Abstract

Chewing gum can stimulate saliva secretion and increase saliva component. Chewing gum contains of different substances such as sucrose, xylitol and probiotic. The purpose of this study was to analyze the flow rate, volume, viscosity, pH and the number of Streptococcus mutans colonies before and after chewing gum containing sucrose, xylitol and probiotic. The research was a quasi-experimental research using a random sampling method. Sample was 30 pre-clinical students of the Faculty of Dentistry, Padjadjaran University. To analyze the difference of characteristic of saliva used Student t test and one way Anova. The results showed that after chewing gum there were significant increasing of saliva volume, saliva flow rate and saliva pH, and significant decreasing of saliva viscosity and the total Streptococcus mutans colony. The difference of the increasing saliva volume, flow rate, pH and decreasing of total Streptococcus mutans colony and viscosity saliva Statistically there were no differences (p>0.005). In conclusion, chewing gum can increase the saliva volume, flow rate, and decrease the saliva viscosity and the total Streptococcus mutans colony.

Key words: sucrose, xylitol, probiotic, saliva, Streptococcus mutans colony