

# Comparing effects of electrical and conventional smoking on saliva

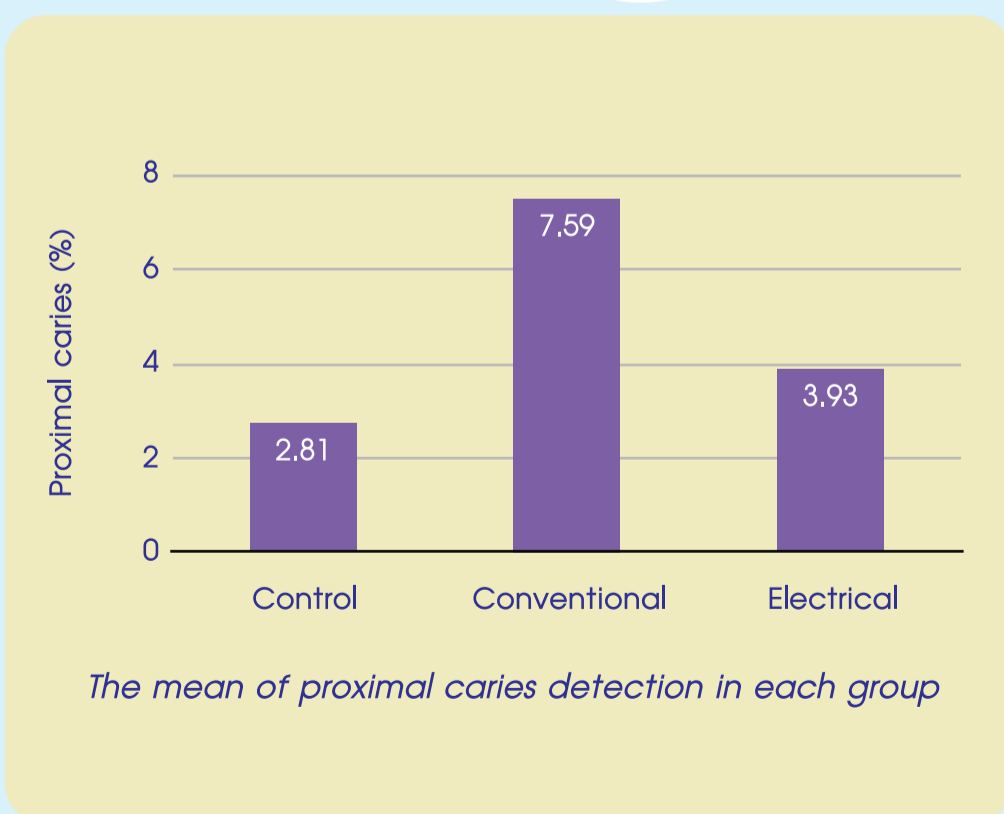
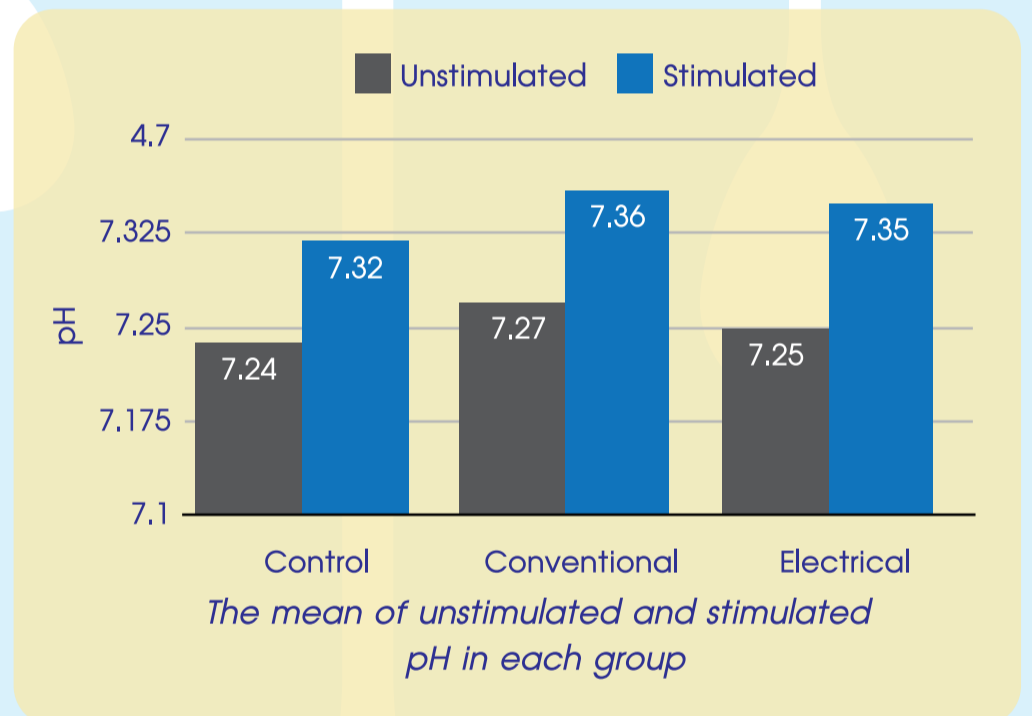
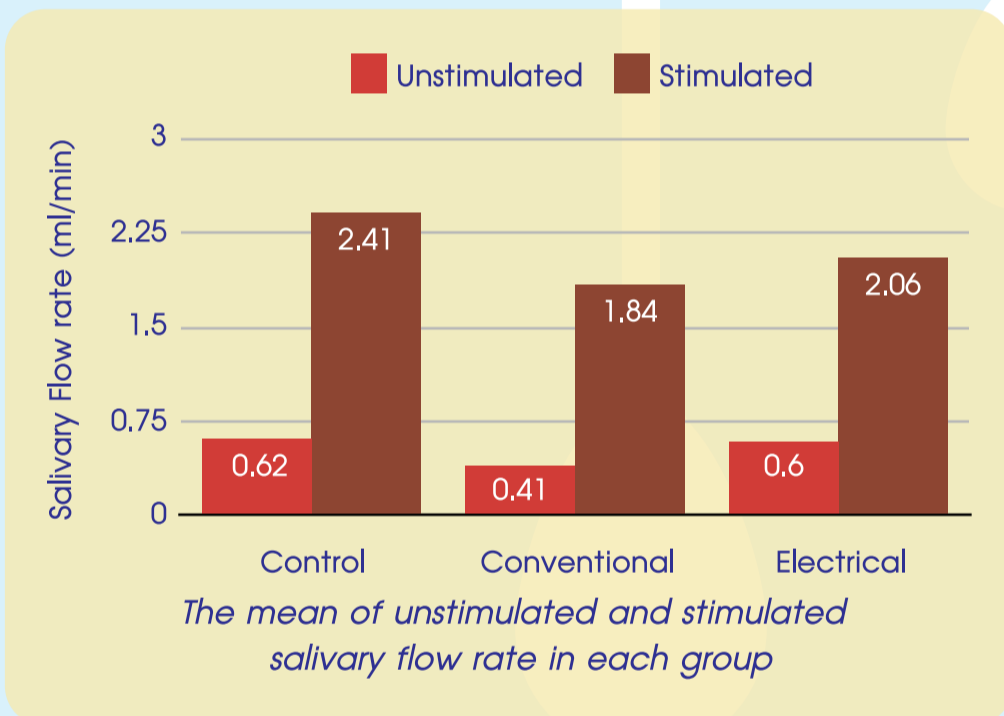
**Key word :** Conventional smoker, electrical smoker, salivary flow rate, salivary pH, proximal caries

