

## Nutrition And Dental Health

### The factors involved in tooth decay and periodontal disease

Poor oral hygiene and nutrition are the factors behind most cavities and periodontal disease. The rate at which these conditions progress can also depend on the body's resistance to disease or immune status. Good nutrition can play a vital preventive role.

TOOTH DECAY or dental caries is a **bacterial disease**. Food debris, mucous and bacteria in the mouth combine to form a sticky mass called **plaque** that sticks to the surface of the teeth. The bacteria flourishes in the plaque, feeds on sugars and produce acid that leaches minerals from the teeth . If the plaque is not removed, the enamel(outer layer) and then the dentine(body of the tooth) gets eroded. If left unchecked the pulp at the centre of the tooth becomes exposed and inflamed. The pulp contains the nerve and toothache results.

PERIODONTAL DISEASE refers to disorders of the gums or other supporting structures of the teeth. It undermines the foundations in which the tooth is set. Again plaque and bacteria are involved. The accumulation of plaque can cause gums to become infected and swollen. The initial stage of periodontal disease, inflammation of the gums is called **gingivitis**. As the gums swell pockets form between the gums and the teeth which trap more plaque and its hardened form calculus. If left untreated gingivitis can lead to tooth decay and an advanced form of periodontal disease in which the bone supporting the teeth begins to erode as a result of infection. Smoking can increase susceptibility to gum disease as it decrease the periodontal blood supply.

### Dietry strategies to promote dental health

1. Chew food thoroughly.
2. A nutrient dense whole food diet supplies the body with vitamins and minerals required for dental health and boosts immunity. Eat a varied, fibrous whole food diet that should include fresh fruit, vegetables and salads and wholegrains such as brown rice, pulses, nuts, seeds, fish and eggs. Fibres and raw food helps to clean plaque away from the teeth and also provides the teeth and gums with the needed exercise.
3. Bacteria tend to thrive in a dry environment, so drink adequate amounts of water, preferably 8 glasses sipped throughout the day. Saliva is an alkaline and neutralises harmful acid. It comes from our salivary glands and can be stimulated by chewing carrots, celery, and sugar free gum.
4. The frequency and amount of sugar intake as well as refined carbohydrates (flour and rice) should be decreased, also because all our food contains sugar. Sugar feeds the bacteria and together with refined foods can deplete the immune system as well as using up vital nutrients.
5. Avoid carbonated soft drinks. These are high in sugar but can also be high in phosphates that promote the loss of calcium from the enamel.
6. Reduce other foods and drinks that weaken the immune system which include red meat. Dairy products saturated fats, alcohol and stimulants such as tea, coffee, and chocolate. Red meat and dairy produce can also be pro-inflammatory.

## Supplements which may help

1. Multivitamin-mineral complex. All nutrients are needed in balance.
2. Vitamin C (with bioflavonoids)
  - \* Immune boosting and anti-inflammatory. Important for periodontal membrane that supports the tooth.
  - \*Promotes healing especially of bleeding gums.
3. Vitamin A General health of gums
4. Vitamin E Promotes healing.
5. Garlic Natural antibiotic and immune booster.
6. Coenzyme Q10 Increases oxygenation and boosts immunity.
7. Zinc Enhances immune function and promotes healing.
8. Osteo complex Contains calcium, magnesium, phosphorus, vitamin D, boron, zinc to help prevent bone loss around the gums.

## Nutritional support when an amalgam filling is removed

Dental amalgam contains approximately 50% mercury, together with variable amounts of silver, tin, copper and sometimes zinc. Amalgam fillings release small amounts of mercury into the mouth. When old fillings need replacing it's considered safer to do so over a period of time due to the amount of mercury vapour released during replacement. The following strategies can help minimise toxic effects of mercury on the body. Ideally, they should be part of your regular dietary regime. If not, you should try to follow these guidelines during the weeks running up to and following your treatment.

## Dietary strategies

1. Follow the dietary advice given above to increase nutritional status and boost the immune system. Eat organic whenever possible.
2. Increase soluble fibre like Oat bran (aids detoxification), this is a good source and pectin is especially helpful. Pectin is found in apples, bananas, pears, prunes, apricots, carrots, dried beans and the white membranes of citrus fruits.
3. Eat garlic, onions, eggs, asparagus as sources of sulphur containing amino acids. Eat plenty of fruit and vegetables for vitamin C and seaweed for alginic acid. These substances latch on to mercury and escort it out of the body (chelation).
4. Eat seeds, especially sesame seeds, and seafood for selenium and whole foods, wholegrains, nuts and seeds and fish and meat for zinc. Selenium and zinc are mercury antagonists, which means that they compete with mercury and help reduce its absorption.
5. Drink lots of water, as above, because it aids detoxification.

## Supplements which can help

1. Multivitamin-mineral complex all nutrients are needed in balance. A 'multi' high vitamins is useful, as they are important for the functioning and protection of the brain.
2. Glutathione, methionine and cysteine sulphur amino acids help to detoxify harmful metals.

3. Selenium, zinc and calcium. Mercury antagonists especially selenium and help to prevent mercury absorption.
4. Vitamin E Works with selenium.
5. Vitamin C Helps to remove toxic metals from the tissue of the body.
6. Antioxidants To boost the immune system.
7. Garlic Acts as a detoxifier.

In a few people mercury toxicity can be one of the factors involved in illness. If this is suspected, tests can be carried out which can detect elevated levels of mercury. A more detailed programme similar to the one outlined above can be tried and the safe removal of fillings discussed with your dentist. This information is for educational purposes only. Before embarking on a supplement regime, it is advisable to consult a clinical nutritionist who can help you plan a personal health plan.

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