

# Promoting oral health through fluoride

## Adopted by the FDI General Assembly: August 2017, Madrid, Spain

### CONTEXT

Despite the efforts to date, dental caries, which affects children and adults (including the elderly), continues to be the most prevalent chronic disease worldwide and constitutes a major global public health challenge<sup>1</sup>. It can hinder an individual's ability to speak, smile, smell, taste, touch, chew and swallow, and can stop a person conveying a range of emotions – through facial expressions – with confidence and without pain or discomfort<sup>2</sup>. Dental caries can also potentiate the risk of some systemic diseases. Maintaining good oral health is therefore critical for securing overall health and well-being<sup>2</sup>.

There are many social determinants of health that contribute to oral-health inequities, causing increased prevalence and severity of dental caries among disadvantaged populations<sup>3</sup>. Dental caries can be prevented, managed or treated in its initial non-cavitated stage through the adoption of evidence-based measures, such as avoiding unhealthy diets (e.g. sugary foods and drinks, particularly those with a high free-sugar content) and by implementing good oral-hygiene habits, which include regular removal of oral biofilm from tooth surfaces and appropriate use of fluoride toothpaste.

Low concentrations of fluoride ions at tooth surfaces are essential to avoid, slow down or stop demineralisation and to enhance remineralisation of tooth tissue<sup>4,5</sup>.

### SCOPE

There are several cost-effective options to make fluoride available to populations, which can and should be applied according to country's regional realities and legislation.

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Original version "Promoting Dental Health through Fluoride" adopted by the FDI General Assembly November 2000 in Paris, France

Original Version reconfirmed in September 2008 in Stockholm, Sweden

An optimal preventive level of fluoride may be present naturally in drinking water or fluoride can be added to water supplies through population-based public-health interventions. Some public water supplies and wells have higher than recommended concentrations of naturally occurring fluoride and therefore defluoridation or alternative drinking water should be recommended in such situations. Water fluoridation is the most efficient, cost-effective, safe and equitable way of preventing, managing and treating carious lesions at a community level. Alternatively, fluorides can be added to salt or milk, at the appropriate concentration and dose<sup>4</sup>.

At an individual level, the use of fluoride toothpaste, fluoride mouthwashes, fluoride gels and/or fluoride varnishes have proven to be effective in managing, preventing and treating the early stages of dental caries, when used at the levels recommended for age, taking in account the guidelines of each country<sup>4–6</sup>.

### DEFINITIONS

#### Role of fluoride in oral health

The preventive efficacy, cost-effectiveness and safety of fluoride-containing products for reducing the prevalence and severity of dental caries and delaying its onset have been proven<sup>3</sup>. It has been clinically shown that fluoride can also play a therapeutic role in the treatment of non-cavitated enamel carious lesions as well as in cavitated caries, such as root caries lesions. This newly rediscovered characteristic of fluorides, always through topical action, reinforces the importance of its use, in synergy with removal of plaque, in the fight against dental caries.

### PRINCIPLES

FDI urges all countries to recognise that universal access to appropriate and judicious use of fluoride for maintaining oral health is part of the basic human right to health.

## POLICY

FDI advocates the use of fluoride, at the appropriate concentration and dose, for management of dental caries in the prevention and/or treatment of early lesions for children and adults (including the elderly) and calls for the implementation of policies that:

- Ensure population-wide public health measures which allow universal access to affordable fluoride in effective concentrations to prevent dental caries and promote oral health.
- Use the most appropriate means to disseminate information on the benefits of fluoride as a preventive agent in health-promotion strategies and programmes.
- Disseminate information about the importance of fluoride in the treatment of non-cavitated carious lesions.
- Encourage governments to reduce or remove taxation and tariffs on fluoride products for oral health.
- Improve capacities of national food and drug administrations for better monitoring of quality standards of toothpaste in line with ISO 11609:2017 and of oral rinses in line with ISO 16408:2015.

## KEYWORDS

Dental caries, oral public health, oral health, 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.

## REFERENCES

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