FDI POLICY STATEMENT

The Use of Topical Fluoride for Caries Prevention

Revised version adopted by the General Assembly: 2025, Shanghai, China

Revised version adopted by the General Assembly: 2018, Buenos Aires, Argentina

Original version adopted by the General Assembly: 2000, Paris, France

CONTEXT

Since the 1970s, recommended oral hygiene technique for caries prevention has included brushing with fluoridated toothpaste to remove plaque from teeth. The use of fluoridated toothpaste, independently or together with water fluoridation, has contributed to the decrease in the incidence of dental caries.[1,2] When available, fluoride delivered to teeth topically using toothpastes is considered one of the easiest ways to prevent dental caries worldwide.

FDI advocates at least twice-daily use of fluoridated toothpaste at an appropriate concentration and dose for the prevention of dental caries. It is recommended to begin use of fluoridated toothpaste in children upon eruption of the first tooth and to continue throughout life as long as teeth are present.[3]

The World Health Organization (WHO) includes fluoridated toothpaste on its Essential Medicines List.[4] The use of higher strength topical fluorides in the form of prescription fluoridated toothpastes, fluoride gels, rinses and varnishes, usually administered or prescribed during a professional visit with an oral health provider, has also been shown to reduce the incidence of dental caries in populations with adequate access to oral health care.[5,6,7]

The key factor in preventing non-cavitated carious lesions from developing or progressing to cavitated carious lesions is to maintain a good balance between the remineralization and demineralization of the hard tissues of the teeth, so there is no net mineral loss over time. Evidence shows that avoiding frequent and excessive intake of sugars, performing regular removal of plaque from tooth surfaces by toothbrushing with fluoridated toothpaste and interdental cleaning (such as flossing), together with regular check-ups with an oral health provider are the best and highly recommended strategies to prevent dental caries.

SCOPE

The use of toothpaste with a minimum fluoride concentration between 1000 and 1100 parts-per-million has proven to be most effective in preventing, arresting and treating dental caries.[8] The best technique and timing to brush is at least twice daily for a minimum of two minutes and preferably without rinsing with water after expectorating the toothpaste. Current recommendations are in general to brush once in the morning

and then prior to bedtime.[3] The use of fluoridated toothpaste in the appropriate amount is recommended throughout the life course for children, adults with special health care needs, and the elderly. Depending on age and health status, some people may require assistance. A Cochrane review found insignificant association between the frequency of toothbrushing or the amount of fluoride toothpaste used and dental fluorosis in young children.[9]

Population based research shows that professionally applied topical fluorides such as gels, rinses and varnishes containing higher levels of fluoride than toothpastes are also effective in reducing the incidence of dental caries when applied by an oral health for professional 1-4 times per year, depending on the caries risk of the patient.[10]

DEFINITIONS

Effective home care for caries prevention includes brushing with fluoridated toothpaste at least twice daily. This can be further reinforced by use of professional fluoride products according to the caries-risk and needs of the individual.[11]

PRINCIPLES

FDI urges all countries to recognize the importance of providing universal access to fluoridated toothpaste and professional fluoride products to prevent, arrest and treat dental caries and to improve oral health and general health.

POLICY

FDI advocates the use of topical fluoridated toothpastes and professionally applied fluoride products and recommends the following:

- National health policy and oral/non-oral health care providers should promote the evidence-based effectiveness of fluoride toothpastes and professional fluoride product.
- Parents/caregivers should begin brushing their child's teeth with fluoridated toothpaste upon eruption of the first tooth; this should continue throughout the life course for patients with teeth.
- Age-appropriate guidelines related to the amount of toothpaste used during tooth brushing and whether adult assistance is needed, as in the case of children, adults with special heath care needs, and the elderly, should be followed.
- Commercially available fluoridated toothpastes should contain a minimum of 1000−1100 ppm of fluoride.
- Higher strength fluoride products such as gels, rinses and varnishes, should be applied by an oral health professional 1−4 times per year, depending on the caries risk of the patient.
- Prescription fluoridated toothpastes at a higher concentration (2500−5000ppm) should be made available and recommended for twice daily use in high caries risk individuals.

FDI urges all stakeholders, including governments, health professional associations, the education system, civil society and industry to take action to ensure that:

- populations understand the benefits of toothbrushing at least twice a day with fluoride toothpaste at the appropriate time and using the proper technique;
- the introduction of toothbrushing with fluoridated toothpaste in schools and nursing homes is acknowledged as an important public health initiative;
- effective fluoride toothpaste and professional fluoride products on the WHO Essential Medicines List are made universally accessible and affordable;
- taxes on fluoride toothpaste are reduced or eliminated;
- national regulatory agencies are advised to accept and follow ISO 11609:2017 to improve toothpaste quality;
- fluoride products are available and affordable to oral health professionals and the public.

KEYWORDS

Dental caries, prevention, toothpaste, dentifrice, fluoride

DISCLAIMER

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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