

# Fluor Protector



FLUOR PROTECTOR  
OF CLINICAL EVIDENCE  
40  
YEARS

Superior protection  
against dental caries  
and erosion



# Fluor Protector



## Overview

- Superior protection against dental caries and erosion
- Fluoride – Clinically proven
- Fluoride varnish – Features and mechanism of action
- Application
- Intensive care gel



# Risks to teeth

## Erosion

## Caries

Acid



Loss of tooth structure due to acid without bacterial involvement



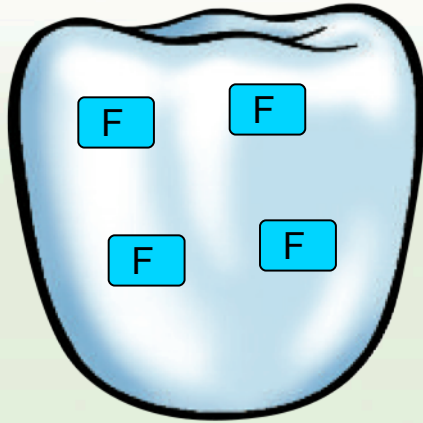
Acid



Loss of tooth structure due to acid with bacterial involvement

(Pictures: Prof. Dr A. Lussi, Dr C. Stecksén-Blicks)

# Fluoride – Mechanism of action



## Fluoride

- Stimulates remineralization
- Inhibits demineralization
- Reduces plaque activity and plaque growth

# Fluoride – Clinically proven



## Indications

- Strengthening of enamel resistance
- Treatment of hypersensitive teeth
- Caries-long-term prophylaxis
- Protection against erosion
- Remineralization of initial lesions

# Fluoride varnish – Accepted worldwide



WHO: There is no doubt that fluoride varnish has a significant caries-reducing potential.

(Fluoride varnish for community-based caries prevention in children, 1997)

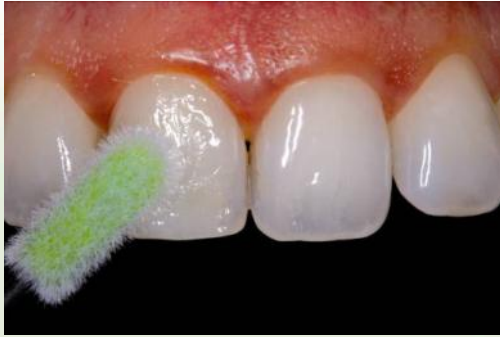
FDI: Professional topical application of fluoride has been shown to be a safe and effective procedure to reduce dental caries.

(FDI policy statement of fluorides and fluoridation for the prevention of dental caries, 1993)

ADA: Evidence-based clinical recommendations for the professional application of fluoride varnish.

(ADA Council on Scientific Affairs, 2006)

# Fluoride varnish – The method of choice



## Advantages of varnish delivery form

- Local protection against caries
- Prolonged adhesion to tooth surfaces
- Improved incorporation of fluoride into the tooth structure
- Proven caries-preventive effect
- Easy, fast application
- Compared to gels, lower risk of swallowing in young children
- Limited systemic exposure
- Safe, comfortable application

(Zero 1992; Zimmer 1993; Beltrán-Aguilar et al. 2000)

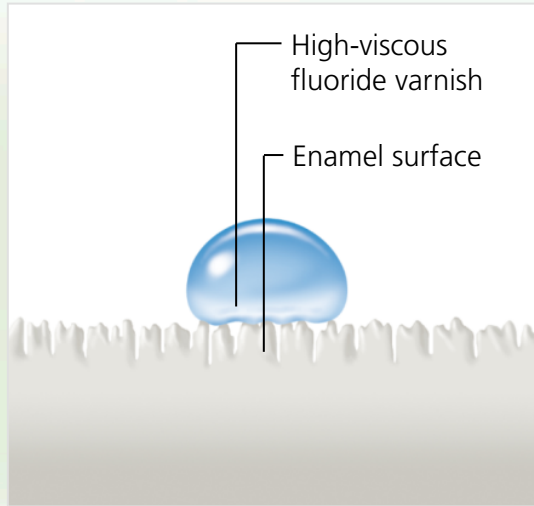
# Fluoride varnishes – Fluor Protector and Fluor Protector S



