

CHARACTERISTICS OF RISK FOOD CONSUMPTION BEHAVIOR IN PEOPLE WITH HIGH BLOOD SUGAR LEVELS IN TANJUNG ANOM

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ABSTRACT

Food consumption behavior is a form of application of eating habits that are influenced by two factors, namely knowledge and attitudes towards food. Food consumption behavior, like any other behavior toward oneself, family or society, is influenced by opinions and other factors related to right action. This study aims to determine the behavioral characteristics of risky food consumption in people with High Blood Sugar Levels in Tanjung Anom . This research is a quantitative research with a descriptive research design. The study population was 10,087 people, where the samples taken were 68 people with the Accidental Sampling technique with the sample criteria being people with increased Blood Sugar Levels. From the results of the study, the majority of people who experienced an increase in Blood Sugar Levels in the age group of 46-55 years with a total of 21 people (30.9%), based on gender, the most were female as many as 60 people (88.2%), respondent data based on the most education, namely high school / high school education as many as 29 people (42.6% and based on the most jobs was IRT, which was 37 people (54.4%). It is expected that the community will choose healthy foods to reduce the increase in KGD in the people of Tanjung Anom hamlet III.

Keywords: high blood sugar; kgd society; risk food consumption behavior

INTRODUCTION

Technological developments and cultural factors greatly influence changes in dietary behavior. Love fast food which contains lots of calories, fat, and cholesterol (Hafid Wahyu, 2019), by consuming fast food has the risk of going to increase in body weight and will lead to an increase in blood sugar levels. According to Hafid wahyu, in 2019 there were 98.9% of respondents who often consume fast food. The behavior of consumption of ready-to-eat foods high in sugar, carbohydrates and even high in fat, easily obtained due to the use of increasingly advanced technology that affects the lifestyle of someone who used to process their own food is now a culture GoFood As a result, it is easier for people to order food according to their preferences without thinking about the effects of the food, especially in urban areas . Many risk factors can increase blood sugar levels, apart from risky food behavior, obesity, and lack of physical activity (Yoko et al., 2021).

Due to an uncontrolled lifestyle with today's technological sophistication, people easily order food according to taste, including ready-to-eat foods that can cause degenerative diseases such as DM, hypertension(Sari & Nugroho, 2021). Apart from the above factors, meal times, meal frequency, and diet quality can also be at risk of increasing blood sugar levels, as well as protein from animals 95% such as red meat 1.29-1.49, fish 0.64-1.67, eggs 0.84-0.94. (Mahmood et al., 2022) (Schwingshackl et al., 2017) (Tian et al., 2017) Risk factors include energy intake, dietary fats, refined carbohydrates, refined grains, alcohol, dietary fiber, whole grains, overweight and obesity, physical inactivity and smoking are contributing factors to increased blood sugar levels. (Livesey et al., 2019) High-fat foods with a frequency of more than 3 times / day such as milk, will also As a trigger factor for increased blood sugar levels, there are 16 people 7 people from the United

States, 7 people from European countries, 1 person from Australia, and 1 person from Taiwan, the habit of consuming sugar is 9% risk. The initial survey by interviewing 8 people found 5 results (Mitri et al., 2020) (Meng et al., 2021) of unhealthy eating behavior, namely happy to consume fried foods 3x a week, consumption of sausages, French fries, fried chicken 3x a week, frequent consumption of snacks such as biscuits every day, drinking sweet drinks after meals and 3 people often consuming soft drinks approximately 3x a week. From the 8 respondents there was an increase in blood sugar levels with the following data 444 mg / dl, 389 mg / dl, 269 mg / dl, 253 mg / dl, 238 mg.dl, 225 mg / dl, 224 mg / dl , and 220 mg / dl.

METHOD

This study is a type of quantitative research with a descriptive research design where researchers identify the characteristics of risky food consumption behavior in people with abnormal sugar levels in Tj Anom Hamlet 3 in 2024 and will obtain data through frequency distribution. This study was conducted in January with a population of 10,087 people with a sample of 68 people, sampling techniques using accidental sampling techniques with the sample criteria were people with increased KGD.

RESULTS AND DISCUSSION

The study was conducted in January 2024. The number of respondents in this study was as many as 68 people of Tanjung Anom . The following are displayed the results of research related to the demographic characteristics of respondents.

