



# THYROID FLYER

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## Thyroid Basics

### Editorial

By Christopher McDermott

Welcome to the second edition of the Thyroid Flyer for 2007. This is a "back to basics" edition. It briefly covers all the major thyroid conditions and their treatments.

Every year we have so many new members with newly-diagnosed thyroid conditions. We have all been in that position at some point. Whatever condition, we have been looking for basic – and reliable – information on what it is we have just discovered. What does it mean? How does it explain the way I have been feeling over recent months – or even years?

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### Call for Volunteers

Thankyou for our recent volunteers offering to help!!! But we still need more...as there are a lot of things to help with!! Do you live in/near Mount Waverley? Are you able to donate a few hours of your time? Thyroid Australia (TA) is a not-for-profit organisation which was founded on the passion to provide leading edge information for people with a thyroid condition. Thyroid Australia was founded by volunteers and is still run by volunteers and receives NO Government funding

We are currently looking for people who can spare a few hours on a regular or even casual basis to assist Brenda, our office manager, at Thyroid Australia's Mount Waverley office with light administration tasks. No experience is necessary, just a keenness to assist!!!

**Please contact Brenda:**

**Phone: (03) 9888 2588**

**Fax: (03) 9561 4798**

**E-Mail: support@thyroid.org.au**

**Thank you in advance!!!**

### A gland affair

By Anne Fawcett

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**A malfunctioning thyroid can affect our physical and emotional wellbeing, but it is often not diagnosed.**

We've all got one, but most of us don't even know what our thyroid gland does - until it stops doing it right. According to figures from support organisation Thyroid Australia, about 7.5 per cent of Australian women and 1.5 per cent of men suffer some form of thyroid dysfunction.

The thyroid gland is a bow-tie or butterfly-shaped gland at the front of the throat below the larynx. It produces two hormones that regulate metabolism. These are thyroxine (T4) and triiodothyronine (T3). Both increase our metabolic rate. The more thyroid hormone in the blood, the faster our metabolism.

"The thyroid gland is a bit like the body's accelerator or the carburetor of an engine," says Professor Bruce Robinson, endocrinologist at the University of Sydney. "If you're going too fast, everything overheats; your heart races; you get tired and shaky; your muscles waste away. If things are going too slow - if the accelerator is not pressed hard enough to the floor - your heart rate slows down, you don't think clearly, you get constipated and so on."

Most thyroid disorders are due to an overactive or underactive thyroid. In healthy individuals, the thyroid gland maintains the metabolic rate at a reasonable speed, but it doesn't act alone.

The thyroid is controlled by the pituitary

gland, located at the base of our brain, which produces

thyroid-stimulating hormone (TSH). If there is too little thyroid hormone in the blood, the pituitary gland produces more TSH, which in turn results in more T3 and T4. If there is too much, the pituitary gland produces less TSH, resulting in a reduction in T3 and T4 levels.

The pituitary gland is under direction from another part of the brain, the hypothalamus, which produces thyroid-releasing hormone (TRH). So thyroid function can be affected at many levels. For example, if the thyroid gland is attacked by the immune system or affected by cancer, it may produce more or less of the thyroid hormones. Similarly, if the pituitary gland or hypothalamus are affected, for example by a tumor, thyroid function can go awry.

Thyroid dysfunction can also arise when the thyroid gland doesn't receive the right amount of iodine, the fuel it uses to produce thyroid hormone.

"Without iodine the gland can't make enough thyroid hormone," says Professor Creswell Eastman, vice-chairman of the International Council for the Control of Iodine Deficiency Disorders.

Adults require 150 micrograms (millionths of a gram) of iodine each day (twice this for pregnant women) to maintain a normal metabolism.

Iodine is in most foods, particularly seafood and dairy. But recent studies by Eastman and his colleagues found 50

# THYROID AUSTRALIA

## **MEMBER BENEFITS**

Full access to Thyroid Flyer is restricted to paid up members of Thyroid Australia.

Thyroid Australia's services are funded by membership fees and donations from individual member of the public.

Membership is not expensive and your money goes towards the cost of maintaining and hosting this site, staffing our office, producing our newsletter and researching thyroid problem an treatments.

Please visit the About Us section of our web site for details on how you can join Thyroid Australia and help us help others just like you.