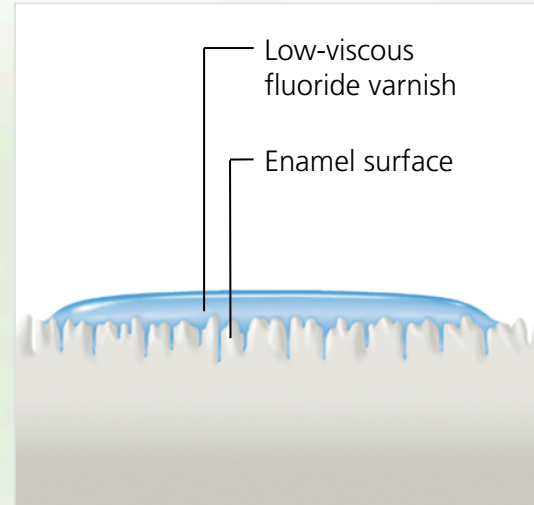
[More information](#)



# Fluoride varnishes – Flow and wetting properties



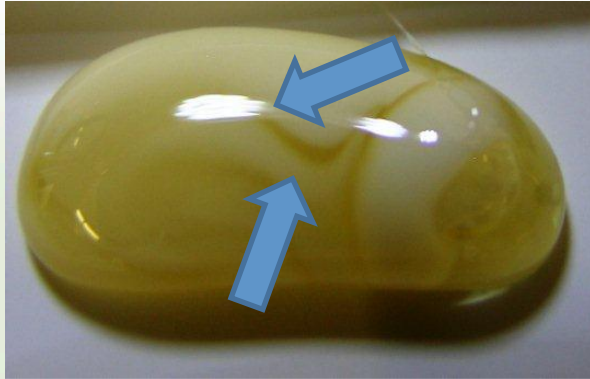
High-viscous fluoride varnish stands on the enamel surface.



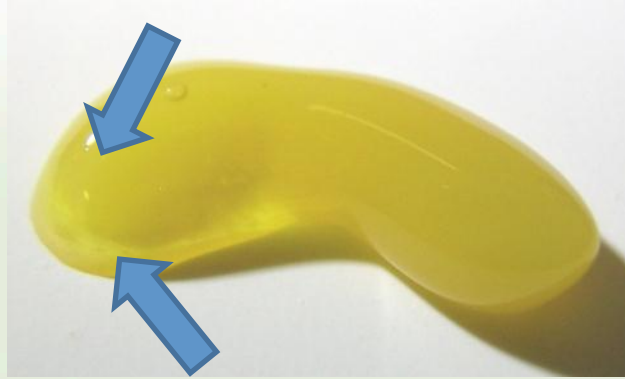
Low-viscous fluoride varnish e.g. Fluor Protector S or Fluor Protector has optimum flow and wetting properties.



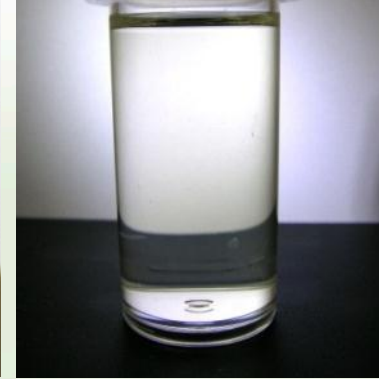
## Fluoride varnishes – Homogeneity



Suspension A



Suspension B



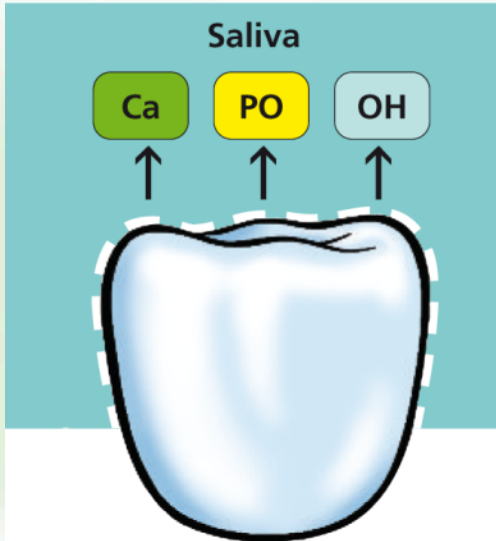
Fluor Protector S

In contrast to other commercially available fluoride varnishes, Fluor Protector S and Fluor Protector are supplied as a homogeneous solution. The fluoride component is completely dissolved. As a result, the fluoride dosage can be controlled and its availability ensured.



