

QUICK FACTS

- Water fluoridation is the most effective way to protect teeth against decay benefitting everybody regardless of age, income or education level thus reducing the cost of dental care.
- Most Malaysians have benefitted from water fluoridation since 1974.
- You cannot taste or smell fluoride in water.
- Water fluoridation is a safe way to protect teeth against decay and is supported by leading national and international health organisations. The amount of fluoride added to the water is carefully controlled and monitored.
- Dental fluorosis can occur in young children if they get too much fluoride either from dietary sources or excessive swallowing of fluoridated toothpaste.
- Studies have shown that children living in fluoridated areas have less tooth decay than children living in non-fluoridated areas.

<http://www.ada.org/public/fluoride>



dental fluorosis



USE OF FLUORIDE IN DENTISTRY

Fluoridation of water supplies may be defined as the controlled addition of suitable fluoride compounds to community water supplies. The appropriate use of fluorides in dentistry is one of the most successful preventive health measures in the history of healthcare.

The availability of fluoride can be increased through the use of:

- fluoridated water
- fluoridated toothpaste
- fluoride varnish
- fluoride gel and fluoridated tooth mousse



Oral Health Promotion Unit
Ministry of Health Malaysia
<http://ohd.moh.gov.my>
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USE OF FLUORIDE IN DENTISTRY:

Maintaining optimum fluoride levels in water supply is important to achieve maximum benefit to oral health and at the same time to prevent any adverse effects such as fluorosis.

Monitoring of fluoride levels (at 0.5 ± 0.1 ppm) is done at two levels:

- at water treatment plants and
- at reticulation points

Implementation of water fluoridation programme in Malaysia involves 4 main agencies:

- Oral Health Division, Ministry of Health
- Engineering Division, Ministry of Health
- Water Treatment Plant Authority
- Suruhanjaya Perkhidmatan Air Negara (SPAN)



Fluoride testing of water samples

FLUORIDE IN WATER

▶ Fluoride in public water supply

Water fluoridation is the treatment of community water supplies for the purpose of adjusting the concentration of free fluoride ion to the optimum level (0.5 ppm) for maximum caries prevention and minimal occurrence of dental fluorosis.

The common fluoride compounds used are:

- sodium silicofluoride (liquid form)
- sodium fluoride (powder)

▶ Fluoride in bottled drinking water

▶ Fluoride in mineral water

TOPICAL FLUORIDES

▶ Fluoridated toothpaste

Active ingredients in fluoridated toothpaste are

- Sodium Fluoride
- Sodium Monofluorophosphate

Fluoride ion at 1000 ppm is equal to 0.1% and 1500 ppm is equal to 0.15%. Fluoride toothpastes should be used twice daily. For young children its used must be supervised.

Fluoride toothpaste containing more than 1500 ppm should be recommended for individuals at high risk to dental caries.

Toothpaste packaging should display the fluoride concentration with specific advice for supervised use in children aged 6 years and below.

The fluoride in toothpaste serves to prevent, control and arrest caries.

▶ Fluoride varnish

Evidence shows that twice yearly application of fluoride varnish produce a mean caries reduction of 33% in the primary dentition and 46% in the permanent dentition.

The varnish application can arrest existing lesions on the smooth surfaces of primary teeth and roots of permanent teeth.

▶ Fluoride gel

▶ Fluoridated tooth mousse



fluoride varnish

