



Relationship between food choice and eating habits among nutritional status of senior high school teacher

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ABSTRAK

Latar Belakang: Overweight merupakan kondisi terjadinya penumpukan lemak berlebih di dalam tubuh yang berisiko bagi kesehatan. Prevalensi overweight Kota Surakarta sebesar 24,03%. Menurut Riskesdas (2018), PNS, TNI, Polri, dan pegawai BUMN dan BUMD sebanyak 20% mengalami obesitas sentral, sesuai dengan data Kemenkes. Data Pokok Pendidikan (2022) menunjukkan bahwa 69,23% PNS (Pegawai Negeri Sipil) adalah guru. Guru memiliki banyak pekerjaan dan merasa tertekan saat bekerja. Terlalu banyak makan adalah cara untuk mengurangi stres. Kebiasaan makan buruk yaitu terlalu banyak mengonsumsi makanan tinggi energi, karbohidrat, lemak, rendah serat menyebabkan penambahan berat badan. Penelitian ini dilakukan untuk mengetahui hubungan pemilihan makan dan kebiasaan makan dengan status gizi guru SMA Negeri di Surakarta.

Tujuan: Mengetahui hubungan pemilihan makan dan kebiasaan makan dengan status gizi pada guru di SMA Negeri Kota Surakarta.

Metode: Desain penelitian Cross-Sectional. Populasi penelitian adalah guru di SMA Negeri di Surakarta dengan 96 responden. Data kebiasaan makan menggunakan kuesioner Adolescent Food Habits Checklist (AFHC), data pemilihan makan dengan kuesioner Food Choice Questionnaire (FCQ) dan status gizi dengan pengukuran antropometri. Uji statistik menggunakan uji Chi-Square.

Hasil: Hasil penelitian menunjukkan bahwa guru paling banyak berstatus gizi pre-obesitas (47.9%). Hasil penelitian menunjukkan bahwa kebiasaan makan pada guru adalah makan sehat sebesar 65,2%. Guru paling banyak melakukan pemilihan makanan sesuai dengan weight control sebanyak 11 responden 23,9%. Terdapat hubungan yang bermakna antara kebiasaan makan dan pemilihan makan dengan status gizi pada guru di SMA Negeri Kota Surakarta.

Kesimpulan: Terdapat hubungan yang bermakna antara kebiasaan makan dan pemilihan makan dengan status gizi, hal ini bisa disebabkan karena kebiasaan makan yang tidak sesuai pedoman gizi seimbang merupakan penyebab utama kelebihan berat.

KATA KUNCI: pemilihan makan; kebiasaan makan; status gizi; guru

ABSTRACT

Background: Overweight is a condition of excessive fat accumulation in the body that is risky for health. According to Riskesdas (2018), civil servants, TNI, Polri, and employees of BUMN and BUMD as much as 20% have central obesity, in accordance with data from the Ministry of Health. Basic Education Data (2022) shows that 69.23% of civil servants are teachers. Teachers have a lot of work and feel stressed at work. Overeating is a way to reduce stress. Bad eating habits that consume too much food high in energy, carbohydrates, fat, low in fiber cause weight gain. This study was conducted to determine the relationship of food selection and eating habits with the nutritional status of public high school teachers in Surakarta.

Objectives: To determine the relationship between food selection and eating habits with nutritional status among teachers in public high schools in Surakarta City.

Methods: Cross-sectional research design. The study population was teachers in public high schools in Surakarta with 96 respondents. Data on eating habits using the Adolescent Food Habits Checklist (AFHC) questionnaire, food selection data with the Food Choice Questionnaire (FCQ) and nutritional status with anthropometric measurements. Statistical test using Chi-Square test.

Results: The results showed that most teachers had pre-obese nutritional status (47.9%). The results showed that the eating habits of teachers were healthy eating by 65.2%. Most teachers make food choices in accordance with weight control as many as 11 respondents 23.9%. There is a significant relationship between eating habits and food selection with nutritional status in teachers in public high schools in Surakarta.

Conclusions: There is a significant relationship between eating habits and food selection with nutritional status, this can be due to eating habits that are not in accordance with balanced nutritional guidelines are the main cause of overweight.