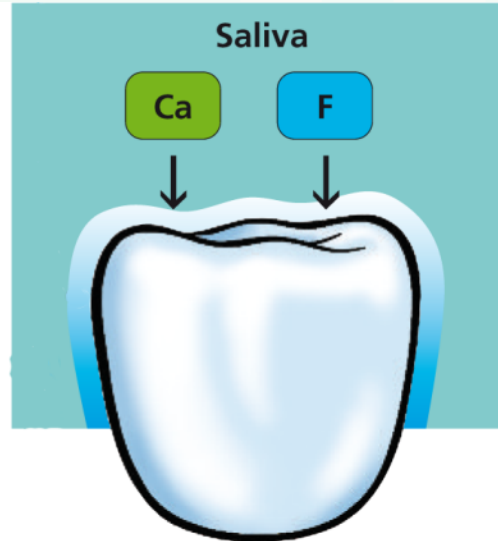
# Fluoride varnish – Mechanism of action

Acidic oral environment



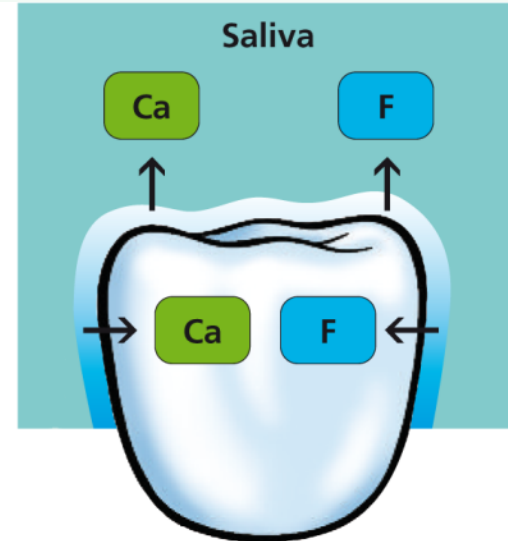
The tooth structure demineralizes if fluoride is not present.

Neutral oral environment



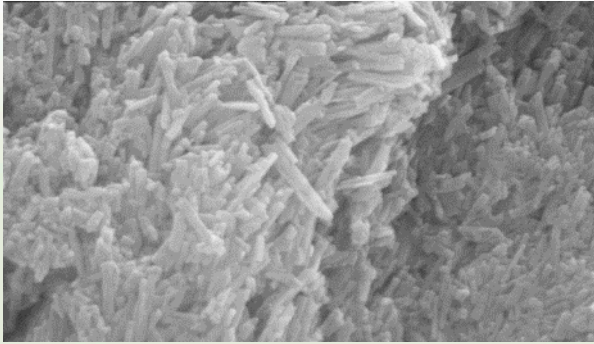
A protective calcium-fluoride layer forms if fluoride is present.

