# The Natural Thyroid Diet

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Your journey starts here...

Welcome to The Natural Thyroid Diet. The 4 Week Plan to Living Well, Living Vibrantly. This book is for you if...

- You have tried no-fat diets, cutting calories and even crazy fad diets but NOTHING has helped you lose the weight. No matter how much effort you put in or how many diets you try your weight seems to keep creeping up. You know this is not normal. It should not be so hard to lose weight.

- You have been diagnosed with an underactive thyroid and are ready to make diet and lifestyle changes to support your thyroid health.

- You have not been 'officially' diagnosed but you know intuitively something is not right. You know you should feel better and you suspect your thyroid is the culprit.

One of the most important first steps you can take to recover your thyroid is to eat well. These days it is more important than ever to educate yourself about the value of good nutrition and healthy eating. A natural thyroid diet provides a variety of fresh, natural foods that supply a wide range of nutrients to support healthy thyroid activity.

I do not have a rigid diet approach. I prefer to provide a framework that you can adapt to suit your needs. This will empower you to take the necessary steps to transform your dietary choices.

Not only that, this book is a guide to help you get a real medical diagnosis, what the medical tests actually mean, the common indicators of low thyroid activity and I provide a Naturopathic perspective as to why thyroid health problems develop in the first place. And finally the real secrets are revealed to help you get your thyroid back on track.

There is a lot of information packed into these pages. That is because The Natural Thyroid Diet. The 4 Week Plan to Living Well, Living Vibrantly is the exact step-by-step plan I gave my clients when I worked with them in private clinical practice. You now have this invaluable resource in your hands. I suggest you read the book through and then go back to highlight ideas and actions you consider most important to you.

Armed with credible information and a plan of action it really is possible to take control of your thyroid health, to start recovering your vibrant health in just a few short weeks.

So let’s begin...
Chapter 1: Low Thyroid Warning

Thyroid troubles are often misunderstood, even downplayed. Some individuals can even feel downright ignored by mainstream medicine. This is despite the fact that thyroid problems are very serious and there is little doubt thyroid problems are on the rise. But you don’t have to suffer anymore. I know how you feel and I understand your thyroid problem. I am here to help you with a simple and powerful plan to restore your thyroid health.

Low thyroid symptoms can be complex and far reaching. Are you always tired? Gaining weight for no reason? Or finding it impossible to lose weight, even with a healthy diet and exercise? Do you feel depressed, moody and forgetful?

An under active thyroid, or hypothyroidism leads to inadequate thyroid hormone production. The tell-tale symptoms of hypothyroidism vary from person to person depending on the severity of the condition. Generally a thyroid problem develops slowly over time, often over a number of years. At first you may barely notice the symptoms. However, as your metabolism continues to slow the symptoms become much more obvious.

Women are more susceptible to low thyroid function than men. Hypothyroidism is often triggered by hormonal changes at puberty, during pregnancy or in the transition time of menopause.

Chapter 2: Symptoms Of An Underactive Thyroid

The thyroid is often referred to as ‘the body’s major metabolic regulator’. Your thyroid keeps your body humming. When the thyroid is not working well it impacts on your whole body health.

Take a few moments to look over this list of common low thyroid symptoms;

- Lethargy or fatigue
- Depression
- Susceptibility to the cold
- Cold hands & feet
- Recurrent infections
- Thyroid gland swelling
- Sluggish memory and concentration
- Stubborn weight gain
- Dry hair, nails and skin
- Pronounced hair loss
- Thinning of the eyebrows; especially the outer third of the eyebrow
- Muscle weakness
- Joint pain
- Menstrual irregularities
- Menstrual pain
- Low libido (sex drive)
- Infertility
- Higher rate of miscarriages
- Lowered stress resistance
- Low blood pressure & heart palpitations
- Shortness of breath on exertion
- Poor lipid profile; raised total cholesterol
- Slow pulse rate (sinus bradycardia)
- Fluid retention (puffy hands/feet)
- Constipation

As you can see from this extensive list, there are a wide range of symptoms relating to low thyroid function. Not everyone has identical symptoms. You may relate to some of these or you may relate strongly to many of these symptoms. An under active thyroid is often misdiagnosed as depression, muscle pain, PMS or simply dismissed as fatigue.

The key is to recognise these indicators as a fundamental problem with the body’s metabolic rate. This is the speed at which the body is able to use oxygen and produce energy within all organs and body systems. A drop in thyroid hormone production, or even when these hormones are working below par throughout the body means less energy is being generated. This has wide ranging effects on overall health making the symptoms of an under active thyroid seem complex and far reaching.

Chapter 3: The Thyroid Rules Metabolism
I cannot over emphasise the importance of educating yourself about your own personal thyroid problem. Once you become more informed it helps you understand which tests are vital to get a real medical diagnosis and the most appropriate course of action to recover your thyroid health. So it is best not to skip this technical information about how the thyroid works and the important activities performed by the thyroid hormones.

Where Is The Thyroid Gland?
The small butterfly-shaped thyroid gland is located near the front of the throat, just below the voice box. The right and left lateral lobes lie on either side of the trachea, or ‘wind pipe’. The lobes are joined by a mass of tissue called the isthmus that lies in front of the trachea.

The thyroid is an endocrine organ that secretes critical messengers called hormones to help regulate and fire up the entire body. The connection to all aspects of health makes the thyroid a very important endocrine organ.
The thyroid gland has a rich blood supply. In fact, the thyroid gland is so essential that it receives more blood per unit of weight than the kidneys. It is important to know that the thyroid cells are the only cells that absorb iodine. Uptake of iodine involves an active transport system which allows this key thyroid mineral to be absorbed at a rapid rate from the blood.

