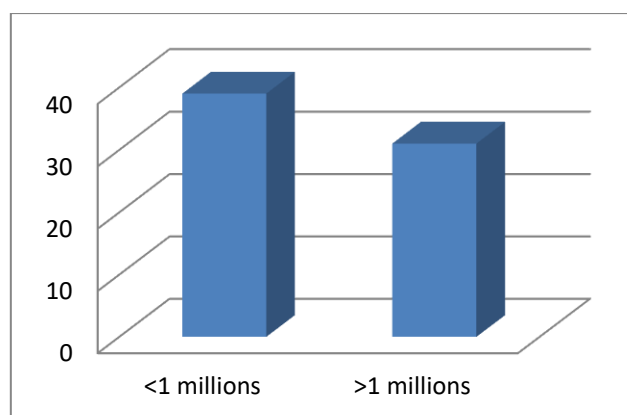


Figure 7. Characteristics of Respondents based on father's income

Based on Figure 7, the majority of respondents' father income was less than 1 million as many as 39 people (55.7%), and those with more than 1 million were 31 people (44,3 %)

Body Image Data Distribution , Breakfast Behavior, and Nutritional Status

The results of collecting data on body image, breakfast behavior and nutritional status of Nutrition study program students at the University of Muhammadiyah Bima are presented in Figure 8, Figure 9, and Figure 10. Data obtained for more than half or the majority of students had a negative body image (70%) , more than half of students had bad breakfast behavior (72.9%) who had normal eating behavior (25.7%) and only a few had good breakfast behavior, namely 2.4% had normal nutritional status.

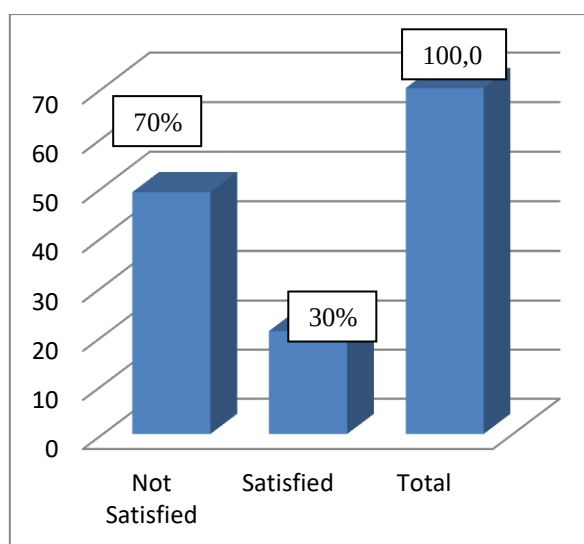


Figure 8. Body Image Distribution of Nutrition Study Program Students

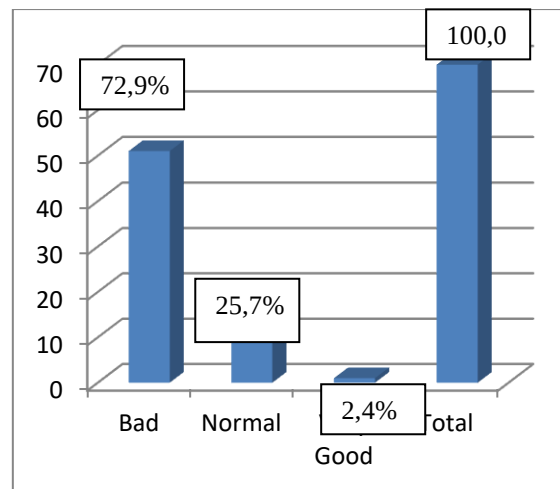


Figure 9. Distribution of Breakfast Behavior Nutrition Study Program Student

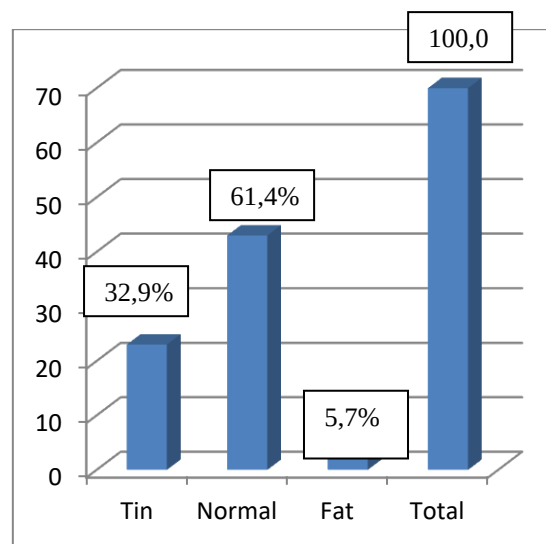


Figure 10. Distribution of Nutritional Status of Nutrition Study Program Students

Body Image Relationship with Nutritional Status

Based on the results of the analysis between body image and nutritional status, the p-value = 0.000 was obtained. With a p-value <0.05 indicates that there is a relationship between body image and nutritional status. The following results of body image analysis with nutritional status are presented in Table 1.

