

Antimicrobial and buffer capacity of crude extracts of chewing sticks (Miswaki) from Kenya

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Abstract:

The use of Chewing sticks (Miswaki) in the third world for control of dental plaque is very popular. Some of the studies that have been conducted on this subject have reported marked decrease in the incidences of dental caries and periodontal diseases in the users of Miswaki, when compared to the users of the conventional toothbrush living under similar conditions. Various mechanisms by which the Miswaki contributes to this phenomenon have been suggested. The purpose of the present study was to investigate in vitro, the anti-microbial action, the potential acid buffer capacity and fluoride content of crude aqueous extracts of eight commonly used chewing sticks from three regions in Kenya. The results obtained in the study, showed that one of the Miswaki had remarkable antibiotic activity against three stains of oral bacteria. Three of the Miswaki had significant acid buffer capacity. None of the eight Miswaki showed any significant fluoride release