**Iodine** is vital for thyroid hormone production. This makes iodine an essential nutrient for ongoing thyroid action. If you do not get enough iodine in your diet your thyroid will make insufficient thyroid hormones. Food sources of iodine are discussed later in this e-book in **Chapter 18: Targeted Nutrients For A Healthy Thyroid**.

To meet ongoing demand the thyroid gland traps iodine from the blood and manufactures thyroid hormones. These life-sustaining hormones are stored and released into circulation as required.

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**The Thyroid: The Master Gland of Metabolism**

The thyroid may be small but it has a big job as the thyroid hormones fire up metabolism. The term ‘metabolism’ refers to the different processes of the body that carry on continuously in the background to ensure your body keeps functioning in tip top shape.

The thyroid hormones boost your body’s metabolic rate to keep your body humming. For example, the thyroid hormones help regulate your heart beat, keep you warm and turn calories into fuel to help meet your body’s ongoing demand for energy.

When thyroid function is low the internal metabolic furnace is turned down. Low thyroid symptoms can be far reaching as all body systems require energy. It makes sense then **body temperature** and **fatigue** are two of the most common signs used to diagnose an under active thyroid.

Low thyroid hormone activity can also cause your skin and hair to dry out, trigger diffuse hair loss, make your joints ache, cause weight gain and kick-start depression.
Chapter 4: Understanding Thyroid Hormone Function

The pituitary gland is an important endocrine organ located deep within the brain. It regulates the thyroid by secreting a hormone called thyroid stimulating hormone (TSH).

TSH travels to the thyroid gland to signal production of the two main thyroid hormones – thyroxine (T4) and triiodothyronine (T3). The three and four indicate the number of iodine molecules contained within the thyroid hormone. The thyroid hormones then circulate within the blood, making them readily available.

Thyroid hormones must enter the cell to bind to the thyroid hormone receptors before they can trigger an effect. T4 and T3 enter the target cells by using a specific transport pathway.

A healthy thyroid produces an abundance of T4 along with smaller amounts of T3. T4 is considered the ‘storage’ thyroid hormone. When the body requires a greater thyroid response it converts T4 to more potent T3. T3 directly boosts energy metabolism in the mitochondria, the powerhouses of all cells. T3 is like a throttle that controls the metabolic rate, it can either slow down or ‘rev up’ metabolism in all organs and body systems.

The activation of T4 through to T3 occurs mainly in the liver. The enzyme that converts T4 to T3 is called iodide peroxidase or 5-monodeiodinase. This specialised enzyme converts approximately 70-80% of released T4 to the biologically active T3, with the remainder converting to small amounts of reverse T3. As you will read later, reverse T3 has the opposite effect of T3.

Why Rigid Diets Don’t Work When You Have An Underactive Thyroid

The thyroid hormones regulate how fast you burn calories. They act as a throttle to either speed up or slow down your body’s metabolic rate. When your thyroid is under active your metabolic rate is switched down which causes weight gain. It’s therefore much harder to lose weight when your thyroid is under active.

Slower metabolism equals less calories burned and greater weight gain. For most people when this happens there is an automatic response to go on a diet to lose weight. However calorie control diets do not work when you have a thyroid problem. And here is the reason why...

When you cut calories you switch off activity of the iodide peroxidase enzyme. This is the body's natural response to slow down your metabolism and conserve fuel during a time of ‘famine’. Cutting calories is therefore not effective when you have an under active thyroid as it triggers this inbuilt ‘famine response’.

A restrictive diet may also reduce intake of specific nutrients required to convert T4 to T3. As you will read later zinc and selenium are two important minerals that assist activation of T4 to T3, the thyroid hormone that stimulates fat burning.
What Is The Role of TSH Releasing Hormone (TRH)?
The pituitary gland itself is regulated by another endocrine gland known as the hypothalamus which is also located within the brain.

The hypothalamus produces **TSH Releasing Hormone (TRH)**. The role of TRH is to signal the pituitary gland to stimulate the thyroid gland by releasing TSH.

TSH has a dual role as it also stimulates production of the **sodium-iodide symporter (NIS)**. The NIS molecule accumulates iodine in the thyroid cells and is an important step in the formation of T4 and T3. Without adequate amounts of NIS, iodine is not able to enter the thyroid cells.

The thyroid also produces the hormone **calcitonin**, which plays a role in calcium and phosphorus metabolism. Calcitonin lowers the amount of calcium and phosphate in the blood by inhibiting bone breakdown and accelerating the absorption of calcium by the bones.

Chapter 5: What is Hashimoto’s Disease?

Hashimoto's thyroiditis is a chronic inflammatory condition affecting the thyroid. It was first described by the Japanese specialist Dr. Hashimoto Hakaru in 1912.

Hashimoto’s thyroiditis is the most common cause of hypothyroidism, particularly in women. It often begins with a painless, firm enlargement of the thyroid gland or a feeling of fullness in the neck. Over time the symptoms of hypothyroidism become apparent.

Hashimoto’s thyroiditis is termed an autoimmune disease. Autoimmune problems occur when the immune system attacks its own tissue. This inappropriate immune activity within the thyroid creates inflammation within the thyroid and in some cases eventual destruction of the thyroid tissue.

