

# The Happy Apple



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Newsletter: Health Department of the Seventh-day Adventist Church Tasmania

Health Director: Natasha Jordan



Hi everyone,

In a conversation I was recently having with a local church member I discovered that she was unaware of the **Banqueting Table Food Co Op** that has been operating for the last 18 months within the North West. This outreach program is run by church members from Wynyard, Burnie and Smithton. The focus of the program is around improving food insecurity



and in February this year we had the Burnie Advocate do an article in the Coast to Coast section of the newspaper. As a result of this article we were invited to attend a workshop coordinated by the Central Coast Council in Ulverstone called **“At the Health Crossroads: Which way do we go with Food? Developing a Local Food Security strategy for the Central Coast area”**. We received a positive response from many other organisations and groups in regards to our food program and they are hoping we can offer this service within their council region.



The Banqueting Table Food Co Op allows people who have either a healthcare card or a pension card to purchase fresh fruit and vegetables at wholesale prices. The orders are placed by Monday afternoon and collected on a Tuesday from Mitch's Food Market at Wivenhoe before the volunteers' bag and box for delivery on Wednesday. Currently deliveries are fortnightly to Waratah, Burnie and Wynyard.

The response from people who utilise the Banqueting Table Food Co Op has been very positive and as a result one lady is attending church in Wynyard. A comment was made to one of our delivery ladies that they have never allowed any other church person to enter their home before but they do allow our church member to enter as we are providing a service that meets one of their health needs.

As a church we have a wonderful health message and this is another way to encourage healthy eating along with forming friendships with people who often have never experienced a genuine concern for their wellbeing. I would encourage other churches around the state to consider the opportunities of health outreach in their local communities.

As a result of the Banqueting Table Food Co Op we have been asked to run a series of health programs in Waratah and these will be starting on the 29<sup>th</sup> May. These programs are called supper clubs which will provide health information around digestive, physical, mental, auto immune, cardiovascular and lifestyle health areas. The programs will be presented to the community by a variety of our generous hard working health professionals who are interested in health outreach. If you would like any further information about either of these health outreach programs please either email Natasha at [natasha.jordan2@bigpond.com](mailto:natasha.jordan2@bigpond.com) or phone 0428 542 374.



# Gum Disease

Most people will have gum disease at some time in their life. Some of the common signs of gum disease are gums that are red, puffy or bleed.



## Causes of gum disease

Gum disease is usually caused by a build-up of plaque on teeth and along the gum line. Plaque is a sticky coating containing bacteria. The immune system tries to get rid of plaque with an inflammation response. This is seen by the redness and swelling of the gum around the tooth.

Everybody has a range of bacteria in their mouth. Plaque is constantly being formed by some of these bacteria when they feed on the sugars in the foods and drinks you consume. Plaque provides the perfect environment for the bacteria that can cause gum disease to live and multiply.

## Stages of gum disease

The two main stages of gum disease are:

- gingivitis
- periodontitis.

## Gingivitis

Gingivitis is early gum disease. It affects the surface layers of the gum, particularly where the gum meets the tooth. At this stage, there is no damage to the deeper parts of the gums, teeth or bone.

The signs of gingivitis are:

- bleeding gums, especially when brushing or eating
- redness and swelling of the gum.

The good news is that gingivitis can be reversed.

You might think it is best to stop brushing if your gums are red or puffy. Try to keep brushing, as this will get rid of the bacteria and plaque that is causing the problem. Soon the gums should look and feel better. If not, see your dentist or oral health professional.



## Periodontitis

Periodontitis is an advanced stage of gum disease that may occur if gingivitis is not treated.

The periodontium is the name given to a group of structures that surround and support the teeth, keeping the teeth in place. Periodontitis is the inflammation of the periodontium caused by the bacteria in plaque and the body's immune response to it.

The structures affected by periodontitis include the covering of the tooth root (cementum), the bone and the fibres that connect the tooth root to the bone (periodontal ligament).

When the gum is weakened by gum disease, spaces can form between the tooth root and the gum. These spaces are called 'periodontal pockets'. Bacteria get trapped in these pockets and cause even more damage to the periodontium. Over time, bone is damaged and lost, and larger spaces begin to form between the tooth and the gum.

If periodontitis is not treated, the structures that hold the tooth firmly into the gum can become so damaged that teeth become loose and may need to be removed.

Smoking and poorly managed diabetes are risk factors for periodontitis.

Signs of periodontitis include:

- bleeding gums
- swollen gums
- receding gums (the gum line shrinks away from the tooth making teeth look longer)
- bad breath
- a bad taste in the mouth
- tenderness when biting
- loose teeth.

Make an appointment with your dentist or oral health professional if you think you have any of these signs. They can talk with you about how to care for your teeth. They can also professionally remove plaque and hardened plaque (calculus). Early treatment of periodontitis can save affected teeth.