Acidic oral environment

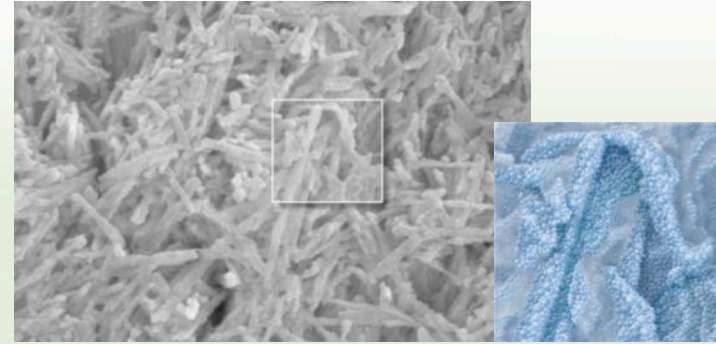


Bioavailability of fluoride

# Fluor Protector S – Fluoride layer



Demineralized enamel



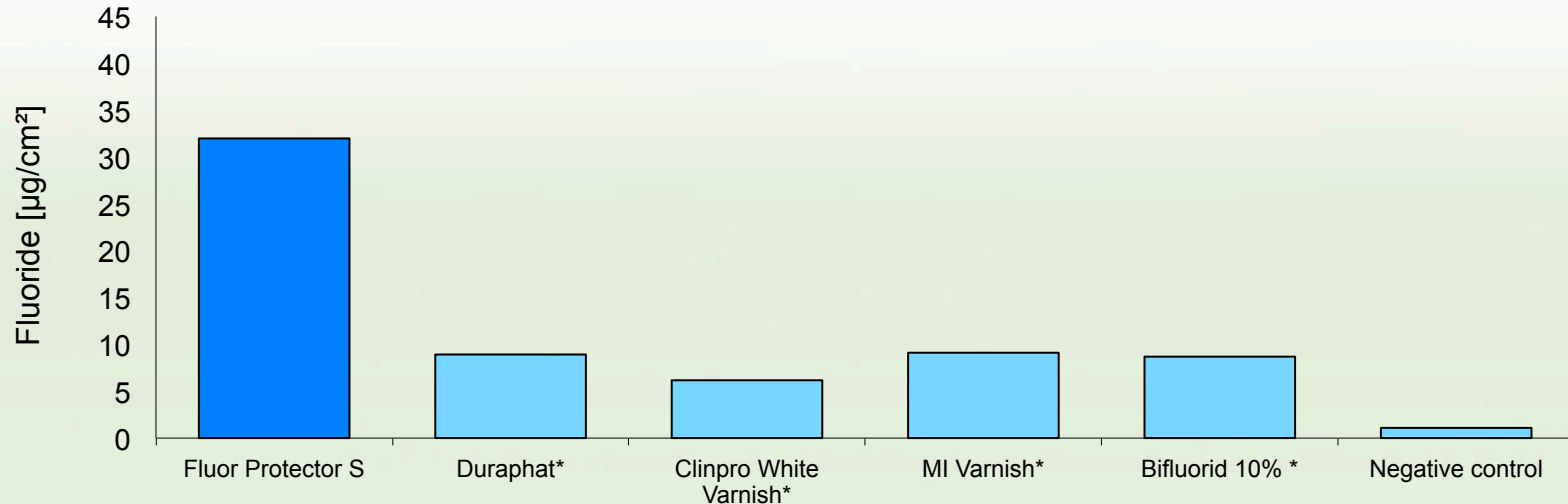
CaF<sub>2</sub>-like precipitates

Calcium fluoride-like layer on demineralized enamel after the application of Fluor Protector S;  
SEM photos, magnification: 30000x

(R&D Ivoclar Vivadent, Schaan, 2012)



# Comparison of fluoride varnishes – Fluoridation



\*) Not a registered trademark of Ivoclar Vivadent AG

Alkali-soluble fluoride on the enamel surface measured one hour after the application of various varnishes

(R&D Ivoclar Vivadent AG, Schaan, 2012)

# Fluor Protector S – Step-by-step procedure



Clean

or



Establish a relatively dry working field



Apply Fluor Protector S

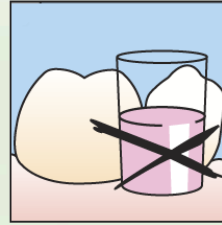


Leave to dry for 60s

# Fluor Protector S – Step-by-step procedure



## Tips for patients after the application of Fluor Protector S



Do not rinse immediately after the application





# Fluoride varnish – Targeted protection of at-risk areas





# Fluoride treatment – Intensive care gel



**Dentists recommend Fluor Protector Gel, because it benefits their patients:**

The protective formula of “calcium + 1450 ppm fluoride + phosphate” strengthens the teeth against acid attacks.

[More information](#)

# Intensive care gel to strengthen the teeth

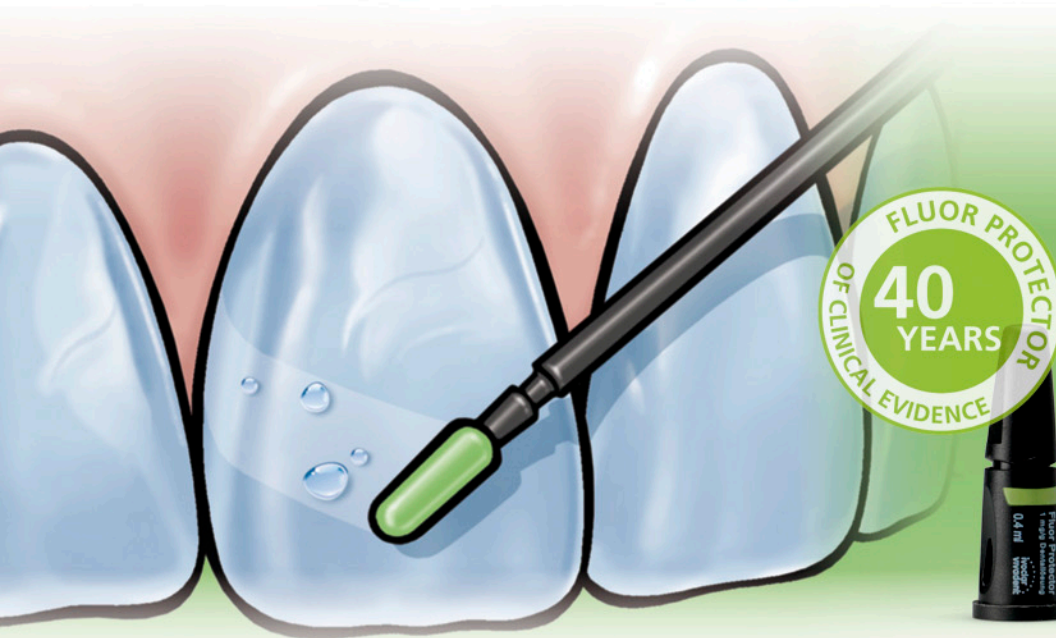


## Special care for special needs

- Sensitive teeth
- Exposed cervicals
- Consumption of acidic food
- Dry mouth
- During orthodontic treatment
- High caries risk
- After professional tooth cleaning
- Sensitive peri-implant tissue
- Within tooth whitening

[More information](#)

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