The inflammation caused by Hashimoto’s thyroiditis, also known as chronic lymphocytic thyroiditis, slows production of thyroid hormones which leads to hypothyroidism. This disease progresses slowly. At first you may not observe any noticeable effects, but without treatment the symptoms gradually become severe.

**Diagnosing Hashimoto's Thyroiditis**

As Hashimoto’s disease is triggered by an autoimmune response a diagnosis is confirmed in the presence of abnormally raised antibodies in the blood.
Your health practitioner may request the following pathology tests; thyroglobulin antibodies (TgAb) and thyroid peroxidase antibodies (TPOAb). An assessment of T4, T3 and thyroid stimulating hormone (TSH) are also normally performed to determine how well the thyroid gland is functioning. A physical examination of the thyroid region is also commonly performed to check for swelling or lumps.

Mainstream medicine does not know exactly what triggers this immune attack on the thyroid. Some think a virus or bacterial infection may initiate this response, while others blame genetics.

For women, raised antibodies are often detected after childbirth. Postpartum thyroiditis is the medical term that is used to describe this particular thyroid problem. It primarily occurs in the first year after childbirth, miscarriage, or induced abortion.

From a Naturopathic point of view I think Hashimoto’s is caused by a range of factors. Most notably autoimmune conditions are strongly linked to psychological stress, environmental toxicity and food intolerances.

The triggers are different for each individual and a thorough health history is usually a good place to start to investigate the causes. For example on questioning it may be revealed that an individual has a history of workplace chemical exposure, heavy metal toxicity via dental amalgams, toxicity from heavy smoking or periods of extreme emotional stress.

It is possible to manage this disorder effectively with a healthy lifestyle, eating well, targeted nutrients and regular physical exercise.

**Should You Increase Iodine Intake?**

The issue of taking iodine is a good question. Even though Hashimoto’s is not an iodine deficiency thyroid disorder it is still important to supply the thyroid with adequate amounts of iodine to support ongoing thyroid hormone production. The thyroid requires the right amount of iodine so a balanced intake works best. Either too much or too little causes problem.

In Australia the safe upper level of intake for iodine is set at 1,100 micrograms per day for adults. Population studies have shown excessive iodine intake may increase the prevalence of autoimmune thyroiditis. It’s therefore important to avoid prolonged use of doses higher than 1,100 micrograms daily without proper medical supervision.

Iodine works hand-in-hand with selenium and there are good human studies to show selenium can help bring down thyroid antibodies. Selenium is a vital nutrient to support the glutathione defense pathways in the thyroid. The body’s glutathione pathways are critical for detoxing environmental toxins. As a supplement selenium is a good choice for individuals with Hashimoto’s thyroiditis who may be experiencing toxicity issues.
Chapter 6: The Conventional Medical Approach

When most doctors do a thyroid test they measure your TSH and based on the test result decide whether you have a thyroid problem or not.

At the onset a thyroid problem is often diagnosed and treated by a specialist endocrinologist as they specialise in hormone health disorders. Once the specialist treatment has commenced a general medical practitioner can take over the task of ongoing monitoring.

Synthetic thyroxine sodium is the mainstay of medical treatment for hypothyroidism. The two common products names are Oroxine and Eutroxsig. This medication is usually is taken once a day before breakfast as taking this medication with food reduces absorption. It can take at least a month for thyroxine replacement therapy to maintain steady levels of T4 in the body.

At commencement thyroxine sodium is usually prescribed in small doses as too much T4 can cause side effects. The most obvious adverse effect is a racing heart. The starting dose and adjustments to the dose are done in small increments to reduce the risk of side effects. T4 medication is gradually increased until the levels of TSH in your blood return to normal.

Typically this thyroid medication is advocated for life. However for many individuals synthetic thyroxine therapy does ameliorate the symptoms of hypothyroidism.

**Acute Reactions to Thyroxine Sodium**

Adverse reactions associated with thyroxine therapy are primarily due to an overdose of the medication. Symptoms of overdose may include chest pain, pounding heartbeat, shortness of breath, tremor, leg cramps, confusion, vomiting, diarrhoea or seizures. These are the type of symptoms you would normally expect if you had hyperthyroidism.

A rigorous scientific review published by The Cochrane Library concluded that thyroxine sodium is not significantly effective in improving the symptoms associated with hypothyroidism.\(^1\) Thyroxine may help correct serum TSH but rarely provides enough T3 to completely relieve symptoms.

It is common for thyroid sufferers to spiral steadily downward feeling worse as the years go by. You may think that advances in thyroid treatment need to be high-tech and expensive. There is another way. Low-tech, low-cost interventions such as nutrition, exercise and reducing stress can make a difference. In fact, optimal thyroid function is unlikely without this approach. Improving WHOLE BODY HEALTH is vital to aid optimal thyroid health recovery.

**Note:** Sodium thyroxine medication is typically advocated for life. This medication requires medical supervision. Never discontinue your medication without medical guidance. You should also check to see if other medications that you are taking will decrease levothyroxine absorption. For example, antacids can bind and delay absorption if taken within four hours of the thyroid medication.

It is important to identify and treat the underlying causes of poor thyroid health. The conventional medical approach typically views the thyroid in isolation from other systems of the body. Improving whole body health can go a long way to balance natural thyroid function.

It is possible for your thyroid to improve or even recover with the right diet and lifestyle interventions but your thyroid cannot do it alone. Thyroid health depends on restoring function to all major body systems and eliminating the factors that cause a thyroid imbalance.

