# UNDESERVED REPUTATION?

**FLUORIDE** 



 $Ca_5(PO_4)_3OH$ 

**HYDROXYAPATITE** 

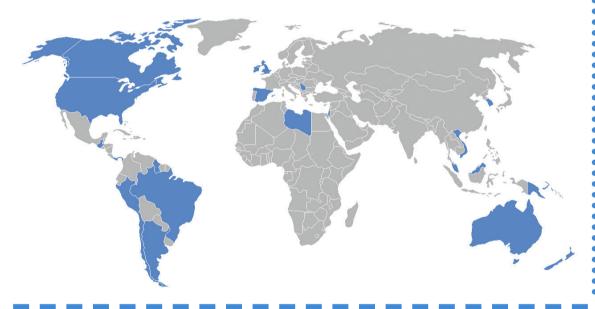
 $Ca_5(PO_4)_3F$ 

**FLUORAPATITE** 

Main constituent of tooth enamel, which can be dissolved in acidic conditions. Ions lost can be replaced by those in saliva; cavities form if the replacement rate is lower than the rate of loss.

Fluoride ions can replace hydroxide ions in hydroxyapatite, forming fluorapatite, which is stronger and more resistant to acidic conditions. As a result, it greatly reduces cavity formation rate.

## Countries with artificial fluoridation programs 35 COUNTRIES 377 MILLION PEOPLE





There are a further 28 countries which supply naturally fluoridated water to more than 280 million people. Some countries which do not fluoridate water instead fluoridate table salt (such as Germany, Switzerland & France), and a select number fluoridate milk.

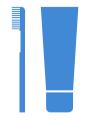
Fluoridated toothpastes have also aided declining tooth decay rates worldwide.

Skeletal fluorosis may occur in those who have ingested 10-20mg of fluoride per day for 20 years.



## **1mg OF FLUORIDE PER LITRE**

**RDA OF 3 LITRES = 3mg PER DAY** 



## 1450mg OF FLUORIDE PER LITRE

**BRUSHING TWICE = 0.4mg PER DAY** 

Significantly below 10-20mg per day.



Tea actually contains more fluoride than drinking water, in the range of 1.0-2.0mg per litre. Even factoring this in, you'd still be below the 10-20mg per day range.

## FACTS ABOUT FLUORIDATION



#### Fluoridation reduces dental caries

Fluoridation is estimated by consideration of a number of studies to reduce tooth decay by 29%. It's effective in both children & adults.



#### Fluoridation does not cause cancer

There is no statistically significant link between the levels of fluoride in artificially fluoridated supplies and cancer, IQ, or Down's Syndrome.



#### Fluoridation can cause mild fluorosis

Mild fluorosis can usually only be spotted by a dentist. It doesn't cause pain, or affect the health or function of the teeth.



### Water naturally contains fluoride

Fluoride is in a majority of natural water supplies at some level, and also in bottled water. It's just not always at the optimal level of 1mg/L.