

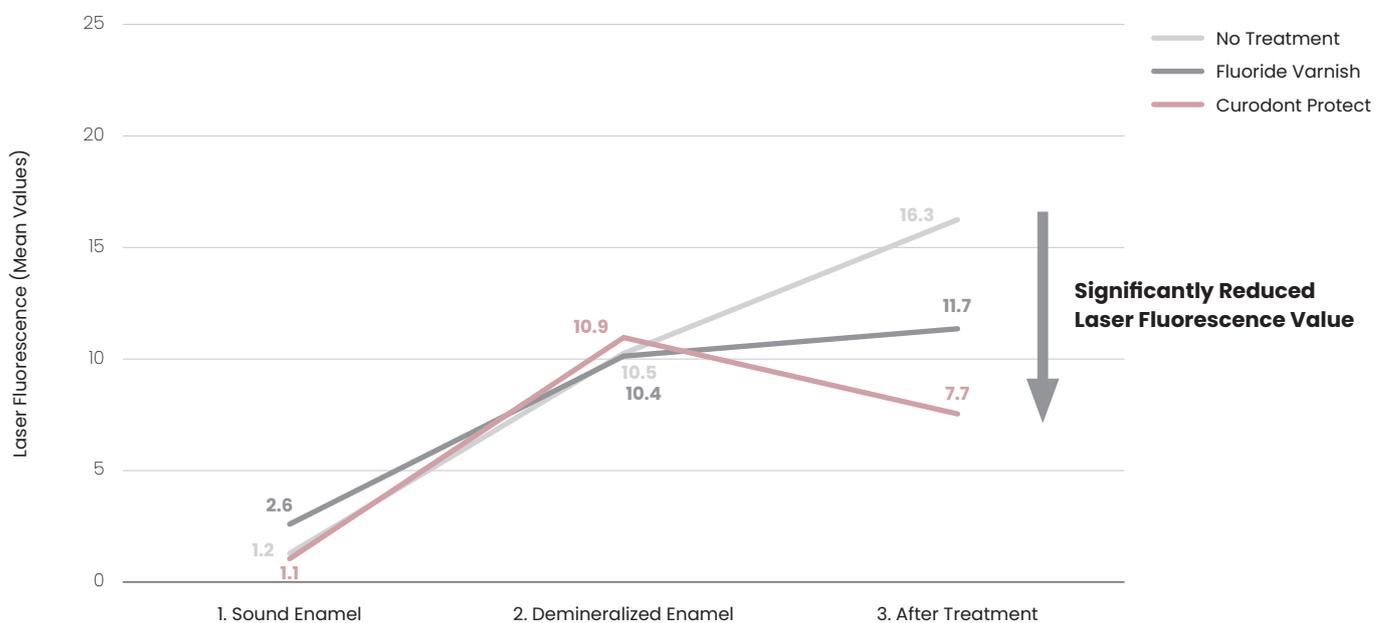


## Curodont Protect protects from the onset and progress of demineralization and remineralizes early carious lesions

### RESULTS

Curodont Protect has a clinical beneficial effect in caries prevention and proved to be useful in preventing the progression of initial demineralisation, especially around orthodontic brackets. Curodont Protect demonstrated superior remineralisation potential compared to the present gold standard of fluoride varnish alone.

### Laser Fluorescence Changes Linked to Demineralization and Remineralization Process

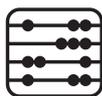


After demineralisation, the fluorescence values of all specimens increase, indicating “enamel lesions”. Curodont Protect demonstrates the highest remineralisation potential, inducing the biggest decrease in the fluorescence value, towards that of sound enamel.