KEYWORD: food selection; eating habits; nutritional status; teachers

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INTRODUCTION

Overweight is a condition where there is an accumulation of excess fat in the body that can pose a risk to health (1). The prevalence of obesity in adults in Indonesia itself has increased by 2.1% per year from 2013–2018. The province with the highest prevalence of obesity nationally is Central Java at 14.3%, while the highest prevalence by district/city in Central Java is Surakarta City at 24.03%. According to Riskesdas (2), 20% of government employees are overweight. According to the Basic Education Data (3), the number of civil servants with teacher status is 69.23%. According to the Central Bureau of Statistics 2022, the largest number of teachers is in Central Java Province, and the number of teachers in Surakarta City alone is 9,752 teachers, while the number of high school teachers in Surakarta City is 1,136 teachers. Meanwhile, there are 380 civil servant teachers in public high schools consisting of 8 schools (4). High school teachers have a workload in terms of preparing their students for the next level, such as choosing to continue to college or

work. Teachers are expected to teach students to think critically, rationally, and solve problems (5). Teachers are also referred to as catalysts, people who are listened to and obeyed by their students (6). Secondary school teachers tend to experience stress due to various factors such as working conditions, work performed, work pressure and work environment. Teachers tend to feel they have a lot of work to do and feel pressured at work (7).

According to Tomiyama, a person experiencing stress may eat more than usual and choose foods high in calories, sugar and fat. A survey conducted by the APA (American Psychological Association) found that up to 39% of people overeat to cope with stress (8). According to research conducted by Isramilda, there is a significant ($p=0.022$) relationship between stress and obesity (9). Stress can alter a person's biological and psychological state, affecting consumption patterns and preferences (10). The higher the level of stress, the greater the tendency to overeat. Overeating is one way to relieve stress (11). Inappropriate eating habits,

namely consuming large amounts of food, choosing foods that are high in energy, carbohydrates, fat and low in fiber, trigger weight gain (12). Weight gain is a group at high risk of overnutrition. Poor eating habits often occur due to eating without knowing the need for nutrients for health. According to Syafarino's research (11) the selection of nutritious foods affects nutritional status.

Nutritional status is an important factor in determining health status because it can describe the balance between the body's needs and nutrient intake. The impact of overnutrition is an early factor that can trigger the onset of degenerative diseases such as heart disease, diabetes, hypertension, musculoskeletal, especially endometrial, breast and colon cancer (13). Therefore, this study was conducted to determine the relationship between food selection attitudes and eating habits with the nutritional status of public high school teachers in Surakarta.

MATERIALS AND METHODS

This type of research is quantitative with Cross Sectional research design. The research was conducted in March 2023 in 8 public high schools in Surakarta City, namely SMA Negeri 1 Surakarta to SMA Negeri 8 Surakarta. This research has obtained ethical approval with number 58/UN27.06.11/KEP/EC/2023. The total number of civil servant teachers who teach in public high schools in Surakarta City is 380 teachers (14). The sample size was calculated using the minimum sample formula (15) as many as 96 respondents. By using cluster random sampling technique. Data collection consists of data on age, gender, latest education, nutritional status, eating habits, and food selection. Variables studied were the identity of respondent characteristics (age, gender and latest education), nutritional status, eating habits, food selection and food intake.

Research instrument used for the nutritional status variable was obtained from the results of anthropometric measurements, namely weighing body weight with a weight scale, then measuring height using a microtoise tool. As for the eating

habits variable using the Adolescent Food Habits Checklist (AFHC) questionnaire with 23 questions and checklist interpretation of correct answers with interpretation categories, namely healthy food habits (Score > 12) and unhealthy eating habits (score < 12). The food selection variable uses the Food Choice Questionnaire (FCQ) questionnaire in food selection using a Likert scale which is interpreted as good with a percentage result of 76-100%, sufficient with a percentage result of 56-75% and less with a percentage result < 56%. Data analysis in this study was divided into univariate and bivariate data analysis. This analysis is presented using frequency distribution tables and cross tabulation (chi-square) with percentage or proportion measures. The use of tables is accompanied by a narrative for easy understanding.

RESULTS AND DISCUSSIONS

Distribution of respondents

The data is presented in an open table. **Table 1** shows the distribution of respondents based on age, gender, highest education nutritional status, eating habits and food choices. In the table there are the number of respondents and percentages. The following table shows that most of the teachers in Surakarta City's public senior high schools are aged 40–60 years (72.9%). According to gender characteristics, most respondents were female (80.2%). According to the characteristics of the last education, more of the last education is Strata 1 (66.7%).

Based on the **Table 1** shows, it is known that of the eight high schools in the city of Surakarta, teachers who have nutritional status are mostly pre-obese (47.9%) and the least nutritional status was obesity (1,1%). Based on the table above, it is known that of the eight high schools in the city of Surakarta, teachers who have healthy eating habits are more (62.5%). Based on the table above, it is known that teachers with the most meal choices in weight control (19.8%). Based on the **Table 2**, it states that the most respondents have healthy eating habits with pre-obesity nutritional status as many as 30 respondents (65.2%).

