

## **ABSTRACT**

*Enamel is a tissue which the most major of mineralization in the body because it contain more then 90% of inorganic materials which is hydroxyapatite. Enamel in deciduous tooth have structure that is less and thinner when compared with permanent tooth therefore the caries process in children prone to happen. Children tend to consume foods and baverages more sweet such as milk. Milk has a high nutrition value as lactose, lipid, protein, various vitamin and mineral. Milk served in a various form such as milk powder, liquid or UHT (Ultra Hight Temperature) and sweet condensed milk. Composition of sweet diet's can affect the tooth hardness of enamel in deciduous tooth because it is contains glucose and sucrose that having an effect to the remineralization and demineralization of the tooth. This type of research is an experimental laboratory, samples were used 24 deciduous as according to inclusion and exclusion tooth criteria. The tooth were devided to 6 samples in each groups. That is milk powder, liquid (UHT) and sweet condensed milk as dependent variable and also aquades as control variable. The result showed the normal values and homogeneous data then test the data with One Way Anova test for analyze the enamel hardness difference between before and after immersion each variables. The results of One Way Anova test showed the probability score 0.00 which means  $p < 0.05$  and concluded that there are signifacant difference between before and after immersion the tooth in powder milk, liquid (UHT) and sweet condensed milk.*

**Keyword:** *Tooth hardness, deciduous tooth, milk powder, UHT, sweet condensed milk*