

Children's acceptance of xylitol-based foods.

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Daily consumption of xylitol (5-10 g/day) added to chewing gum and confectionary foods has been previously shown to prevent dental caries in children. **METHODS:** Snack foods containing xylitol were developed and tested for acceptability in a convenience sample of 31 children ages 3 to 6 years. In order to mimic an after-meal snack, all children were tested during mid-morning, approximately 1 h after eating. Preference testing was based on the methodology of Birch et al. (J Nutr Educ, 1979; 11: 77-80). In the first phase, each child was presented with a tray of six xylitol-based foods (popsicles, pudding, gum drops, gelatin dessert, cookies, popcorn) and asked to taste each item in any desired order. Immediately after tasting a food, the child was asked to place it in front of one of three cartoon faces (smile, frown or neutral) representing the child's response to the taste of that particular food. In the second phase, the child was asked to rank order the foods in each face category (smile, frown or neutral). Ranks within categories were then combined to obtain a rank ordering for all of the foods. **RESULTS:** Non-parametric data analysis indicated significant differences in ranking between the foods when they were compared to each other (Friedman ANOVA by ranks, $P < 0.01$). Pudding was significantly less preferred than the other foods (sign tests, $P < 0.04$). At least 84% of the children found five of the six foods very good or satisfactory, when considered individually. **CONCLUSIONS:** These results suggest that snack foods developed with xylitol are generally well accepted by children.

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