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Damage to The Surface Of Children's Teeth Due To The Impact Of Milk Formula Giving Patterns Over A Long Period Of Time Due To Acid Production In The Oral Cavity (Caries)

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Abstract

Formula milk is milk produced by industry. For needs intake nutrition in the system body child which contain carbohydrate like sucrose and lactose which can result in caries teeth in children age preschool. Dental caries is one of disturbance health teeth that experience calcification so that tooth become porous, perforated even broken. Research Objectives this is for know influence consumption of formula milk against caries teeth. Research this use type study literature study, where method literature study looking for data used originate from textbooks, journals, articles scientific, literature review containing about Influence Consumption Formula Milk Against Caries Teeth. Research results that consumption of formula milk has an effect to caries tooth child age preschool. Content carbohydrate like sucrose and lactose can cause caries teeth and if too often consuming formula milk then level severity caries tooth the more high. Research conclusion this is factor main the occurrence caries in children age preschool is with consume food and drink cariogenic.

Keyword: Damage, Surface of Children's Teeth, Impact of Formula Milk, Due to Acid Production In The Oral Cavity (Caries)

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**1. Introduction**

According to Alpers in Efendi Rahayu et al., (2018), the cause caries tooth because of internal and external factors. Internal factors are factors that originate from in among them that is factor host (saliva), microorganisms, substrate (sucrose), and time. The factors external which includes that is type gender, habits Eat food cariogenic, habit drink formula milk using bottle, age, knowledge, habits rub teeth and levels parent's economy. According to the American Academy of Pediatric Dentistry (2018), the cause main caries tooth child that is habit consumption of formula milk in term long time, use bottle, frequency administration and duration.

Dental and oral health is part from health body that is not can separated One with that other because health teeth and mouth will influence health body. In general, a person it is said Healthy No only her healthy body but also healthy cavity mouth and teeth. Because of that that, health Teeth and mouth play a very important role in support health body a person (Depkes, 2008 in Jumriani 2019).

Problem main in cavity mouth child until moment this is disease caries teeth (Annisa, 2013 in Jumriani 2019). Caries is a disease network caries tooth namely enamel, dentin and cementum caused by activity body tiny in a carbohydrates that can fermented (Kidd, Edwina AM, 2013 in (Angki & Sainuddin, 2020). While Gigi is network the hardest body compared to the others. However so, teeth is network easy body very experience damage. This happens when tooth no to obtain maintenance should (Sari, 2017).

Age period preschool is children aged 1-6 years (Soedjiningsih, 1995). Where at the age of the child experiencing the process of growing flower with Good from physical, mental and social. The process of growing flowers are closely related with factor health in other words only on healthy child can expected the growth process occurs optimal flower (Kumia, 2008 in (Angki & Sainuddin, 2020).

2. Research Methods

Types of research used that is descriptive analytics. Design study using cross-sectional. At stage This results from data processing will analyzed more Details so that to obtain conclusion from research conducted. After get results analysis and data processing





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has done will discussed in a way more Details so that produced data conclusion that will prove succeed or whether or not the proposed hypothesis. The research instrument for gender data, cariogenic food eating habits, formula milk drinking behavior and parental economic level used a questionnaire while the Early Childhood assessment Caries (ECC) using observation sheets. The independent variables are gender, cariogenic food eating habits , formula milk drinking behavior, and parental economic level. The dependent variable is the occurrence of Early Childhood Caries . The questionnaire has been tested for validity and reliability to ensure that the instrument is valid and reliable.

3. Results

a. Results

Research result This that consumption of formula milk has an effect to caries tooth child age preschool. Content carbohydrate like sucrose and lactose can cause caries teeth and if too often consuming formula milk then level severity caries tooth the more high. So it is recommended to mother for give milk at the time before sleep and teach child brushing tooth before sleep or after drink milk and give tool help the child for drinking milk that is straw (pipette) so that the rest from the milk no sticky on the surface tooth.

The results of the study show that factors related to the occurrence of Early Childhood Caries (ECC) is the habit of eating cariogenic foods and the behavior of drinking formula milk. The results of this study are in line with the research of Rahayu & Asmara (2018), which explains that consuming cariogenic foods more frequently can increase the likelihood of caries compared to consuming large amounts but less frequently.

b. Discussion

Dental caries is disease infection caused by demineralization of enamel, dentin and cementum because consumption food cariogenic especially carbohydrates. One of example carbohydrate is lactose (milk sugar). Occurrence caries tooth due to sugar consumption will metabolized such that appearance so that formed polysaccharides that allow bacteria attached to the surface teeth, besides it will also provide backup energy





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for metabolism caries furthermore as well as for breeding bacteria cariogenic. The main factor the occurrence caries is often consume food and drink cariogenic with content sucrose which is very tall.

Reason caries tooth influenced by factors teeth, microorganisms (bacteria), substrate and time. Frequency consume high sucrose increase acidity plaque and increase potential formation plaque as well as growth bacteria in the cavity mouth. The most active plaque work at night day, at the time child in condition rest. Eat during Sleep increase risk risk caries tooth Because cleanliness mouth and speed decreased saliva flow moment sleep. So consume drinks / foods that contain sugar with bottle must reduced or stopped at the time evening day (sleep). For reduce risk caries teeth, one of the method that must be done is give education health to parents about method management giving formula milk and maintenance tooth children to avoid dai caries tooth.

4. Conclusion

Research conclusion this is that the results of the statistical test using the Chi- square test were obtained the p -value is 0.006 indicating that the duration of formula milk consumption is factor risk the occurrence caries teeth in children preschool. The OR value of 7.718 means child with consume more formula milk from 2 years has 7,718 times for caught caries tooth compared to children who consume less formula milk from 2 years. As obtained p value = 0.017 which shows consumption frequency of formula milk is factor risk caries teeth in children preschool. The OR value of 9.667 means child with consumption of formula milk during more from 3 times a day has 9,667 times for caught caries tooth compared to children who consume less formula milk than 3 times a day. This is show that the duration and frequency consumption of formula milk is factor risk the occurrence of Early Childhood Caries (ECC) in children preschool. thing This because of longer and more often something foods that contain carbohydrate That contact with tooth so the more big possibility For time duration production acid in the cavity mouth which causes the occurrence demineralization of enamel and takes place for 20-30 minutes.





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Statement of informed consent

Every action we take as authors is a mutual agreement or consent

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