**Thyroxine Sodium Can Contribute To Poor Bone Health**

One of the main long term health issues with taking synthetic thyroxine is the potential for this drug to accelerate bone loss. Studies confirm that long term thyroxine therapy is associated with decreasing bone density which can lead to osteoporosis.²

The silent disease of osteoporosis often goes unnoticed until a bone is broken. But it is never too late to preserve bone strength as bone is a highly dynamic, living tissue. Health experts agree that choosing a healthy balanced diet and engaging in regular weight bearing exercise can ensure a lifetime of good bone health.

When it comes to building bone health the nutrient that first springs to mind is calcium. It is the most abundant mineral within the body. But building your bone health may involve much more than popping a calcium supplement or eating more dairy foods. There is a critical nutritional factor that may have greater benefits to rival even the best calcium products. It is the acid-alkaline balance of the body.

Some bone experts argue that osteoporosis is strongly linked to an acid-forming diet. The typical Western diet is high in acid-forming foods such as meat, sugar and white flour products. Low-acid eating with The Natural Thyroid Diet will benefit bone health and decrease your risk of osteoporosis.

Bones adapt to physical stress; the more you use them the stronger they become. Regular physical activities such as walking, cycling, swimming, weight training, yoga or Pilates will keep your bones in good shape for life.

**Menopause + Bone Loss**

‘Peak bone mass’ is a term used to describe the time when there is maximum bone density. Women usually achieve peak bone mass at around 25 to 30 years of age. This is when bones are at their strongest. Women are particularly susceptible to significant bone loss after they reach peak bone mass as the hormones oestrogens and progesterone play a dual role in maintaining bone density. While the loss of some bone density is normal with ageing, combating bone loss is a constant challenge after the transition into menopause.
Hormone Replacement Therapy (HRT) is often touted to treat menopausal bone loss. I do not advocate turning to HRT given the demonstrated risks. It is important to remember that hormones have a natural cycle and the body can adapt when positive steps are taken to support this transition. Natural remedies such as herbal phytoestrogens can assist in gently restoring hormonal balance. Black Cohosh (*Cimicifuga racemosa*), Wild Yam (*Dioscorea villosa*) and Red Clover (*Trifolium pratense*) are prized herbs to support declining hormone levels during menopause.

**Bioidentical Hormone Replacement Therapy (BHRT)**

Bioidentical hormone replacement therapy (BHRT) is the use of supplemental doses of hormones with a chemical structure identical to those naturally produced in the body. BHRT allows for an individual prescription of different concentrations of the major hormones, including the thyroid hormones. Not all doctors prescribe BHRT. You may have to seek out a doctor specialising in this field.

Ideally, thyroid hormone replacement therapy is best done with a prescription that contains both T4 and T3 or active T3. **Armour Thyroid**® extract is the most widely available thyroid preparation that contains both T4 and T3.

Your doctor may also recommend a single T3 preparation to improve thyroid function. For example, **slow release T3** is often prescribed to improve metabolism or to counter the effects of high reverse T3. It may take a series of small steps to get your thyroid hormones adjusted to where they should be. Do not assume that more is better. Small amounts of supplemental T3 and T4 work well.

Along with improvements in diet and lifestyle factors, the overall goal of BHRT is to alleviate symptoms and enhance the function of your thyroid. It can take 6-12 months to see improvements in severe cases.

**Chapter 7: Get A Real Medical Diagnosis**

An under active thyroid, or hypothyroidism can cause symptoms ranging from a mild deficiency state which is barely detectable with standard thyroid blood tests to a severe thyroid problem. Even minor changes in thyroid function have a dramatic effect on your overall health.

Controversy surrounds testing and the clinical definition of hypothyroidism. Subclinical thyroid dysfunction is defined as an 'abnormal TSH level and free T4 and T3 levels within their reference ranges'. This is a narrow medical guideline used to define a thyroid condition.

Do you think you may have an undiagnosed thyroid problem? It is vital to get a proper medical diagnosis. If left unchecked a thyroid problem causes weight gain and increases the likelihood of you developing cardiovascular problems, depression and anxiety.

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There are three ways to diagnose a problem with your thyroid: review the symptom list, undertake laboratory tests with your health practitioner and assess your basal body temperature. A brachioradialis reflexometry test may also be useful.

**Thyroid Lab Tests**

The 'gold standard' test for hypothyroidism is to measure the blood level of TSH, the messenger hormone that sends the signal to the thyroid to produce more thyroid hormones.

Often this single TSH test is done to see if further thyroid tests are warranted. This can waste your time. If you suspect you have a sluggish or under active thyroid you need to test all the major thyroid hormones straight away. If you have thyroid disorders in your family, make sure you mention this to the doctor.

If your doctor only wants to test TSH or your doctor tells you your thyroid is OK after only checking TSH, find a doctor who will do a thorough assessment of your thyroid hormones. A single TSH test is simply not enough.

It is vital to determine if the thyroid is manufacturing T4 and that the T4 is converting through to active T3. You need to assess free T3 and free T4. Free T3 is the best clue to how your thyroid is working as it directly fires up metabolism in all organs and body systems.

Most of the thyroid hormones circulating in the blood are bound to transport proteins. Only small amounts are free and biologically active, therefore measuring the concentration of free thyroid hormones is of greater diagnostic value.

A special test that specifically measures reverse T3 (rT3) should be requested to exclude reverse T3 dominance. In addition, thyroid antibody testing should be performed to rule out an autoimmune disease.

Raised antibodies are a sensitive marker for autoimmune conditions such as Graves’ disease, which is strongly linked to a hyperactive thyroid state or Hashimoto’s thyroiditis, the primary cause of hypothyroidism.

