

# **An In Vivo Comparison of the Antimicrobial Activities of three mouthrinses**

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The purpose of this in vivo study was to determine and compare the antimicrobial effectiveness of three commercial mouthrinses and a water control. The antimicrobial efficacy of the products was determined against aerobic, microaerophilic and anaerobic bacteria. Twenty human subjects participated in this study. At each experimental session for a given subject, a pre-test saliva sample was taken. This sample was divided and used to grow three bacteria cultures under the different incubation environments. After giving the pre-test sample, the subject rinsed with one of the mouth rinses or the water control for 30 seconds, then waited one hour, at which time a post-test saliva sample was collected. Again, the sample was divided and used to culture the different types of bacteria. Following a 48-hour incubation period, the numbers of microbial colonies on each plate were counted and compared. The results indicated that all of the mouthrinses tested performed significantly better than the water control. The Natural Dentist® and Peridex® did not demonstrate a statistically significant difference in inhibiting aerobic, microaerophilic, and anaerobic bacteria. Both The Natural Dentist and Peridex were significantly more effective than Listerine® in inhibiting the three different types of bacteria.