Table 1.
Frequency distribution of respondents based on demographic data of respondents of Tanjung Anom community (n=68)

Characteristic	f	%
Age (Years)		
17 – 25	5	7,4
26 – 35	15	22,1
36 – 45	16	23,5
46 – 55	21	30,9
56 – 65	11	16,2
Gender		
Law Law	8	11,8
Woman	60	88,2
Education		
No School	2	2,9
SD	16	23,5
SMP	14	20,6
SMA/SLTA	29	42,6
D3	3	4,4
S1	4	5,9
Work		
Wiraswasta	5	7,4
IRT	37	54,4
Entrepreneurial	19	27,9
Buruh	3	4,4
Guru	3	4,4
Other	1	1,5

Based on the age group most in the age group of 46-55 years with a total of 21 people (30.9%), second there are ages 36-45 years with a total of 16 people (23.5%), third there are ages 26-35 years with a total of 15 people (22.1%), fourth there are ages 56-65 years with a total of 11 people (16.2%) and the least age is at the age of 17-25 years with a total of 5 people (7.4%). The results of previous studies showed a unique thing about factors related to blood sugar levels. First, the results of research conducted by Rudi, A. and Kwureh (2017) which showed that variables related to blood sugar levels were age, hereditary history, gender, and diet. Age factors are related to the physiology of old age where the older the age, the body's functions also decrease, including the work of the hormone insulin so that it cannot work optimally and causes high blood sugar levels (Komariah & Rahayu, 2020). In line with Arief's opinion (2008) which says with an increase in age, intolerance to glucose will increase. Increasing age and obesity rates are major risk factors for elevated blood sugar levels apart from genetics (Masruroh, 2018). The data mentioned by WHO also explained, after the age of individuals exceeds 40 years, their blood glucose levels increase by 1-2 mg% per year during fasting, and the increase increases in the range of 5.6-13 mg% 2 hours after eating (Fanani, 2020).

The most sex-based characteristics were 60 women (88.2%) and the fewest sex characteristics were 8 men (11.8%). Risk factors other than age are gender where women have a higher body fat composition compared to men, so women are more easily obese which is related to the risk of obesity and diabetes (Komariah & Rahayu, 2020). This is in line with research conducted by Gunawan & Rahmawati (2021) which states women tend to experience increased blood sugar levels because women have higher cholesterol than men and there are also differences in doing all activities and daily lifestyles that greatly affect blood sugar levels. The results of the distribution of respondent data based on the most education are high school / high school education 29 people (42.6%), then elementary education there are 16 people (23.5%), junior high school education there are 14 people (20.6%), S1 education there are 4 people (5.9%), D3 education there are 3 people (4.4%) and education respondents are at least in non-school education there are 2 people (2.9%). Education is believed to be a factor to understand the management, control of blood sugar, overcome symptoms that arise with proper handling and prevent complications due to increased blood sugar levels. Education is generally related to knowledge, higher education possessed by a person makes him respond to what is experienced in a positive way and will try to control blood sugar levels. People with a high level of education will usually have a lot of knowledge about health and with this knowledge people will have awareness in maintaining their health (Pahlawati & Nugroho, 2020).

This is in line with research conducted by (Ramadhani & Khotami, 2023) Where the result of the study is that there is a relationship between education and increased blood sugar levels. Someone who has a high education is certainly expected to have extensive knowledge as well. However, this is not absolute because someone with a low educational background does not necessarily have low knowledge. Knowledge can be sourced from non-formal, not necessarily sourced from formal education (Silalahi, 2019). The level of education affects the rise in blood sugar levels. Individuals whose education level is relatively high will usually have extensive knowledge about health. The breadth of knowledge he has makes him better understand the diseases that may attack him, and he will also dig up information that has something to do with the disease he suffers. A sense of

awareness to carry out efforts so that his health can be maintained will also arise in him. The lifestyle he lives will also be better and optimized again (Syaftriani et al., 2023).