In summary, a proper medical diagnosis can only be achieved by performing a thyroid screening test of TSH, free T4, free T3, thyroid antibodies and rT3.

**Thyroid Function + Healthy Ageing**

It is common for older individuals to experience some degree of hypothyroidism, with women affected more than men. The typical symptoms of hypothyroidism such as weight gain, muscle cramps, tingling and an inability to tolerate cold are less common in the older population. When the symptoms of an under active thyroid do occur they are less obvious.

Older individuals may display symptoms such as weight loss, confusion, decreased appetite, joint stiffness, joint and muscle pains, weakness and a tendency to fall. Because these
symptoms can be subtle or associated with ageing they are often overlooked as being caused by hypothyroidism. A thyroid screening test is vital. In fact, this test should be done regularly in all people aged over 65 years.

**Thyroid Neck Check**

If you have noticeable enlargement, swelling or discomfort around your throat please ask your doctor to examine your thyroid. Your doctor may also order a thyroid ultrasound. This medical test is used to check the size, shape and texture of the gland as well detect any nodules or cysts within the gland.

**Chapter 8: The Real Problem With Blood Tests**

Evaluating thyroid health using blood tests does not always yield a definitive diagnosis. It is well accepted that TSH, T4 and T3 tests are not overly sensitive. To add to this, TSH and thyroid hormone levels vary throughout the day and from day-to-day. Taking a thyroid test one day could yield different results the next day.

If you have borderline hypothyroidism the testing does not always diagnose a potential problem. The wide reference ranges make it hard to diagnosis small variations in your hormone levels.

Your thyroid hormone levels may fall within the so called ‘normal range’ but you are definitely experiencing low thyroid symptoms. You could be then told you are experiencing sub-clinical hypothyroidism. The term ‘sub-clinical’ can simply mean that your thyroid problems are being ignored.

It is very important not to rely solely on pathology tests alone to diagnose a thyroid problem. Consider any symptoms of hypothyroidism along with the blood test results.

**Chapter 9: What The Thyroid Tests Mean**

What do they all mean? Labs provide health practitioners with reference ranges that are derived from average values in the whole population. Having a result in the reference range therefore does not always prove a healthy thyroid state.
The **standard references** listed here are used by Australian pathology labs. The *ideal* reference range has been included. These numbers have been developed from my clinical experience. You will not find these numbers in standard medical text and some doctors may argue against using such a narrow range.

If you are outside of Australia you will have different reference ranges. Check your pathology report to help you interpret your thyroid test results.

- **Thyroid Stimulating Hormone**: Normal range 0.4-5.0 mIU/L. Ideal < 1.5
- **Free T4**: Normal range 10 - 25 pmol/L. Ideal 14-20.
- **Free T3**: Normal range 4.0 – 8.00 pmol/L. Ideal 4.5-6.5
- **Reverse T3 (rT3)**: Normal/ideal range 170-450. High levels of reverse T3 are clearly evident.
- Thyroid Antibodies; raised thyroglobulin antibodies (TgAb), thyroid peroxidase antibodies (TPOAb) and TSH receptor antibodies (TRAb) indicate an autoimmune problem. The TRAb test is usually done if you are showing signs of an over active thyroid.

High levels of antibodies are clearly evident, indicating an autoimmune condition. The antibodies will be well above range if you have an active autoimmune response going on in your body. Antibodies attack the thyroid causing inflammation and impaired function.

Follow up tests at three or six monthly intervals are usually sufficient to assess how your thyroid is improving. By treating your thyroid the symptoms will improve over time. Your symptoms are usually the best indication of how well your thyroid is recovering.

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**CASE STUDY**

Christine, aged 55 years.

Christine first attended my clinic as she was having problems losing weight. She ate well and exercised regularly. I suspected a thyroid problem based on her individual health history. She went to her local doctor with instructions to ask for an assessment of; TSH, free T4, free T3, thyroid antibodies, a full blood count, blood sugar levels (BSL), liver function test (LFT) and a cholesterol study.

At her next visit we reviewed the pathology results. Total cholesterol was raised along with an unhealthy ratio of HDL and LDL ratios. Some of the liver enzymes were also raised. This is common in thyroid conditions. Christine’s TSH was 6.6 (high) and free T4 was 10.2 (low). The T3 and thyroid antibodies were not done. The raised TSH indicated a problem with the thyroid. (A high TSH reading means that the pituitary is working hard to get the thyroid into action).
Without the T3 it was impossible to evaluate if T4 was converting to T3. The thyroid antibodies should have been done to rule out Hashimoto’s disease.

Christine returned to her doctor to insist on a complete battery of thyroid tests. She requested that all the listed tests be done. Her results for the second blood tests were; TSH 6.22 (high), T4 8.9 (low), T3 3.8 (low), thyroglobulin antibodies (TgAb) 63 (range < 40), thyroid peroxidase antibodies (TPOAb) 2577 (range <34).

The antibodies were extremely high, indicating an autoimmune condition. Her doctor diagnosed Hashimoto’s thyroiditis after receiving these test results. Christine’s story highlights the importance of seeking a proper medical diagnosis.

Chapter 10: Is It Thyroid Hormone Resistance?

Many individuals with classic symptoms of hypothyroidism, such as low body temperature, fatigue and depression, are discouraged when they are told that their thyroid hormone levels are within the normal range. But they may be experiencing a further complication. This problem is known as ‘thyroid hormone resistance’. The question of whether you might be resistant to your own thyroid hormones is rarely considered.