**Introduction :** Smoking is one of the most common factors affected oral health. Presently the use of electrical cigarettes has been increasing worldwide. However, there is limited data how its effects on salivary flowrate, salivary pH and proximal caries.

**Objective :** To compare salivary flow rate, salivary pH, and detect proximal caries between non-smokers, conventional smokers and electrical smokers.



**Methodology :** Patients were asked to complete questionnaires before participating in this research. Unstimulated saliva and stimulated saliva were collected from 90 patients. The patients were divided into 3 groups which were non-smokers, conventional smokers and electrical smokers. Individual salivary flow rate was collected by spitting method and pH was assessed by pH pocket meter. Proximal caries were detected and recorded by using bitewing radiograph.



**Result :** The mean of unstimulated salivary flow rate in conventional, electrical smokers and non-smokers was 0.41 ml/min, 0.60 ml/min, 0.62 ml/min and stimulated salivary flow rate was 1.84 ml/min, 2.06 ml/min and 2.41 ml/min respectively. In our study, the results showed that both unstimulated and stimulated salivary flow rate between non-smokers and conventional smokers were statistically significant difference. When comparing unstimulated salivary flow rate between conventional and electrical smokers was also statistically significant difference. While the unstimulated salivary and stimulated pH were not statistically significant difference. The mean of unstimulated and stimulated salivary pH was 7.25 and 7.34. Even though the percentage of proximal caries in conventional smokers was slightly more than electrical smokers and non-smokers, but there were not statistically significant difference

**Conclusion :** The result showed conventional smokers had more effect to unstimulated salivary flow rate than electrical smokers. Smoking had no effect on salivary pH and proximal caries in all groups. However, electrical cigarette is still fairly new and it needs long-term study for the effects.