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# Evaluation of the erosive potential of selected non-carbonated powdered sachet fruit drinks on the human enamel


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## Abstract


This study was carried out to evaluate the erosive potentials of selected non-carbonated powdered sachet fruit drinks on the human dentition using physical examination and standard analytical procedures involving measurements of some physicochemical parameters such as pH, electrical conductivity and buffering capacity. The results of the physical examination revealed that all the fruit drinks complied with the NAFDAC specifications except that 50% of the drinks had no NAFDAC registration number while the results of the physicochemical analyses showed that the pH of the fruit drinks ranged from 2.635±0.22 to 2.25±0.13, electrical conductivity ranges between 1631±0.05 and 493±0.0 µS/cm and buffering capacity ranged from 3.80±0.05 to 0.75±0.11$cm^3$ of NaOH, respectively. The results showed that all fruit drinks analyzed were highly acidic as the pH values of the prepared solutions were less than the threshold pH (5.5) for enamel dissolution. Therefore, prolong retention of such drinks in the mouth might result into enamel wearing and tooth decay as such food and drinks with high sugar content should only be taken in small quantity.



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