

KANDUNGAN EKSTRAK THE HIJAU DALAM PERMEN KARET XYLITOL TERHADAP PH SALIVDA DAN INDEKS PLAK ANAK

(*GREEN TEA EXTRACT ON XYLITOL CHEWING GUM TOWARDS
SALIVARY PH AND DENTAL PLAQUE INDEX IN CHILDREN*)

ABSTRACT

Background. Many children in Indonesia have dental health problems. According to RISKESDAS, severity of dental caries in children is 1,4 that means every child at least have 1 tooth decay. So, there should be an alternative option to decrease severity by consume chewing gum. Xylitol with green tea extract chewing gum contains sugar free and green tea extract that help to control salivary pH and reduce accumulation of dental plaque. **Purpose.** To analyze salivary pH and plaque index changes after chewing xylitol with green tea extract gum in children. **Method.** This research was done to children between age 10-12 years and used cross-over method. 30 students divided into 3 group that in week one group A chewed paraffin wax, group B chewed xylitol, group C chewed xylitol with green tea extract then measured the salivary pH and plaque index. Next week the chewing gum was cross over till every group had chewed every gums. The data is analyzed using Pair T-Test, Friedman Test, and Median. **Result.** Increasing of salivary pH after chewed paraffin wax was 0,013, increasing of salivary pH after chewed xylitol was 0,48, increasing of salivary pH after chewed xylitol with green tea extract was 0,357. Plaque index decrease after chewed paraffin wax was 0,113, plaque index decrease after chewed xylitol 0,601, plaque index decrement after chewed xylitol with green tea extract was 0,412. **Conclusion.** Chewing xylitol with green tea extract gum can elevate salivary pH and decrease acumulation of dental plaque in children but it is less effective than chewing xylitol gum.

Keywords: xylitol with green tea extract, chewing, salivary pH, plaque index.