Table 1. Analysis of the relationship between body image and nutritional status

Nutritional status	Body Image				<i>P-Value</i>	PR*
	Not satisfied		Satisfied			
	n	%	n	%		
Thin	23	32.9	0	0.0	.000**	25.93
Normal	22	31.4	21	30.0		
Fat	4	5.7	0	0.0		

*Prevalence Ratio

**The relationship between nutritional status and eating behavior, body image is stated to be significant if the p value < 0.05

Based on the results of this study, it showed that 23 students (32.9%) had a dissatisfied body image, while only 0 students were satisfied with their body image with a thin nutritional status (0, 0%) and the majority of respondents who were satisfied with normal nutritional status were 21 people (30.0%). Table 5 also shows that there is a significant relationship between body image and eating behavior ($p = 0.000$). Respondents who have a dissatisfied body image have a 25.9 times tendency to have a thin nutritional status compared to respondents who have a satisfied body image

Relationship between breakfast behavior and nutritional status

Based on the results of the analysis between breakfast behavior with nutritional status obtained p -value = 0.040. With a p -value < 0.05 indicates that there is a relationship between breakfast behavior with nutritional status. The following results of body image analysis with nutritional status are presented in Table 2.

Table 2. Relationship analysis of breakfast behavior with Nutritional Status

Nutritional status	Breakfast Behavior						<i>P-Value</i>	PR*
	Bad		Normal		Very good			
	n	%	n	%	n	%		
Thin	21	30.0	1	1,4	1	1,4	.040 **	12063
Normal	27	39,6	16	22,9	0	0.0		
Fat	3	4,3	1	1,4	0	0.0		

* Prevalence Ratio

**The relationship between nutritional status and eating behavior is stated to be significant if the p value < 0.05

Based on the results of this study, it shows respondents who have breakfast behavior A lot of people with poor nutritional status have thin nutritional status, namely 21 people (30.0 %), while those who have normal eating behavior and only have very good eating behavior are only 1 person (1.4%). For respondents with good breakfast behavior, the majority with normal nutritional status were 27 people (22.9 %). Table 2 also shows a significant relationship between breakfast behavior and nutritional status ($p = 0.040$). Respondents who have bad breakfast behavior have a tendency of 12.0 times to have a thin nutritional status compared to respondents who have normal breakfast behavior and very good.

RESULTS AND DISCUSSIONS

The results of the research that was conducted on Nutrition study program students at Muhammadiyah University of Bima with a total of 70 respondents showed that the majority of respondents in this study were in the category of late adolescents aged 17-19 years as many as 46 people (65.70%), then aged 20-25 years as many as 18 people (25.72%), and the least aged > 25 years was 6 people (8.58%).

The results showed that the body image of nutrition study program students had the majority having a body image perception that was dissatisfied. This was obtained from the statements contained in the questionnaire which was distributed to 70 respondents who had a dissatisfied body image perception, namely 49 people (70%). Most of the respondents said that they were dissatisfied with their body shape and appearance, moreover some students thought that they were teenagers who had to have an ideal body, so that it would be beautiful to be seen by the opposite sex, so that the desire also arises to be able to change some parts of their body (Saragih et al., 2022).

In line with the research of Sabila Zainun Ni'ma 2022 In this study, female adolescents at SMK Negeri 1 Driyorejo Gresik Regency had a negative body image. Young women often

compare their bodies with those around them. Blaming their body shape and size makes young women feel insecure in public. Teenagers also do not hesitate to ask other people about their bodies in order to get the right body. They will remain focused on appearance so that they look beautiful (Ni'mah & Indrawati, 2022).

