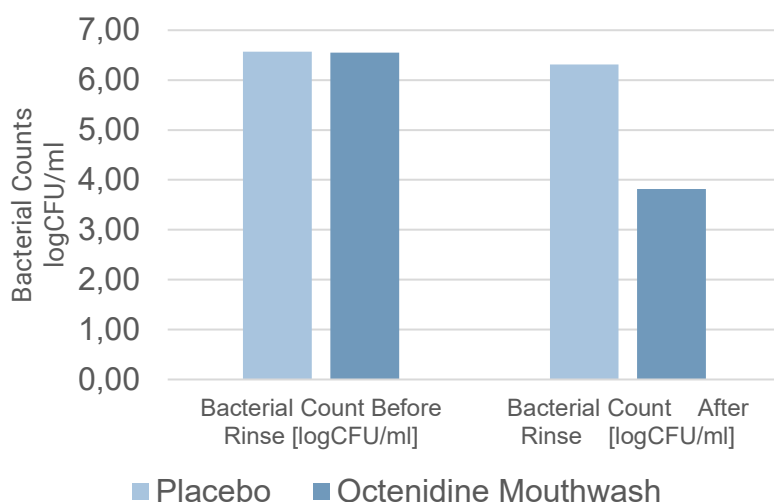


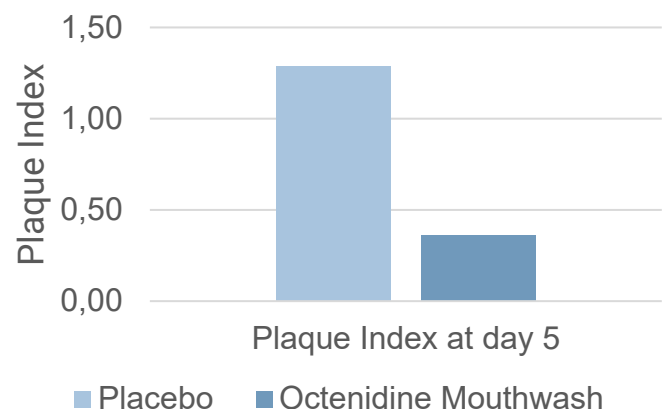
## Research Compact

<b>Tags</b>	Oral Cavity, Octenidine
<b>Title</b>	<b>Impact of 0.1% octenidine mouthwash on plaque re-growth in healthy adults: a multi-center phase 3 randomized clinical trial</b>
<b>Authors</b>	Jockel-Schneider Y, Schlagenhauf U., Petsos H, Rüttermann S, Schmidt J, Ziebolz D, Wehner C, Laky M, Rott T, Noack M, Noack B, Lorenz K
<b>Source</b>	2020, Clinical Oral Investigations, <a href="https://doi.org/10.1007/s00784-021-03781-3">https://doi.org/10.1007/s00784-021-03781-3</a>
<b>Aim of the study</b>	Some patients e.g. immobilized patient have an impaired capacity for oral hygiene. Hence, alternatives to traditional tooth brushing are needed. This randomized, placebo-controlled, double-blind, multi center phase 3 study aimed to evaluate the plaque inhibition efficacy of a oromucosal solution containing 0.1% octenidine (OCT) in the absence of mechanical tooth cleaning over a period of 5 days.
<b>Methods</b>	201 healthy volunteers were recruited and randomized into either Octenidine or placebo control group in a 3:1 ratio. Rinsing was conducted twice daily for 30 seconds over a course of five days. Colony forming units in saliva were assessed after the initial rinsing. Plaque index, gingival index and tooth discoloration index were documented at day 1 and day 5. Adverse effects were monitored
<b>Results</b>	After the first rinse OCT reduced the bacterial load in saliva significantly compared to placebo (2.725 vs. 0.240 lgRF; $p < 0.0001$ ). OCT inhibited plaque formation (PI 0.36 vs. 1.29, $p < 0.0001$ ) after 5 days significantly better than the placebo. Gingival index reduction was higher in OCT than placebo (0.04 vs. 0.00; $p = 0.003$ ). However, tooth discoloration was slightly higher in patients treated with OCT (0.25 vs. 0.00; $p = 0.0011$ ). Temporary dysgeusia and mild tongue staining were the main adverse effects.

### Bacterial counts



### Plaque Index



### Conclusion

**Moutwash containing 0.1% octenidine is a safe and effective measure to inhibit plaque formation and to reduce bacterial load in the oral cavity, especially when personal oral hygiene is temporarily impaired.**