

# STUDIES BY PROF. DR. DR. GÄNGLER UNIVERSITY WITTEN/HERDECKE

## CLINICALLY CONTROLLED TRIAL IN 2012 OF PLAQUE REDUCTION AND INFLAMMATION CONTROL OF GINGIVA WITH THE EMMI<sup>®</sup>-DENT

- The tested exclusively ultrasound-activated toothbrush emmi<sup>®</sup>-dent is effective in plaque reduction.

2012

- The ultrasonic toothbrush contributes to gingival health and avoids completely abrasive brush movements.
- Therefore, the risk of abrasive lesions on teeth and gums is excluded.
- This plaque reduction on all sites of teeth after one single toothbrushing was measured with more than 20% compared to the non-cleaned teeth. During follow-up for 7 and 21 days, the area free of plaque was kept by 45%.

## CLINICALLY CONTROLLED TRIAL IN 2013 OF THE EFFECT OF ULTRASONIC TOOTHBRUSHING IN PERIODONTAL MAINTAINANCE TREATMENT

- The direct application of ultrasound within the oral cavity is a completely new biophysical dimension of effective tooth cleaning and control of the bacterial biofilms with no brushing action at all.

2013

- The ultrasonic toothbrush contributes to gingival health by significantly reducing gum bleeding and avoids completely abrasive brush movements. Therefore, the risk of wear lesions on teeth and gums is excluded.
- The ultrasound oral hygiene home care resulted in a markedly improved reduction of periodontal pockets. Therefore, the ultrasonic toothbrush emmi<sup>®</sup>-dent contributes effectively to the periodontal maintenance treatment.

## ULTRASONIC VS. MANUAL TOOTHBRUSHING IN ORTHODONTIC PATIENTS WITH MANIFEST GINGIVITIS

- The study confirms earlier results of plaque reduction and contribution to gingival health (Denda, 2012 and May, 2013).

2018

- The emmi<sup>®</sup>-dent ultrasonic toothbrush used in a high risk cohort of subjects under orthodontic treatment and exhibiting chronic gingivitis is clinically effective in significant plaque reduction and highly significantly decreasing the number of gingivitis teeth.
- The advantage of the emmi<sup>®</sup>-dent is the non-abrasive brush movements.