The Jean Hailes *Foundation for women's health*

Fact Sheet

Understanding Your Thyroid Gland

What is it?
Your thyroid gland is in your lower neck and its primary function is to make and release hormones into the blood stream. The thyroid hormones help the body use energy, stay warm and keep the brain, heart, muscles and other organs working as they should and to control the body metabolism.

Sometimes the thyroid gland does not function properly and this is often described as underactive or overactive.

Quick facts on underactive or overactive thyroid conditions

- When the thyroid gland produces too little hormone (underactive) it is called hyp**o**thyroidism
- When the thyroid gland produces too much hormone (overactive) it is called hyp**er**thyroidism

Underactive thyroid
An underactive thyroid is the more common disorder and usually occurs in people over 40. It affects up to 1 in 10 women over 65.

Signs and symptoms may include:

- Low energy
- Depression
- Slow heart rate
- Weight gain
- Cold intolerance
- Muscle fatigue
- Dry skin
- Hair loss
- Constipation
- Goitre (enlarged thyroid gland)

All or only some of these may be present in any individual. They are often non-specific symptoms and can easily be missed.

How is it diagnosed and treated?
A simple blood test will tell your health practitioner if you have an underactive thyroid. A low-cost, safe and effective hormone replacement therapy, Thyroxine, is available. This is not like most drugs, but rather is a compound manufactured to be identical to the thyroid hormone your body makes, so it has no side-effects as long as the doses are monitored using blood tests. Your dose will be carefully worked out by your health practitioner and in most cases you will need to take it for the rest of your life. Causes may include a family history, or an autoimmune disease called Hashimoto's Thyroiditis.

Overactive thyroid
An overactive thyroid gland affects about two per cent of women and 0.2 per cent of men.

Signs and symptoms include:

- Irritability / anxiety
- Rapid heart rate
- Weight loss
- Sleeplessness
- Sweating
- Heat intolerance
- Diarrhoea
- Menstrual problems
- 'Poppy eyes'

Again those affected may have some or all of these symptoms. The most common cause of an overactive thyroid is an auto immune condition called Graves' disease when antibodies or immune proteins produced by the body activate the thyroid uncontrollably. Other causes can include overactive nodules or short-term inflammation known as 'thyroiditis'.

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How is it diagnosed and treated?
A simple blood test will tell your health practitioner if you have an overactive thyroid. The treatment depends on the cause, and usually includes:

- Anti-thyroid drugs
- Radioiodine therapy
- Surgery

All are effective but each has advantages and disadvantages.

Goitre
A goitre is simply an enlarged thyroid gland. Iodine deficiency can lead to a goitre, as can growth of nodules on your thyroid. Graves' disease can also lead to over-stimulation and enlargement of your thyroid. Your health practitioner will help you decide on the best treatment after working out the cause of your goitre.

Goitres may be visible in the neck or if very large, cause some pressure in this area. An ultrasound will determine the size of the goitre.

Thyroid nodules
Thyroid nodules are lumps in the thyroid. There are two basic types of nodule:

- Hot or warm (approximately 15 per cent of nodules). They do not have a high risk of cancer.
- Cold (approximately 85 per cent of nodules). 10-15 per cent are cancerous and the remainder are just lumps.

Thyroid scans are used to determine whether nodules are hot or cold. Most thyroid nodules are not cancer. Fine needle aspiration biopsy is used to remove cells for analysis. Larger nodules (bigger than three centimetres) are more likely to be cancerous. Treatment varies.

Thyroid cancer is not common and is curable especially if detected early. There are a number of different forms:

- Papillary (70 per cent)
- Follicular (25 per cent)
- Medullary and anaplastic (five per cent)
- Thyroid lymphoma (very uncommon)

The standard treatment involves the surgical removal of the thyroid gland. Follicular cancer needs more aggression than Papillary and often requires removal of the lymph nodes.

Iodine deficiency disorder
Iodine is needed by the thyroid gland to make thyroid hormones. You can normally get it through food, but some soils are low in iodine leading to food that is also iodine deficient. Areas of south-east Asia and areas of Australia have low iodine soils. Areas around the Great Dividing Range including New England, Canberra, Gippsland and Tasmania are affected.

There is concern that iodine deficiency is increasing in Australia. It can be a very serious problem for newborn babies and young children who need iodine to grow and develop normally.

How can I treat this disorder?
Treatment involves increasing iodine in the diet through iodised salt or foods rich in it, including seafood or seaweed. But beware. Too much iodine is also a problem!

Where can I get more information?
www.jeanhailes.org.au
www.thyroid.org.au
www.thyroidfoundation.com.au

This resource was developed with the support of the Australian Department of Health and Ageing

This fact sheet is designed to be informative and educational.
It is not intended to provide specific medical advice or replace advice from your health practitioner.

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health tips

Enjoy a wide variety of nutritious foods, by eating plenty of vegetables, legumes, fruit and wholegrain cereals. Include lean meat, fish, poultry and/or alternatives.

Try to include fish 3–5 times a week (this can include canned fish, such as salmon, sardines and tuna).

Take time out just for you.

Make pelvic floor exercises a life-long habit — even if you have no symptoms.

Be active on most, or all, days of the week: you don't have to do a 30 minute walk, 3x10 minutes is just as good!

3 serves of dairy each day for good bone health.