The blood levels of thyroid hormones may not reflect what is happening at the cellular level. Normally the thyroid hormones attach to the T3 receptor, or the 'dock ing station' in the cell to stimulate an effect.

In ‘thyroid hormone resistance’, the thyroid hormones are prevented from activating the T3 receptors. That is, your thyroid may be producing adequate thyroid hormones but they are unable to activate a cellular response.

One of the most common reasons for this is that toxic compounds occupy the cell receptors preventing the hormones from binding with them. Do you suspect environmental chemicals are sabotaging your thyroid health?

Chapter 11: What is Reverse T3 Dominance?

While hypothyroidism is becoming more widely accepted, Reverse T3 Dominance is often overlooked. Reverse T3 dominance, sometimes referred to as Wilson's Syndrome is a common hypothyroid condition.

Under normal conditions T4 will convert to both T3 and reverse T3, with the body quickly eliminating rT3. Reverse T3 dominance occurs when greater amounts of T4 are converted to reverse T3, the inactive form of T3.

When T4 converts to reverse T3 it leads to all the typical symptoms of hypothyroidism.
Every cell in the body has a T3 receptor. The problem is, reverse T3 has a similar molecular structure to T3 and therefore fits into the receptor upside down. This blocks the active T3 from binding to the receptor site and activating a healthy thyroid response.

Testing For Reverse T3 (rT3)
Most of the biological effects generated by your thyroid are due to the activity of T3. T3 has a high affinity for the thyroid receptors. Reverse T3 Dominance can be difficult to diagnose as low thyroid symptoms exist, but the free T3 levels can be within normal limits. These results can give a false impression of true thyroid function. A separate measurement of reverse T3 is essential to identify reverse T3 dominance.

If rT3 is blocking the action of T3 you will experience the effects of low thyroid function. Some internet sites propose that a measurement of T3 includes a portion of rT3. This is not the case with Australian pathology labs.

CASE STUDY
Lisa, aged 40 years.
Lisa attended my clinic as she was experiencing extreme fatigue and low blood pressure. She had a busy corporate career and was finding it hard to keep up with the demands of her job. A full medical history was taken. Also an assessment of blood pressure and pulse rate was performed. It appeared Lisa was experiencing sinus bradycardia, an abnormally slow heart rate. This condition is often related to low thyroid function. She was showing other signs of poor thyroid function so a test of her thyroid was requested along with an electrocardiography (ECG).
Sinus bradycardia was confirmed via the ECG test. (Her resting heart rate was less than 60 beats per minute). Her pathology results showed TSH, T4, T3 and thyroid antibodies were all within range.

Lisa's reverse T3 came back at 705 (range: 170-450). This is an unusually high level of reverse T3. Evaluating reverse T3 was invaluable as it allowed a diagnosis of low thyroid function due to reverse T3 dominance.

**Treating Reverse T3 Dominance**
Treatment of this hypothyroid disorder usually involves prescribing a single T3 preparation. It is important that synthetic T4 (levothyroxine) or Armour Thyroid®, which contains a mixture of T4 and T3 are not prescribed for this condition. It is highly likely that a portion of the supplemented T4 will be shunted towards greater production of rT3, allowing this problem to continue.

Switching to a single T3 preparation will slowly bring down the reverse T3. It usually takes around 12 weeks for the body to eliminate the elevated reverse T3.

Treating the cause is also critical - why is so much rT3 is being produced? Treatment is more effective when all aspects of health are addressed.

High levels of stress, adrenal fatigue and toxicity are the major culprits in the development of reverse T3 dominance. I suggest speaking to a qualified health practitioner if you suspect this problem. Treatment is complex and needs to be tailored to each individual.

**Chapter 12: The Clinical Indicators of Hypothyroidism**
Blood tests are not always enough to diagnose a thyroid problem. For this reason, your health practitioner will also discuss the clinical signs & symptoms of low thyroid function.

The common signs and symptoms could include dry skin, hair loss, low libido, unexplained fatigue, rapid weight gain, menstrual irregularities, mood changes, heart palpitations, joint pain or muscle weakness.

They may also perform a physical examination of your throat and request a visual assessment of the thyroid gland. This is usually done with an ultrasound, which checks for thyroid nodules. Thermography imaging (thermal imaging) may also be used.

**Thyroid Nodules**
A thyroid nodule is a lump in or on the thyroid gland. Thyroid nodules are common and it is possible for more than one nodule to develop. Any time a lump is discovered in thyroid tissue the possibility of malignancy (cancer) must be considered. Fortunately, the vast majority of thyroid nodules are benign (non-cancerous).

Many patients with thyroid nodules have no symptoms whatsoever and are found by chance on a routine physical exam or imaging study. Some individuals may become aware of a gradually
enlarging lump at the front of the neck and may experience a vague pressure sensation or discomfort when swallowing. If you notice a lump or changes to the shape of your thyroid gland you should bring this to the attention of your health practitioner immediately.

Nodules can be caused by a simple overgrowth of normal thyroid tissue, fluid-filled cysts, inflammation (thyroiditis) or a tumor (benign or cancerous). Nodules are not routinely removed as they are often found to be benign. Endocrinologists rely heavily on three specialised tests in deciding which nodules should be treated surgically; thyroid fine needle biopsy, thyroid scan and thyroid ultrasonography.

A thyroid fine needle biopsy is used to gather a sample of the tissue contained within the nodule. This procedure can be performed in a doctor’s office. A thyroid ultrasonography is used to guide the placement of a biopsy needle to decrease the frequency of inadequate specimens.

