

# **Comparative Evaluation of the Effects of Black Tea Extract Mouthrinse and Chlorhexidine Mouthwash on Salivary Streptococcus Mutans Load**

**Ruchita Khade<sup>1</sup>, Swati Saawarn<sup>1</sup>, Shubhangi D Mishra<sup>2</sup>, Einstein A<sup>3</sup>, Anushree Rathore<sup>1</sup>, Tarjani Shankar<sup>1</sup>**

1Department of Oral Pathology and Microbiology, Bhabha College of Dental Sciences, Bhopal, ,

2Department of Oral Pathology and Microbiology, NIMS Dental College and Hospital, NIMS University Rajasthan,3Department of Oral Pathology, Thai Moogambigai Dental College and Hospital, Chennai.

## **ABSTRACT:**

Background- Dental caries is one of the most frequent oral health problems. The present study shows the antibacterial effect of black tea extract on salivary Streptococcus Mutans load.

Materials & Methods- The study was conducted on 125 individuals. The differences in the Colony Forming Units and count-scores of S.mutans were analyzed in salivary samples collected from individuals before and after administration of 2% black tea extract mouth-rinse and chlorhexidine mouthwash(CM).

Results- There was a statistical difference in mean salivary S. mutans colony count and mean count-score before and after administration of black tea extract mouth-rinse ( $p = 0.0003$ ) and chlorhexidine mouthwash ( $p = 0.0002$ ) respectively. Hence, it was found that there is no statistically significant difference in the fall of S.mutans load due to black tea mouth-rinse and chlorhexidine mouthwash.

Conclusions- A 2% black tea extract mouth-rinse significantly reduces salivary S.mutans load, irrespective of age and gender. Also, it is an effective natural anti-cariogenic agent with no known implicated side effects.

**KEYWORDS:** dental caries; oral health; streptococcus mutans; black tea extract mouth-rinse; chlorhexidine mouthwash.