

## Effect of a Triclosan/Copolymer/Fluoride Dentifrice on the Oral Microflora

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Eighty-one human subjects completed a double-blind study which examined the effects of a 0.3% triclosan/2% Gantrez copolymer/0.243% sodium fluoride dentifrice on the microflora of supragingival dental plaque. Subjects were divided into an experimental group which performed normal oral hygiene with the triclosan/copolymer/fluoride dentifrice and a control group which also performed normal oral hygiene with the same dentifrice minus the triclosan/copolymer. At baseline, 10 weeks, and 28 weeks, supragingival dental plaque was collected from buccal and lingual surfaces of the four first molar teeth and assayed for: 1) bacterial morphotypes by phase contrast microscopy, 2) *Actinobacillus actinomycetemcomitans*, *Actinomyces* species, *Bacteroides forsythus*, *Bacteroides gingivalis*, *Bacteroides intermedius*, *Streptococcus mutans*, *Streptococcus sanguis*, and *Wolinella recta* by immunofluorescence microscopy, and 3) *Lactobacillus*, yeast, enterics, *Staphylococcus*, aerobes and anaerobes by bacterial culture. After 28 weeks' use of their respective dentifrices, changes in the supragingival plaque microflora of the subjects were similar between the triclosan/copolymer/fluoride dentifrice group and the control dentifrice group, except for statistically significant reductions in fusiforms, spirochetes and staphylococci and significant increases in *S. sanguis* in the triclosan/ copolymer/fluoride dentifrice group, as compared to the control dentifrice group. The subject population was unusual in the presence of enteric species and anaerobes found in supragingival plaque sites. This study indicates that the use of a dentifrice containing 0.3% triclosan and 2% Gantrez copolymer over an extended period of time (28 weeks) does not result in shifts in the microflora of supragingival plaque favoring the growth of either opportunistic or pathogenic bacterial species.