Dental caries is a major dental and oral health problem in the world. Dental caries is a disease of dental hard tissue that is closely related to the consumption of cariogenic foods or drinks. Cariogenic foods are sweet foods that can cause dental caries. The large number of street food vendors will encourage students to have a habit of consuming street food, especially during class breaks. Based on the results of the initial data on dental caries examination conducted at SDN 1 Jeumpet, from 15 students, the average dental caries was 3.8 in the moderate category. This study aims to determine the relationship between snacking patterns and dental caries in students of SDN 1 Jeumpet, Aceh Besar District. Using the chi-square test with a value of <0.05. The research was carried out at SDN 1 Jeumpet, Aceh Besar District and was carried out on 19-21 January 2022. The population in this study amounted to 102 students. The sample of this research is all students of SDN 1 jeumpet taken using Random Sampling technique that is as many as 50 students. The results showed that the value obtained was p = 0.034. Based on the results of the study, it was found that the pattern of snacking was not good with dental caries status in the high category of 13 students (50%). Meanwhile, a good snack pattern with dental caries status was found in the moderate category, namely 13 respondents (54.2) with a p value of 0.034 (p<0.05). The results of the chi-square statistical test show that there is a relationship between snacking patterns and dental caries in SDN 1 Jeumpet students, Aceh Besar district in 2022. It can be concluded that there is a relationship between snacking patterns and dental caries. Suggestion: It is expected that students will reduce the pattern of snacking on sweet and sticky foods and it is recommended to increase the consumption of fibrous snacks as daily food and maintain dental and oral hygiene.

Keywords: Snack Patterns, Dental Caries

A. Introduction

Dental and oral health is a very important thing in human life. The problem of dental and oral health is a serious problem that must be
considered, because dental and oral disease is still a problem that often arises in the community. Dental and oral health in children is influenced by several things, including children's irregular snack eating patterns, wrong patterns in brushing teeth and children's motivation to brush their teeth. Snack consumption patterns can affect dental health and foods that are easily sticky on the tooth surface can accelerate the process of dental caries. (Jainal Abidin, 2017).

Dental caries is a major dental and oral health problem in the world. In developing countries, the prevalence of dental caries tends to increase as a result of increased sugar consumption and less use of flour. Limited access to dental health services in developing countries causes caries teeth to be left untreated or extracted to simply relieve pain. (Permatasari, et al, 2014).

Tooth decay can affect the health of other body parts, thus interfering with daily human activities. The emergence of a disease often goes unnoticed or is considered unimportant. Problems like this also occur in dental diseases such as dental caries. Dental caries disease is a disease that attacks the dental caries tissue, namely the occurrence of damage to tooth enamel, dentin and cementum, due to a carbohydrate body. The main cause of caries is Streptococcus Muntans. Microorganisms can colonize the surface of the teeth so that they quickly produce acids that affect the demineralization process. (Jainal Abidin, 2017).

Snack eating pattern is a form of human behavior in meeting the need for food, including the types of snacks and the frequency of consumption of snacks in one day. Elementary school age children prefer snack foods, compared to heavy meals. They tend to spend their food money in the school canteen and street vendors around the school. (Jainal Abidin, 2017).

Cariogenic foods are sweet foods that can cause dental caries. The nature of cariogenic foods is that they contain lots of carbohydrates, are sticky and break easily in the mouth. Cariogenic foods contain a lot of sugar and are sticky so they can stick to the surface of the teeth if not cleaned properly. Sweet foods affect the formation of dental caries. The pattern of consumption of foods such as sugar or sucrose accelerates the occurrence of dental caries, especially in children who like to consume
these sweet foods. In addition, other foods such as syrup, soda or soft drinks should also be avoided.

The relationship of sugar in snacks with caries is greater than the total diet because snacks are eaten more often in a high frequency. The influence of diet in the caries process is usually more local, especially in the frequency of food consumption. Every time a person consumes food and drinks that contain carbohydrates, acid will be produced by several caries-causing bacteria in the oral cavity, resulting in demineralization that lasts for 20-30 minutes after eating. (Rahenna, 2020).

In school children, dental caries is an important problem because it not only causes pain, but also spreads infection to other parts of the body, resulting in decreased productivity. This condition will certainly reduce the frequency of children's attendance to school, interfere with learning concentration, affect appetite and food intake so that it can affect nutritional status and in the end can cause physical growth disorders. Generally, children entering school age have a high caries risk because at this school age children usually like to snack on food and drinks as they wish. (Worotitjan, et al, 2013).

The large number of street food vendors will encourage students to have a habit of consuming street food, especially during class breaks. Snack food sold in schools is not necessarily healthy for consumption by students. In addition, not many students have the awareness to consume healthy snacks. One of the causes is students' ignorance about the nutrition of street food. (Hartanto, 2014).

Children who enter school age have a high risk of developing caries. At the age of 6-12 years, more intensive care is needed because at that age there is a change of teeth and the growth of new teeth. The number of snacks in schools, with sweet foods and drinks, threatens children's dental health (Salfiyadi, 2017).

