Does Oral Hygiene Affect the Amount of *Streptococcus* in the Normal Flora of the Human Throat?

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Abstract

Every organism contains indigenous microflora that are unique to that organism. These resident microorganisms are there to help protect the organism from the harmful pathogens it comes in contact with. In the human throat and mouth the majority of normal flora are different strains of *Streptococci* and *Staphylococci*. On the surface of teeth there is a covering of microorganisms known as a biofilm. An attempt to disrupt this biofilm occurs when individuals brush. Some pathogenic *Streptococci* create these biofilms in our mouth causing different complications; this includes gum disease, plaque, cavities, and possibly heart disease. To maintain proper oral hygiene, the ADA recommends brushing your teeth twice a day with toothpaste that contains fluoride. The ADA also suggests that you floss after brushing. Flossing removes the build-up of bacteria between the teeth where the toothbrush is unable to reach. To help reduce the process of tooth decay, the use of mouth washes with fluoride help protect the teeth by removing plaque and strengthening the tooth enamel. The biofilm on the surface of the teeth is disrupted when we brush and floss our teeth. We posed the question “Does oral hygiene affect the amount of *Streptococcus* in the normal flora of the human throat?” We wanted to see what amount of oral hygiene is most affective in killing *Streptococcus*. We also looked at how effective alcoholic and non alcoholic Listerine was at killing *Streptococci*, to see if either one played a role in controlling the amount of *Streptococci* in the throat.