



**PRODEN
PLAQUEOFF®
DENTAL**

Summary of clinical study of the effect of daily intake of A.N ProDen® on calculus, plaque, and gingivitis

Conclusion

Regular intake of ProDen PlaqueOff® Dental containing the seaweed A.N ProDen®) substantially reduces dental calculus, plaque formation, and gingival bleeding, confirming its effectiveness as a supplement to enhance oral hygiene practices. The reductions in calculus, plaque, and bleeding were all statistically significant, supporting the beneficial impacts of the supplement.

Recommendations

Including ProDen PlaqueOff® Dental containing A.N ProDen® in daily oral care routines can significantly benefit dental health, particularly in reducing calculus and plaque buildup.

Objective

To evaluate the effectiveness of A.N ProDen® (ProDen PlaqueOff®) in reducing dental calculus, plaque formation, and improving gingival health over a period of 6 months.

Results

Calculus Reduction: 95% of participants (52 out of 55) in the A.N ProDen® group showed a reduction in dental calculus formation, with statistically significant differences compared to the placebo group.

Material and Methods

Participants: 61 adults initially enrolled, with 55 completing the study. Participants were randomly assigned to receive either two capsules daily containing 500 mg of dried A.N ProDen® or a placebo, over two 6-month periods separated by a 1-month washout.

Plaque Reduction: There was a significant decrease in plaque formation, quantified as a 7.2% reduction compared to the placebo group, demonstrating statistical significance.

Assessments: Dental evaluations were conducted at the start and end of each treatment period, measuring changes in supragingival calculus, plaque accumulation, and gingival bleeding.

Gingival Bleeding: Participants experienced a 27.2% reduction in gingival bleeding, which was statistically significant, indicating improved gum health.

Gingivitis: There was no statistically significant reduction in overall gingivitis scores between the groups.

Table 1. Descriptive values and statistical analysis of differences between the intake groups at 6 months, N=55

	Intake group	Mean	SD	P value
Calculus index (mm) (Volpe-Manhold)	Alga (A.N ProDen®)	0.50	0.45	<0.0001
	Control	0.95	0.54	
		Medium	Range	
Gingival index (Löe and Silness)	Alga (A.N ProDen®)	0	0-2	0.13
	Control	1	0-2	
Gingival bleeding (Ainamo and Bay)	Alga (A.N ProDen®)	0	0-1	0.024
	Control	1	0-1	
Plaque index (Ougley-Hein)	Alga (A.N ProDen®)	1	0-4	0.008
	Control	2	0-4	

A randomized controlled clinical study of the effect of daily intake of Ascophyllum nodosum alga on calculus, plaque, and gingivitis by Jan W.V. van Dijken, S. Koistinen & Per Ramberg