The characteristics of respondents based on the most jobs are IRT, which is 37 people (54.4%), then there are 19 entrepreneurs (27.9%), then there are 5 entrepreneurs (7.4%), then there are 3 workers (4.4%), the same as teachers, there are 4 people (4.4%), then the least work, there are others where there is 1 person (1.5%). According to the ADA (2012) someone who works has great benefits because blood sugar levels can be controlled through physical activity and can prevent complications. Work with light physical activity will cause less burning of energy by the body so that excess energy in the body will be stored in the form of body fat which can result in obesity which is one of the factors increasing blood sugar levels (Arania et al., 2021). Less physical activity such as lack of light exercise and not done regularly will make blood sugar levels increase so that it cannot be controlled (Keeping Up with the Kardashians, 2020). Results of research conducted by (Muharani Syaftriani et al., 2023) Occupational kenis is closely related to increased blood sugar levels. The work of the individual exerts an influence on the level of physical activity he performs.

Risk Food Consumption Behavior in Tanjung Anom Community

Table 2.

Frequency Distribution Food consumption behavior is at risk in the people of Tanjung Anom (n=68)

Consumption Behavior	f	%
Bad	36	52,9
Good	32	47,1

The results of research on risky food consumption patterns in people in Tanjung Anom village, Medan, in 2024 include 32 people (47.1%) and 36 people (52.9%). Based on the results of research conducted by researchers in Tanjung Anom, Medan, in 2023, the majority of people who are respondents with food consumption behavior at risk of not being good are 36 people (52.9%). The behavior of risky food consumption in the respondents studied included often eating and drinking sweet sweet such as sweet tea, *soft drinks*, syrup, packaged juices, dodol, *cake*, canned fruit, people add food flavoring every time they cook. People also enjoy food with the addition of sauce and soy sauce. This study is the same as previous research by Sudikno, et al (2015) often consume sweet foods (55.4%), sweet drinks (73%) and rarely consume *soft drink* (95.3%) and instant food (68.8%). As many as 52.1% of respondents had strenuous physical activity. Consumption patterns of risky foods include sugary foods/drinks, salty foods, fatty foods, offal, grilled/baked goods, and seasonings (Nisak Aulia Jauharun & Rias, 2018). Mulyani et al (2020) also had irregular eating patterns as many as 56 respondents, and most respondents often consume risky foods amounting to 34 respondents (60.7%).

The body produces blood sugar by digesting some foods into sugar that circulates in the bloodstream. This blood sugar will be burned and used by the body as energy or energy for us to be able to move, but the rest of the sugar that is not used or burned by the body will later be stored into the cells to be used as further energy. If the diet is not maintained anymore, blood sugar increases, and the body will store again into cells, if this continues without being balanced with a healthy lifestyle and lack of physical activity / exercise, of course, the risk of sugar accumulation in the blood (Ministry of Health RI, 2023). Data obtained by researchers through questionnaires about the value of KGD caused by the diet of people who mostly consume sweet foods or drinks

once a day, eat salty foods once a day, consume fatty / fried foods 1-2 times a week, eat processed preservative foods such as sausages, corned beef and others 3-6 times a week, then the habit of adding flavoring spices to dishes such as masako, Micin and others once a day, eat instant noodles 3-6 times a week, eat wet noodles such as meatball chicken noodles, then the habit of consuming *junk food* 1-2 times a week. People do not realize that a bad diet can increase blood sugar levels.

People's diets have shifted from a diet that contains a lot of fiber from vegetables, to a diet that consumes too many foods that contain too much protein, fat, sugar, salt and contain little fiber. The composition of food like this is especially found in ready-to-eat foods that have recently been very popular. In addition, a very busy way of life with work from morning to evening and sometimes even until night, sitting behind a desk causes frequent meals that are not on time. This risky lifestyle causes unmonitored blood sugar levels (Rottie et al., 2019). One effort to control blood sugar levels is to improve diet through the selection of the right food. Diet is food intake that provides a variety of amounts, schedules and types of food that a person gets. Improper dietary arrangements as recommended by the 3J (Schedule, Number and Type) can result in increased blood sugar levels (Wahyuni et al., 2019). In research conducted by Wahyuni et al (2019) showed results that based on different tests using *mann-whitney test*, P values of $0.016 < 0.05$ were obtained which means there are differences in blood sugar levels with good and bad diets.

CONCLUSION

The results showed that all respondents had abnormal blood sugar levels, where out of 68 respondents there were 36 (52.9%) who had bad food consumption. It is advised to the public to choose healthy foods to reduce Blood Sugar Levels.

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