Table 1. Distribution respondents

Distribution Respondents	n	%
Umur		
Adulthood 18–39	26	27.1%
Middle-aged young 40–60	70	72.9%
Gender		
Male	19	19.8%
Female	77	80.2%
Highest level of education		
Bachelor's degree	64	66.7%
Master's degree	32	33.3%
Nutritional status		
Overweight	34	35.4 %
Pre-Obesity	46	47.9 %
Grade 1 Obesity	15	15.6 %
Grade 2 Obesity	1	1.1 %
Eating habits		
Healthy eating habits	60	62.5 %
Unhealthy eating habits	36	37.5 %
Food choices		
Health	16	16.7 %
Mood	17	17.7 %
Convenience	15	15.6 %
Natural Content	10	10.4 %
Price	11	11.5 %
Weight Control	19	19.8 %
Familiarity	8	8.4%

Based on statistical tests, the $p=0.047$ ($p < 0.05$). Based on the Table 2, the most respondents made food choices in accordance with weight control with pre-obesity nutritional status as many as 11 respondents (23.9%). Based on statistical tests obtained $p=0.018$ ($p < 0.05$). As in Arusha city council about 68.9% of young adults working as healthcare workers, teachers, and bankers had an obese nutritional status (16).

Relationship between food selection attitudes and eating habits with nutritional status among high school teachers

Based on data analysis using the Chi-Square test on the test of the relationship between eating habits and nutritional status, it shows that there is a relationship between eating habits and nutritional status in teachers in Surakarta City's public senior high schools obtained $p < 0.05$, there is a significant relationship between eating habits with nutritional status. Carbohydrate intake can affect nutritional status, the more carbohydrate-

rich foods a person consumes and does not use immediately, the more it will be stored in muscle tissue as glycogen when the body does not use it immediately (13). Eating habits are human behaviors towards food that include attitudes, beliefs, and choices related to the consumption of food purchased repeatedly (17). Wrong eating habits lead to an increased risk of abnormal nutritional status and health problems (18).

Many of the civil personnel that teach in Surakarta City's public senior high schools are office workers. They tend to be less conscious of their eating habits because of their jobs (19). The findings of 30 journals that examined the relationship between eating habits and obesity indicate that eating habits do affect obesity. Certain eating habits will cause people to acquire weight or become obese. Furthermore, eating too much food might make you heavier, which can cause metabolic syndrome, diabetes, insulin resistance, dyslipidemia, high blood pressure, atherosclerosis, and several cancers (20).

Table 2. Relationship between food selection attitudes and eating habits with nutritional status among high school teachers in Surakarta

Variables	Nutritional Status								Total	p	
	Overweight		Pra-Obesitas		Obesitas 1		Obesitas 2				
	n	%	n	%	n	%	n	%			
Eating habits											
Healthy eating habits	16	47.1	30	65.2	13	86.7	1	100	60	62.5	0.047 (Sig)
Unhealthy eating habits	18	52.9	16	34.8	2	13.3	0	0	36	37.5	
Food choice											
Health	4	11.8	6	13	6	40	0	0	16	16.7	0.018 (Sig)
Mood	7	20.6	8	17.4	2	13.3	0	0	17	17.7	
Convenience	6	17.6	9	19.6	0	0	0	0	15	15.6	
Natural Content	1	2.9	4	8.7	4	26.7	1	100	10	10.4	
Price	8	23.5	3	6.5	0	0	0	0	11	11.5	
Weight Control	5	14.7	11	23.9	3	20	0	0	19	19.8	
Familiarity	3	8.9	5	10.9	0	0	0	0	8	8.3	

Consuming different kinds of food must be balanced with controlling the quantity of food that meets the body's requirements, under PMK No. 41/2014. Applying the "Isi Piringku" eating technique allows one to eat a variety of foods in adequate quantities. A variety of meals, including side dishes, fruits, vegetables, and staple foods, are organized in the proper proportions in the "Isi Piringku" meal guide. Vegetables can help you avoid gaining weight. Vegetables are low in glycemic load and high in fiber. High fiber intake facilitates the body's easy excretion of fats and bile acids, reducing the absorption of fats and sugars. Fruits, like vegetables, have a high water content, a low energy density, and a lot of fiber, which can help you feel fuller longer and consume less fat and energy (28). Fiber has a significant impact on stool consistency, which facilitates defecation. Since fiber is more difficult to digest than fatty foods, a lack of fiber intake leads to improved nutritional status (29).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research conducted, it can be concluded that most teachers have healthy eating habits. There is a significant relationship between eating habits and nutritional status. Most teachers make food choices in accordance with weight control. There is a significant relationship between food selection and nutritional status in teachers in public high schools in Surakarta City). Food selection is related to nutritional status because if a person chooses to

eat a variety of foods that are in accordance with balanced nutritional guidelines, the nutritional status of the teacher will be improved.

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