Assessment of the effect of fruit (apple) and plain yogurt consumption on plaque PH

Sahar Sayahpour, P Moeiny and A Aminikhah
Islamic Azad University, Iran

Introduction: Yogurt is believed as healthy and nutrient snack. Nowadays, due to new improvements in producing fruit yoghurts, more tendencies are seen in their consumption especially among children. Therefore, evaluation of their cariogenicity is important.

Aim: The aim of this study was evaluation of the effect of two kinds of fruit (apple) and plain yoghurts on plaque PH.

Materials & Methods: In this study, 10 healthy dental students were selected. Dental plaque pH in certain area of the mouth was taken by Metrohm microelectrode and digital pH meter. Plaque pH was measured at the baseline and intervals of 2, 5, 7, 10, 15, 20, 30, 40, 50 and 60 minutes after rinsing with test materials, including: fruit (apple) and plain yoghurt (2.5% fat). For positive control group, just the baseline PH and at intervals of 2 and 5 min after swishing with 10% sucrose solutions were recorded. The results were analyzed using repeated measures ANOVA (P<0.05).

Results: Lowest pH was obtained after fruit yoghurt consumption followed by plain yoghurt and 10 % sucrose solutions. Furthermore, time duration which remained below the critical pH was longer after consuming fruit yogurt.

Conclusion: Both kinds of yoghurt were considered cariogenic since plaque pH drop below the critical points. Average of plaque pH after consumption of fruit yoghurt was significantly lower in almost all the time intervals.

Biography

Sahar Sayahpour has completed her DDS at Qazvin University of Medical Sciences, Iran. Now, she is pursuing her Post-graduate degree in Pediatric Dentistry at Islamic Azad University, Dental Branch of Tehran. She has published three papers and has presented orally in five international conferences. She received best Researcher award in her university.

saharsls@gmail.com