## Prevention of gum disease

Regular tooth brushing helps to prevent gum disease by removing the plaque that causes it. Remember:

- Brush teeth and along the gum line twice a day, in the morning and before going to bed.
- Use a toothbrush with a small head and soft bristles.
- Over 18 months of age, use a fluoride toothpaste, low fluoride for children aged 18 months to six years of age and standard fluoride for people six years and older.
- After brushing, spit out toothpaste, don't swallow and don't rinse with water. This leaves a small amount of fluoride in the mouth to protect teeth.

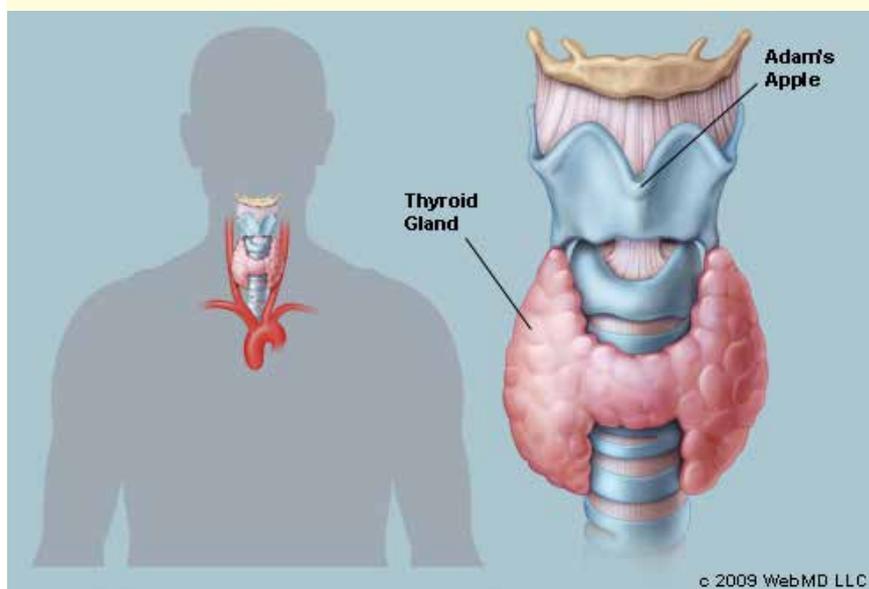
Eating well can also help prevent gum disease. Sugars provide the food for some types of mouth bacteria to multiply and form a plaque layer on the teeth and gums. A high-sugar diet can contribute to a thick layer of plaque. Avoiding sugary foods and drinks, especially between meals, can help to keep plaque levels under control. Follow the Australian Dietary Guidelines and enjoy a wide variety of nutritious foods from the five food groups every day, including vegetables, fruit, grain foods, lean meats (or alternatives), dairy (or alternatives). Drink plenty of water.

### Have a dental check-up

See your dentist or oral health professional if you have swollen or bleeding gums, or are worried about anything to do with your mouth. Getting treated early can help save teeth affected by gum disease and other problems. Ask them how often you should visit for a check-up.



# Thyroid Gland



(also referred to as T4) and tri-iodothyronine (also referred to as T3). The numbers 3 and 4 refer to the number of atoms of iodine in the hormones. Iodine is essential for the production of thyroid hormones and humans need about 150 mcg (millionths of a gram) each day. Iodine is found in most foods, especially seafood. The soils in Tasmania and along the Great Dividing Range are low in iodine, so the food from these areas can contain insufficient iodine. Iodised salt is the best way to supplement dietary iodine, but taking too much iodine can also be a problem.



Some of the more common hormonal disorders are associated with the thyroid gland, which is part of the endocrine system. This system is a collection of glands that secrete chemicals called hormones directly into the bloodstream. Together with the nervous system and the immune system, the endocrine system helps the body to cope with different events and stresses.

The thyroid gland is situated at the front of the throat, below the larynx (Adam's apple), and comprises two lobes that lie on either side of the windpipe. The thyroid gland secretes hormones to regulate many metabolic processes, including growth and energy expenditure. If the thyroid gland is overactive or sluggish, the metabolism will be affected, leading to a variety of symptoms that are easily misdiagnosed. Around one in 20 people will experience some form of thyroid dysfunction in their lifetime. Women are more susceptible than men.

