

Patient information about Fluoride

Fluoride makes the tooth more resistant to decay.

Fluoride's connection to prevention of dental decay, caries, has been known since the beginning of the 1900s. It has been known since the 1930s that people who lived in areas where the water was naturally fluoridated had up to two thirds fewer dental caries lesions. Studies have since shown that by adding Fluoride to drinking water, the population will have a significant decrease in dental caries.

The first water fluoridated artificially in the UK was in Birmingham in 1964. It has been monitored and adjusted as necessary since 1990 by the Drinking Water Inspectorate (DWI) who ensure drinking water quality in England and Wales is acceptable.

Fluoride occurs naturally in most water supplies, though the actual amount present varies depending on the source. Water supplies in the North West are naturally low in fluoride - and normally contain less than 0.2mg fluoride per litre. Some water supplies have fluoride added to raise the concentration to 1.0mg per litre.

Fluoride has been added to toothpaste since 1914. Fluoride is absorbed onto the teeth and incorporated into the enamel structure. It can help to remineralize the enamel, preventing or arresting early carious lesions. **Fluoride toothpaste** comes in

Over the Counter (OTC) toothpastes :

- 1000ppm recommended for under 0-3 year olds and
- 1450ppm recommended from 3 years and up

and

Prescription Only Medicines (POM) toothpastes

- 2800ppm allowed for 10 + years with high risk of caries and
- 5000ppm for 16 + years with a higher than normal caries frequency.

Recommendations:

The Department of Health (DoH) recommend in their "Delivering Better Oral Health" document the following regarding age and doses of Fluoride:

Children aged up to 3 years

- Use only a smear of toothpaste containing no less than 1000ppm of Fluoride.

All children aged 3-6 years

- Use a pea sized amount of toothpaste containing more than 1000ppm of Fluoride. Apply **Fluoride varnish 2.2%** to teeth **twice yearly** (2.2% F).

All children and young adults (7 years+)

- Use fluoridated toothpaste (1350ppm Fluoride or above). Apply **Fluoride varnish 2.2%** to teeth **twice yearly**.

Children with *high risk* of caries:

- Apply **Fluoride varnish 2.2%** to teeth **3-4 times per year**.

Age 8+ daily **Fluoride rinse 0.05% NaF**. (Fluoride rinse for those with active caries to use at a different time to brushing).

Age 10+ with active caries prescribe **2800ppm toothpaste**.

Age 16+ with active caries prescribe **5000ppm toothpaste**.

All adults should use fluoridated **toothpaste of 1350ppm Fluoride** or above.

Adults with *high risk* of caries:

- Apply **Fluoride varnish 2.2%** twice yearly.
- Daily **Fluoride rinse 0.05% NaF** for those with active coronal or root caries for use at a different time to brushing.
- Prescribe **5000ppm Fluoride toothpaste** for those with active coronal or root caries.