The results of research Khotimah, et al (2013) showed that there was a relationship between consuming cariogenic snacks and the incidence of caries. This happens because generally children often consume it in large quantities and often, but rarely brush their teeth after consuming these foods. This condition also causes the child's mouth to become dirty. If cariogenic foods are consumed with a more frequent frequency, the child
is more likely to have dental caries compared to consuming large amounts of food but with less frequency. In the case of children who consume cariogenic snacks less frequently but still experience dental caries, this condition may be due to the wrong way of brushing their teeth or the wrong time to brush their teeth. From the above explanation, it shows that caries threatens children's dental health, so parents, especially mothers, need to monitor their children's snack patterns, especially when at school. If possible, children are not accustomed to snacking at school and are provided with food from home. (Mukhbitin, 2018)

From the explanation above, it can be concluded that at the age of 6-12 years, children are undergoing a process of growth and development, plus children at that age begin to consume a lot of cariogenic foods that can trigger caries. Dental health conditions in adulthood, one of which is influenced by dental health conditions when they were children. So, the role of parents is needed to familiarize children with maintaining oral hygiene, especially for children aged 6-12 years. (Mukhbitin, 2018)

The results of the Basic Health Research (RISKESDAS) conducted by the Indonesian Ministry of Health in 2018 showed an increase in the proportion of Indonesian people experiencing dental and oral problems compared to the 2013 RISKESDAS results, from 25.9% in 2013 to 57.6% in 2018. The results of the 2018 Basic Health Research or Riskesdas stated that 93 percent of early childhood experienced cavities. This means that only seven percent of children in Indonesia are free from dental caries problems. (Romida, 2020).

Based on data obtained from the Lampeuneret Public Health Center, Darul Imarah through interviews with dental health workers at the Lampeuneret Health Center, during the current pandemic UKGS activities are only carried out once a year on dental and oral health as well as counseling at SDN 1 Jeumpet and mass toothbrushing which done occasionally and only checked on some students having caries of 4.2% in SDN 1 Jeumpet students.

Based on the results of the initial data on dental caries examination conducted at SDN 1 Jeumpet, from 15 students, the average dental caries was 3.8 in the moderate category, therefore there is a gap between the government's target and the results obtained. Based on the results of
interviews conducted with 15 students, it was found that most of the students bought the food provided in the school canteen and did not bring lunch from home. The results of the researchers' observations, in the canteen there are several cariogenic snacks such as chocolate fried bananas, donuts, sweets, meatballs, crackers and in schools there are no fiber foods such as fruits.

B. Method

Based on the description and background above, the problem formulation of this research is "Is there a relationship between snacking patterns and dental caries in SDN 1 Jeumpet Aceh Besar students?"

1. General Purpose
   The general objective of this study was to determine the relationship between snacking patterns and dental caries in students of SDN 1 Jeumpet Aceh Besar in 2022.

2. Special Purpose
   Knowing the pattern of snacks in SDN 1 Jeumpet Aceh Besar students.
   Knowing the status of dental caries in students of SDN 1 Jeumpet Aceh Besar.

3. Scope of Research
   The scope of this research is limited to dental and oral health to determine the relationship between snacking patterns and dental caries in students of SDN 1 Jeumpet Aceh Besar.

C. Result and Discussion
A. Research Results
   The research was conducted on January 19, 2022 at SDN 1 Jeumpet, Aceh Besar District. The sample of this research is all students of SDN 1 taken using random sampling technique that is as many as 50 students. Collecting data using interview techniques using questionnaires and conducting direct examinations of respondents. Based on the results of processing the questionnaire data and the results of the examinations that have been obtained in the field, it can be seen as follows:
1. Univariate Data
   a. General data
      1) By Age
      Distribution of Age Frequency to Students at SDN 1 Jeumpet, Aceh Besar District

      | No | Age | Frequency | %  |
      |----|-----|-----------|----|
      | 1  | 6   | 10        | 20 |
      | 2  | 7   | 5         | 10 |
      | 3  | 8   | 10        | 20 |
      | 4  | 9   | 7         | 14 |
      | 5  | 10  | 10        | 20 |
      | 6  | 11  | 8         | 16 |
      | total |     | 50        | 100|

      Based on the table above, it is found that the percentage of respondents by age is 20% of respondents aged 6 years, 10% of 7 years old, 20% of 8 years old, 14% of 9 years old, 20% of 10 years old and 11 years old, year by 16%.

      2) By Gender
      Frequency Distribution of Students at SDN 1 Jeumpet, Aceh Besar District.

      | No | Snack pattern | Frequency | %  |
      |----|---------------|-----------|----|
      | 1  | Male          | 24        | 48 |
      | 2  | Female        | 26        | 52 |
      | Total |           | 50        | 100|

      Based on the table above, the percentage of respondents based on gender is obtained where respondents who are female are 52% and male are 48%.

   Special Data
   3) Snack Pattern
   Distribution of Snack Patterns in SDN 1 Jeumpet Students, Aceh Besar District
Based on the table above, it can be seen that the snack pattern of 50 respondents who have a less good snack pattern is more than 26 respondents (52%).

4) Dental Caries Status
Distribution based on dental caries status in students of SDN 1 Jeumpet, Aceh Besar District

Based on the table above, it can be seen that the most dental caries status in the medium and high categories were 18 respondents (36%).

1. Bivariate Data
Distribution based on the relationship between snack patterns and dental caries in students of SDN 1 Jeumpet, Aceh Besar District
Based on the table above, it can be seen that from 50 respondents the pattern of eating less well with dental caries status was obtained in a high category, namely as many as 13 students (50.0%). Meanwhile, a good snack pattern with dental caries status was found in the moderate category, namely 13 respondents (54.2%).

D. Conclusion
Based on the results of the research and discussion, it can be concluded that, There is a relationship between snacking patterns and dental caries in students of SDN 1 Jeumpet, Aceh Besar District with a p value = 0.034, Snacking patterns of 50 respondents have less good snack patterns, namely as much as 26 respondents (52%). The most dental caries status was found in the medium and high categories as many as 18 respondents (36%).

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