### Iodine for hormone production

The thyroid gland produces two primary hormones - thyroxine

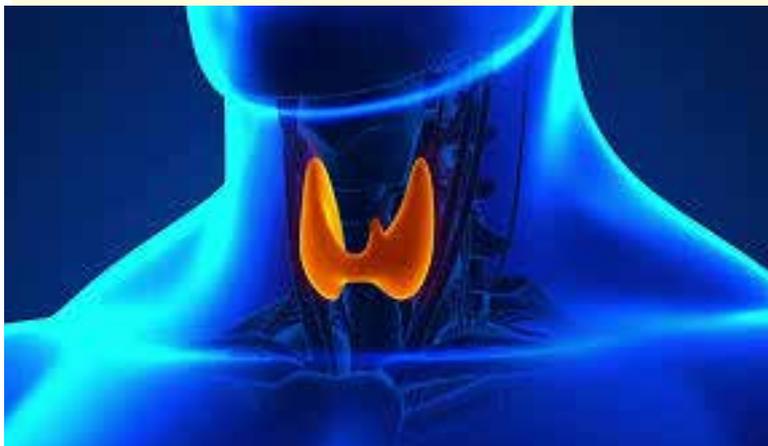
Of the two hormones produced, T3 is more active than T4, but is produced in much smaller quantities. T4 has a lesser effect, but most is converted to T3 by enzymes that remove one iodine atom. The greater the amount of T3 and T4 circulating in the blood, the faster the metabolism. Lower amounts of T3 and T4 result in a reduced metabolism.

### The pituitary gland

The thyroid gland is controlled by the pituitary, which is considered the 'master gland' of the endocrine system. The pituitary is located at the base of the brain. Its principal function is to monitor and regulate the activity of the other glands. The pituitary affects the thyroid gland by producing a hormone called thyroid-stimulating hormone (TSH), which prompts the thyroid to release more T4 and T3. If there is too much T4 circulating in the blood, the pituitary reduces the amount of TSH produced, which then causes thyroid activity to slow. If there is too little T4, the pituitary increases the amount of TSH. In this way, T4 and T3 levels in the blood are kept relatively constant. The pituitary gland, in turn, is overseen by a part of the brain called the hypothalamus.

## Goitre

An enlargement of the thyroid gland is called a 'goitre'. A shortage of iodine in the diet is a common cause of goitre, especially in areas where the soil has little iodine. If a person's diet is too low in iodine, the pituitary keeps sending chemical messages to the thyroid, but without effect. In attempting to make more thyroid hormone, the gland gets larger and larger. This is also common with underactive thyroids, as the pituitary attempts to speed them up. Overactive thyroids can also produce goitres because their overactivity is often due to overstimulation. Goitres indicate a problem with the thyroid or iodine intake.



## Overactive thyroid (hyperthyroidism)

An overactive thyroid releases too much T4 and T3 into the bloodstream, causing the metabolism to speed up too much. The most common cause is Graves' disease. This is an autoimmune condition in which antibodies behave like TSH and stimulate the thyroid uncontrollably. Complications of untreated hyperthyroidism include liver damage and heart failure, which can lead to death. Symptoms of an overactive thyroid include:

- Rapid pulse
- Tremor (shaking) of the hands
- Sweating and sensitivity to heat
- Weight loss (despite an increased appetite)
- Nervousness, agitation and anxiety
- Fatigue
- Diarrhoea
- Bulging eyes
- Goitre

## Underactive thyroid (hypothyroidism)

An underactive thyroid releases too little T4 and T3 into the bloodstream, causing the metabolism to slow down too much. The most common cause is Hashimoto's disease. This is an autoimmune condition in which white blood cells and antibodies attack the thyroid gland. If not treated, the metabolism will continue to slow and will ultimately (in 10 to 15 years) lead to death. Symptoms include:

- Lethargy and fatigue
- Feeling cold (even on warm days)

- Unusual weight gain
- Depression
- Reduced concentration (brain fog)
- Puffiness of the face
- Hair loss
- Dry skin
- Constipation
- Goitre

When these symptoms increase, the condition may be called myxoedema.

Congenital hypothyroidism must be urgently treated to avoid serious brain damage. All newborn babies are now screened for this condition.

## Other thyroid gland disorders

Other disorders of the thyroid gland include:

- **Nodules** - lumps in the thyroid. Some are groups of uncontrollably overactive thyroid cells. These are called 'hot' nodules and cause hyperthyroidism. Other nodules are 'cold'. These are generally harmless, but about 20 per cent will be cancerous.
- **Cancer** - thyroid cancer is uncommon and is readily treatable, especially if detected early.



## Treatment for thyroid gland disorders

Problems with thyroid hormone levels can be diagnosed with a simple blood test. The presence of antibodies in the blood will confirm Graves' or Hashimoto's disease. Underactivity is treated by taking thyroxine tablets - a form of hormone replacement. Overactivity is treated with drugs that slow the activity of the thyroid gland. If these do not work, part or all of the thyroid can be removed surgically, or some or all of the active thyroid cells can be killed with radioactive iodine.

Nodules and cancers are diagnosed with a variety of different tests, including ultrasound, special x-rays and fine needle biopsies. Hot nodules will generally be removed surgically or destroyed with radioactive iodine. Cold nodules are frequently left alone and simply kept under observation. Cancer is treated by surgically removing the thyroid gland, followed by treatment with radioactive iodine to destroy any cells which may have spread.

Taking iodine supplements can be dangerous for patients with Graves' disease or hot nodules.