A thyroid scan is a picture of the thyroid gland taken after a small dose of a radioactive isotope has been injected or swallowed. The scan tells whether the nodule is hyper functioning (‘hot’ nodule), functioning along with the rest of the thyroid gland (‘warm’ nodule), or not functioning (‘cold’ nodule). Thyroid cancer is rarely found in hot nodules, so a scan showing a hot nodule eliminates the need for fine needle biopsy. If a hot nodule causes hyperthyroidism, it is treated with radioiodine or surgery.

**Thyroid Cancer**
The most common sign of thyroid cancer is the development of a lump on the thyroid gland, or swelling at the front of the throat. Other symptoms can include hoarseness of the voice, difficulty swallowing and noticeable swelling of the lymph glands in the neck. You should always seek advice from your health practitioner if you have a distinct lump in your neck.

**Chapter 13: Basal Body Temperature Testing**
Your basal or base temperature while resting reflects your metabolic rate which is largely determined by the activity of your thyroid gland. A low body temperature often indicates sluggish metabolism, often a direct result of poor thyroid function.

Basal body temperature testing is a very simple test that can be performed at home. It is one of the best ways to assess your thyroid making this an accurate and affordable method of assessing thyroid health.

Your body works best within a very narrow temperature range. The catalytic enzymes, hormones and vitamins and minerals work best at 97.8 – 99.8 degrees Fahrenheit or 36.5 – 37.5 degrees Celsius. Being cold indicates you are experiencing less biological activity. Your body is not performing well enough to raise the body’s core temperature to a normal functioning level.

**Procedure for Basal Temperature Testing**
All that is required to do this testing is a good quality thermometer.
The temperature is taken at rest – preferably first thing in the morning before rising over 10 days;

- Place a digital thermometer by your bed before going to sleep at night
- On waking, place the thermometer in your mouth. It is important to make as little movement as possible. Lying and resting with your eyes closed is best. Do not get up until you have completed the test.
- Read and record the temperature and date.

Perform this test on at least five mornings, preferably at the same time of day. Menstruating women must avoid doing this test around the middle of their cycle as body temperature naturally rises at ovulation. Men and post menopausal women can perform the test at any time.

Your basal body temperature should be between 97.6 - 98.2 Fahrenheit (98 Fahrenheit is ideal) or 36 - 37 Celsius (37 Celsius is ideal). Low body temperature is a strong predictor of low thyroid function. Low temperature readings indicate sluggish metabolism which is often the direct result of low thyroid function.

Basal temperature testing should not be used as a stand-alone diagnostic tool. Temperature readings are usually considered along with an assessment of the possible signs and symptoms of an under active thyroid.

**Brachioradialis Reflexometry Testing**

A specialised test can be performed by tapping a muscle in your arm (the brachioradialis muscle) and recording the reflex. From this a computer program is used to assess how well the thyroid is functioning. The test is known as ThryoFlex™. Check if there are health practitioners in your local area offering this test.

**Chapter 14: Take Heart Health Seriously**

If you feel breathless, and notice your heart beat is sometimes irregular you could have low blood pressure (BP). Hypothyroidism is often associated with both low BP and a low pulse rate. Ask your health practitioner to check your BP and pulse rate.

**Sinus bradycardia** is common in hypothyroidism. This condition arises when the heart beats more slowly than usual. It is defined as a resting heart rate of 60 beats per minute or less. In simple terms you could say the ‘brakes are on the heart’.

An accurate diagnosis of sinus bradycardia is usually made by using an electrocardiography (ECG). This will also rule out a possible problem with your actual heart. The reduced ability of the heart to pump blood efficiently puts more strain on your heart. To overcome both low blood pressure and sinus bradycardia it is very important to heal your thyroid.

If you have a problem with blood pressure, you should also request a **cholesterol panel** along with **homocysteine**. People with low thyroid function tend to have raised cholesterol and high
levels of homocysteine. Too much homocysteine is an independent risk factor for heart disease. Vitamin B12, B6 and foliate work together to help keep homocysteine levels down.

Chapter 15: Hypothyroidism & Mood Disorders

Thyroid problems are often misdiagnosed as mood disorders such as depression or anxiety. Low thyroid function is linked to mood changes and emotional issues are likely to improve by treating the underlying thyroid condition.

One explanation for the link between hypothyroidism and mood disorders is the influence of T3 on brain activity. T3 is found in particularly large quantities in the area of the brain that controls emotions such as joy, anger and fear.

Biologically active T3 regulates the action of certain ‘feel good’ brain chemicals called neurotransmitters. These brain chemicals rule your mood and emotions. When T3 is low, or the action of this thyroid hormone is blocked, the entire cascade of brain chemicals may be affected.

The key neurotransmitters that regulate mood and emotional wellbeing are serotonin, noradrenaline and GABA (gamma-aminobutyric acid). Serotonin and noradrenaline are your ‘happy’ chemical messengers. As for GABA, it is often referred to as the ‘calming’ neurotransmitter.

A range of nutrients are required to build key neurotransmitters and thyroid hormones to help regulate your mood. Choosing a nutritious, vital diet that is as close to nature as possible is a critical step to re-balancing your emotional wellbeing.

Apart from dietary influences, another issue to consider is the impact of prescription drugs. For example anti-depressants may lower thyroid hormone levels and lithium used in bi-polar disorders can block the production of thyroid hormones.

