# Comparison of Dental Esthetic Perceptions of Young Adolescents and Their Parents

## Introduction & Purpose
Since the 1990s, there has been more study of esthetic perceptions and psychological indicators of oral health. Several studies have shown that concerns about the esthetic impact of dental fluorosis can be discernible to lay people, including adolescents. The aims of this study were to compare dental esthetic perceptions of 13 year old adolescents with those of their parents and to assess their associations with fluorosis.

## Experimental Design
Subjects in the Iowa Fluoride Study participated in dental examination at the age of 13. They were assessed by trained and calibrated examiners for fluorosis. Adolescents and their parents completed a questionnaire concerning their satisfaction with adolescents’ dental appearance. McNemar and Bowker tests of symmetry were used for comparisons of esthetics ratings between parents and adolescents. Comparison of satisfaction between fluorosis cases and non-cases were made using Cochran-Armitage Trend and Fisher’s Exact tests.

## Results
Excluding subjects with orthodontic treatment, 376 adolescents were included. 26% had definitive fluorosis mostly at mild level. 15% of adolescents were dissatisfied with dental appearance. Main concerns of adolescents were tooth color (45%) and alignment (35%). Compared to parents, adolescents were significantly less satisfied with overall appearance (p<0.001) and color (p=0.048) and more concerned about tooth shape (p=0.002). Fluorosis was not significantly associated with adolescents’ satisfaction with overall dental appearance, tooth color, or areas of concern (P>0.05) whereas parents of subjects with maxillary incisor/canine fluorosis were more dissatisfied (compared to parents of those without fluorosis) with overall appearance (p=0.014) and overall color (p<0.001), and also more concerned about color (p=0.005) and color irregularities (p<0.001).

## Conclusions
Adolescents had generally less satisfaction with overall appearance and tooth color and were more concerned with tooth shape than parents. Fluorosis was not associated with adolescents’ esthetic satisfaction level whereas it was related to parental satisfaction.