The Effectivity of Using Tooth Paste Containing Sodium Bicarbonate and Tooth Paste Containing Fluoride to Salivary pH

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BACKGROUND-One factor that can affect oral health is oral level of acidity, which is the salivarypH. Sodium bicarbonate and fluoride are the components of tooth paste that can influence the salivary secretion and pH.

OBJECTIVE-The aim of this study was to evaluate the effectivity between using tooth paste containing sodium bicarbonate and tooth paste containing fluoride to salivarypH.

METHODS-This study was true experiment test with pretestposttest design with control group. Sample is achieved by using simple random sampling. The amount of sample was obtained by applying the sample size of Federer and obtained 15 sample each group. Salivary pH was taken before and after brushing teeth instruction and pH was assesed by using pH meter. Statistic test paired sample ttest and independent sample ttest were used in this study by SPSS program v20 for windows.

RESULT- The result of independent sample ttest showed that there is significant difference increase of salivary pH between using tooth paste containing sodium bicarbonate and tooth paste containing fluoride, with higher value of increase salivary pH in using tooth paste containing sodium bicarbonate (p:0.032, p<0.05).inconclusion,The use of tooth paste containing fluoride and sodium bicarbonate in brushing teeth is effective to increase the salivary pH. However, tooth paste containing sodium bicarbonate has higher effectivity in increasing salivary pH than toothpaste containing fluoride.

CONCLUSION-There is increase in salivary pH from 6.880 to 7.230 before and after using tooth paste that contains sodium bicarbonate (p:0.000, p<0,05). Also, there is increased salivary pH in tooth paste containing fluoride group before and after brushing teeth instruction, from 6.900 to 7.171 (p:0.000, p<0.05).