A high molecular mass cranberry constituent reduces mutans streptococci level in saliva and inhibits in vitro adhesion to hydroxyapatite.

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Previous investigations showed that a high molecular mass, non-dialyzable material (NDM) from cranberries inhibits the adhesion of a number of bacterial species and prevents the co-aggregation of many oral bacterial pairs. In the present study we determined the effect of mouthwash supplemented with NDM on oral hygiene. Following 6 weeks of daily usage of cranberry-containing mouthwash by an experimental group (n = 29), we found that salivary mutans streptococci count as well as the total bacterial count were reduced significantly (ANOVA, P < 0.01) compared with those of the control (n = 30) using placebo mouthwash. No change in the plaque and gingival indices was observed. In vitro, the cranberry constituent inhibited the adhesion of Streptococcus sobrinus to saliva-coated hydroxyapatite. The data suggest that the ability to reduce mutans streptococci counts in vivo is due to the anti-adhesion activity of the cranberry constituent.

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