

Your teeth are under attack from food acids every time you eat. Every meal or snack is followed by an 'attack and recovery' process. Some people have a higher risk of decay and need EXTRA fluoride to protect their teeth.

Everyone's teeth are at risk –

'attack and recovery' follows every meal, snack or drink

Teeth are attacked by:

- acid produced by plaque bacteria
- acidic foods and drinks

Acids penetrate below the hard enamel tooth surface, and dissolve some of the tooth minerals. The acid attack usually lasts up to 30 minutes after eating.

Recovery (or remineralisation) begins as the saliva in the mouth washes away the food acids. Much of the lost tooth mineral will be replaced in the time between meals. Fluoride from water and toothpaste helps to rebuild damage and strengthen teeth.

A snacking or 'grazing' eating pattern; frequent sweets, juice, cordial or soft drinks between meals is not tooth-friendly.

When are teeth at greatest risk?

- when major changes affect our lives
- when carers responsible for our diet and oral hygiene are not aware of dental risk factors
- three age groups are of particular concern:
 - Pre-school age children
 - Adolescents and young adults
 - Older adults



Decay on baby teeth of a 3 year-old child

Infants and young children

Infants and young children rely completely on parents and carers for what they eat and drink and their tooth cleaning habits. Newly emerged teeth are particularly vulnerable to dental decay. As teeth get older, the outer surface becomes harder and more resistant to acid attack.

Children who have been bottle-fed for a long time often get decay on the top front teeth. Non-stop access to a bottle containing milk, sweetened drinks or fruit juice leads to prolonged acid attack. If the bottle is left with the child at bed time, the risk of decay is increased. Acids forming in the mouth of a sleeping child are washed away at a slower rate. Change from the bottle to a cup or feeding mug by 12 months of age, and offer water between meals.

Avoid:

- long feeding periods during day or night
- sweetened drinks or fruit juices in bottle, or sweetened dummy
- bottle left with child at night

Sugar:
too much/
too often



Acid:
too much/
too often

Recovery phases are too short to repair the lost tooth minerals. In time, acid can dissolve whole layers of tooth crystals below the surface. Early 'white spot' decay shows where the tooth is fragile and will become a hole if the acid damage continues.



20 year-old male with holes and early white spot decay near the gum line

Teenagers and young adults

School-leavers and young adults face major changes in their social environment as they:

- become more independent
- seek employment or begin tertiary education
- enter the workforce
- move out of home

Increasing independence may lead to changes in health priorities and behaviour.

Any of the following may affect oral health:

- unhealthy diet or irregular meals relying on convenient 'fast foods'
- increased snacking and consumption of soft drinks and sports drinks
- skipping brushing with a fluoride toothpaste
- putting off regular dental visits

Young people often do not realise that they may be at high risk of decay until the neglect of several years causes them problems and expensive treatment.

Further information

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Decay



Root decay near the gum line (seen in older adult's mouth)

Older adults

. . . face major lifestyle changes, including

- retirement, decreasing income
- moving (from the family home) into a retirement village or nursing home
- losing a spouse
- poor health

Oral health may be affected by any changes that affect the appetite or diet, or circumstances that lead to:

- irregular meals
- frequent between-meal snacks or sweetened drinks
- sucking sweets or sipping sweet drinks to relieve 'dry mouth' or the taste of medications
- delaying dental visits due to cost or poor health
- skipping brushing with a fluoride toothpaste
- less ability to brush thoroughly all parts of the mouth due to stiffness or pain in wrists and fingers, eg arthritis.

Groups at higher risk may include...

- people in areas with low fluoride water
- anyone with any recent major change in employment, lifestyle, health status, moving to another city/state/country, marriage, or separation.

People who have responsibility for the well-being of:

- recent migrants and refugees
- people with disabilities
- people with compromised health

need to be aware of dental risk factors.

If your mouth is out of balance –

Your dental professional can:

- help you to identify risk factors that apply to you
- advise you how to control decay and prevent further damage

Your dentist may recommend the use of additional fluoride to strengthen your teeth:

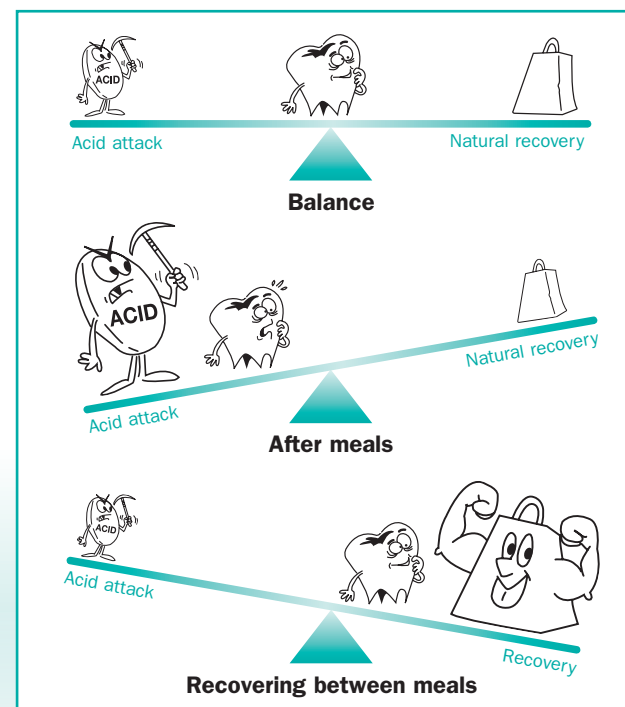
- to prevent decay
- to remineralise already damaged areas of your teeth

Fluoride is available in water supplies in most capital cities in Australia, in toothpaste, mouthrinses and in fluoride treatments prescribed by dentists.

Consult a dentist before beginning to use any additional fluoride

Keep all fluoride products out of the reach of young children

The acid attack and recovery balancing act



Whose teeth are at risk?

Could it be you or someone in your care?



Colgate Dental Education Programs