### STUDY ESSENTIALS



9  
Participants



Randomized, Cross-Over  
In Situ Trial



15 Weeks



Lollar,  
Germany

### How can you use these results in your practice?

You can use Curodont Protect in-office and instruct the patient on its home-use for three benefits: (i) protection from the onset of caries, (ii) protection from the progress of initial demineralization, and (iii) a degree of remineralization. This is especially advantageous in patients with a high caries risk, where fluoride alone might not be sufficient, such as those with fixed orthodontic appliances. The clinical benefit of Curodont Protect due to its remineralizing ability has also been demonstrated previously *in vitro*.<sup>1,2</sup>

## STUDY INFORMATION

**Title:** Randomised In Situ Clinical Trial Investigating Self-Assembling Peptide Matrix P11-4 in the Prevention of Artificial Caries Lesions\*



**Products Tested:** • Curodont Protect  
• Fluoride Varnish (FV)



**Scope & Methodology:** The objective of this clinical study was to investigate the efficacy of Curodont Protect in combination with daily oral hygiene, in remineralising artificial initial demineralisation and to compare its caries prevention efficacy to the application of fluoride. Volunteers had bovine specimens (half including orthodontic brackets) placed on the buccal aspects of mandibular appliances. Specimens included internal sound enamel control and a demineralised control. This study was divided into three phases. Each phase lasted 4 weeks, with three types of treatments: A) no treatment; B) treatment with FV once at the start; C) treatment with Curodont Protect once at the start and then twice a week application by the volunteers. Each 4 weeks treatment was followed by a one-week washout. Assessment techniques:

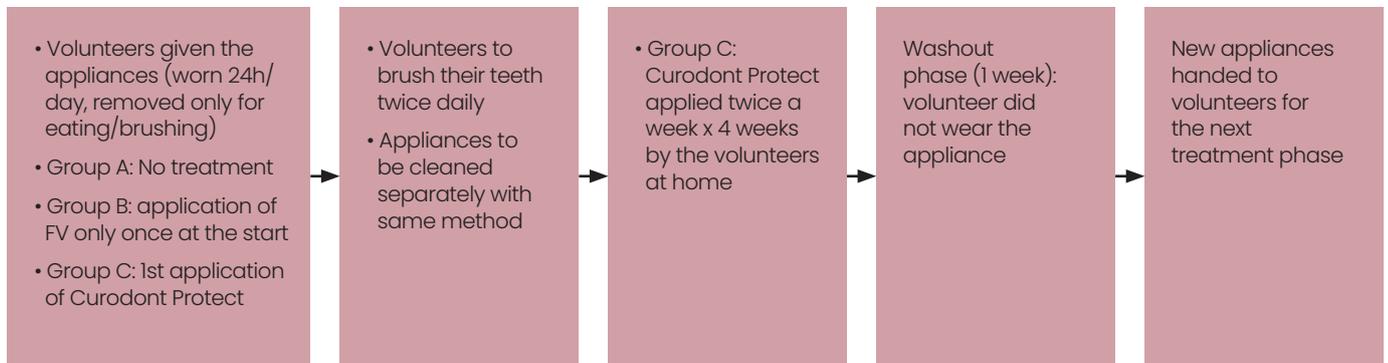
- Laser fluorescence values
- Micro-CT analysis



**Study Participants:** 9 volunteers with specimens (sound enamel and demineralised control) placed on the buccal aspects of mandibular appliances.



### Procedure:



**Conclusion:** The study demonstrated the ability of Curodont Protect to prevent caries and remineralise enamel around orthodontic brackets. Curodont Protect, in combination with daily oral hygiene, showed higher efficacy in remineralising artificial initial demineralisation, compared to daily oral hygiene alone and also compared to the application of fluoride varnish and daily oral hygiene.

### \*Reference

Jablonski-Momeni A, Korbmacher-Steiner H, Heinzl-Gutenbrunner M, Jablonski B, Jaquet W. and Bottenberg P, J. Orofac Orthop. 2014 May;75(3):175-90.

### Supporting Studies

1. Ceci, M. et al. Effect of self- assembling peptide p11-4 on enamel erosion: AFM and SEM studies. Scanning. 38, 344–351 (2016).
2. Soares et al. Assessment of enamel remineralisation after treatment with four different remineralising agents: A Scanning Electron Microscopy (SEM) Study. J. Clin. Diagn. Res. 11, ZC136–ZC141 (2017).