

SURPRISING AMOUNTS OF FUNGUS IN YOUR MOUTH

Oral microbiome - organisms residing in the oral cavity and their collective genome - are critical components of health and disease. The fungal component of the oral microbiota has not been characterized. In the study, “Characterization of the oral fungal microbiome (Mycobiome) in healthy individuals,” published in the most recent edition of *PLoS Pathogens* by a group of researchers led by Mahmoud Ghannoum, Professor, Department of Dermatology, characterized the fungal microbiome (mycobiome) of the oral cavity in healthy individuals. The results demonstrate that the fungal component of the oral microbiome is diverse as revealed by the presence of 74 culturable and 11 non-culturable fungal genera in the oral cavity. A total of 101 species were identified, with between 9 and 23 culturable species present in each person. Fifteen genera (which included four known pathogenic fungi and non-culturable organisms) were present in $\geq 20\%$ of the tested samples; *Candida* species were the most frequently obtained genera, isolated from 75% of all study participants, followed by *Cladosporium* (65%), *Aureobasidium*, Saccharomycetales (50% for both), *Aspergillus* (35%), *Fusarium* (30%), and *Cryptococcus* (20%). The remaining fungi detected in the oral wash samples represent organisms likely originating from the environment. This is the first study that identified the “basal mycobiome” of healthy individuals, and provides the basis for detailed characterization of the oral mycobiome in health and disease.

Read the article:

<http://www.plospathogens.org/article/info%3Adoi%2F10.1371%2Fjournal.ppat.1000713>