Most students have a negative body image. Body image is formed due to the behavior of thoughts, beliefs and individual beliefs about their body shape. The adolescent stage is an important stage in the development of body image. There are many things that affect body image including social media, peers which help shape beliefs about the ideal body you want (Yori & Pamirma, 2020). The results of the study showed that there was a relationship between body image and nutritional status because the majority of respondents said they were concerned about appearance and body shape so that it affected eating and drinking behavior, including in choosing foods that contained good nutritional intake or not, while the majority of respondents were boarding children who Most of them choose to eat fast food or junk food as well as the lack of student awareness of the importance of eating nutritious food.

The results also show that the majority of respondents with a satisfied body image have normal and very good nutritional status. This is because a positive body image has a true view of their body and sees the shape of their limbs as they are, so that adolescents tend to have feelings of pride, confidence and gratitude. to the real body shape and feel comfortable with their appearance (Nurleli, 2019). Poor body image can have an impact on a person's physical and psychological health, and can affect self-esteem, mood, competence, social functioning, and work functions. Low body image is often measured as body dissatisfaction (Yori & Pamirma, 2020). Conversely, adolescents who have a negative body image or are dissatisfied with their appearance will more often compare their body shape with the body shape of others with the thought that the body shape of their peers is more attractive than themselves (Marlina & Ernalina, 2020).

The results of the study also revealed that there was a significant relationship between breakfast behavior and the nutritional status of nutrition study program students. From the results of the analysis, 51 students (72.9%) did not have breakfast. This is because the majority of students consider breakfast behavior to be a habit that is rarely even difficult for the average boarding house student to do, and many respondents consider they do not want to be busy with preparing breakfast, which they are afraid of being late for campus so that many respondents immediately go to college without breakfast and make it a habit. Factors that influence breakfast habits in young women are the level of education of parents. Different levels of parental education can also affect habits in children. In addition, Prof. Dr. MY Langeveld explains that the influence of parental education is clearly seen in children who look disciplined and are more mature in thinking (Rahman et al., 2021).

The factor of breakfast habits in adolescents is also influenced by the work of parents. The results of Kharmina's research (2011) show that 52% of adolescents have high family income. Family economy is a fundamental factor that will affect all aspects of life. The economic level is directly related to the purchasing power of the family, both purchasing power for food and purchasing power for better health services (Wondal et al., 2021).

Based on the results of the analysis there is a relationship between breakfast behavior and nutritional status. The majority of students who do not have breakfast have a thin nutritional status, bad habits in breakfast behavior certainly affect nutritional status, lack of positive motivation from students to have breakfast, so that nutritional intake in the morning less, while adolescence is a critical age that really needs adequate nutrition for the growth process. breakfast has an important role in the formation of children's nutritional status. Before starting the day, breakfast is very necessary to maintain health, the importance of breakfast is also to fill energy sources so that energy needs are met throughout the day. People who skip breakfast are more likely to feel hungry quickly so they will eat large portions when they meet food. This causes an increase in blood sugar levels and rapid weight gain. It's different when someone has breakfast in

the morning, because he will get metabolic stability and tends not to consume many calories throughout the day (Purwanti & Shoufiah, 2017).

CONCLUSION

Based on the results of the research that has been done, it can be concluded as follows: From the results of the correlation test, it shows that there is a relationship between body image and nutritional status in students of the Nutrition study program. with a p-value = 0.000, the majority with the category Body image is not satisfied 70%. Because of concerns about appearance and body shape so that it affects eating and drinking behavior including the selection of foods that contain good nutritional intake or not, while the majority of respondents are boarding school children who mostly choose to eat fast food or junk food and lack of student awareness of the importance of eating nutritious food. The more the sample is satisfied with body image, the smaller the frequency of going on a diet, conversely, the more dissatisfied with body image the higher the enthusiasm for a balanced diet.

From the results of the correlation test, it shows that there is a relationship between breakfast behavior and nutritional status in Nutrition study program students. with a p-value = 0.040, the majority with breakfast behavior in the bad behavior category of 72.9%. Bad habits in breakfast behavior certainly affect nutritional status, lack of positive motivation from students to have breakfast, reasons for being lazy to get up early, lazy and late getting up early so that they skip breakfast, so that nutritional intake in the morning is lacking, while adolescence is a crucial age that really needs adequate nutrition for the growth process. The more those who do not have breakfast or with the category of bad breakfast behavior, the intake of nutrients that enter the body is also less so that the nutritional status is poor, conversely if the breakfast behavior is good then the intake of nutrients in the body is also fulfilled so that the nutritional status is normal.

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