Chapter 16: Healthy Thyroid Hormone Activity Halts Hair Loss

Are you secretly worried about the amount of hair you are losing? Hair loss is one of the most common and distressing signs of a thyroid problem. For women, thyroid hair loss is most noticeable in the months after childbirth.

Typically thyroid hair loss causes overall shedding. It’s not the same as male type baldness that can be experienced by both men and women. You may notice that handfuls of hair come out when combing or washing your hair, or may fall out after gentle tugging. The medical term for excessive hair loss is alopecia (al-oh-PEE-shah).

Hair health is very much dependent on an ample supply of thyroid hormones. The thyroid hormones directly affect the hair follicles to help generate new hair growth. Decreased metabolism or energy production within the hair follicle leads to the early release of the hair at the root. You see it as too much hair falling out.
A ground breaking study published in the Journal of Clinical Endocrinology & Metabolism showed that T4 has a direct effect on the proliferation of the cells responsible for hair growth and the length of time hair grows. In addition, both T4 and T3 stimulate melanin synthesis. Melanin gives pigment or colour to your hair. Early greying of your hair can also be a symptom of hypothyroidism. This important study provides evidence that human hair follicles are direct targets of thyroid hormones.

It is not too late to halt hair loss. As your thyroid recovers you will notice less hair loss. Both the appearance and growth of your hair will improve. But keep in mind new hair can take months before it really gets going. The important first step is to stop your hair falling out.

Chapter 17: What Causes a Thyroid Problem?

The symptoms of an under active thyroid usually develop slowly over time, often over a number of years. The symptoms are usually subtle in the early stages, however as the condition worsens the symptoms become more obvious. Anyone can develop hypothyroidism but for women the risk is even higher especially after the age of 40. These are the main triggers that put you at risk of developing a thyroid problem;

- Nutrient deficiencies; especially low iodine
- Thyroid disrupting chemicals; due to environmental exposure
- Thyroid damaging foods
- High levels of stress
- Adrenal fatigue
- Genetic susceptibility (family history)
- Autoimmune disorders; the immune system attacks the thyroid tissue
- Hormone imbalances; especially high levels of circulating estrogens
- Infections
- Poor liver function
- Food intolerances & a ‘leaky gut’ (gut permeability)
- Surgical removal of the thyroid gland
- Physical trauma to the thyroid gland
- Exposure to electromagnetic radiation

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Chapter 18: Targeted Nutrients for a Healthy Thyroid

Like every cell and organ in your body, the thyroid requires specific vitamins and minerals to carry out important day-to-day functions. The chief nutritional factors include:

- Iodine
- Selenium
- Zinc
- B vitamins
- Essential fatty acids (good fats)

These nutrients keep your thyroid humming, setting the pace for ongoing thyroid activity. Choosing the foods containing a wide array of these vital nutrients will support life-long thyroid health.

As most people find it difficult to optimise nutritional intake through diet alone nutritional supplements have become increasingly popular. You should always consult your qualified health practitioner regarding your personal nutritional requirements. Your practitioner can also make recommendations based on your specific thyroid disorder.

These are my general nutritional recommendations to support healthy thyroid function.

**Iodine: A Mighty Mineral For The Thyroid**

Iodine deficiency is a common cause of hypothyroidism. Iodine is required to assist in the normal healthy production of thyroid hormones. To meet the body’s ongoing demand for thyroid hormones, the thyroid gland traps iodine from the blood and manufactures both T3 and T4 which are released into circulation as required.

Apart from its role in thyroid function, iodine is also necessary for a healthy immune system, detoxification and children’s growth and development. Iodine requirements are increased significantly during pregnancy. A sub-optimal level of this mineral during pregnancy has been associated with an increased incidence of miscarriage, stillbirth, birth defects and intellectual delays.

**What is Goitre?**

The amount of iodine in food or water depends upon the amount of iodine in the local soil. The older an exposed soil surface, the more likely the iodine has been leached away by erosion. Low iodine levels lead to enlargement of the thyroid as this gland attempts to trap more iodine from the blood supply.

An enlarged thyroid, known as goitre is one of the earliest and most visible signs of an iodine deficiency.

**The Best Sources of Iodine**
Most of the earth’s iodine is found in the oceans. Rich sources of this trace mineral include seafood and sea vegetables. This includes Bladderwrack, arame, hijiki, nori, wakame and kombu. These are used most commonly in Japanese cooking.

Iodine added to table salt has poor bioavailability so the body does not fully absorb it. In fact, refined table salt is a lifeless food product that contains harmful amounts of aluminum. Therefore, avoid using refined white table salt. A natural sea salt is a better option.

**Iodine supplements**

Iodine supplements are effective for preventing and treating an iodine deficiency. They are generally considered safe when taken as recommended. As iodine is only normally required in trace amounts a balanced intake of this nutrient is recommended. For this reason iodine is often expressed in small microgram quantities, not milligram amounts on the label of an iodine supplement.

When you are researching an iodine supplement it is important to know that 1,000 micrograms equal one milligram. The microgram measurements are routinely abbreviated as ‘mcg’ or ‘µg’.

**Bladderwrack (Fucus vesiculosus)**

Bladderwrack is a specialised type of seaweed that is also known by its botanical name *Fucus vesiculosus*. Bladderwrack is traditionally used to help support healthy thyroid function. It is also a whole food source of iodine.

**Testing Iodine Levels**

**Iodine Patch Test:** The advantage of this external skin patch test is that it can be performed at home. Purchase a bottle of iodine tincture from your local pharmacy. Look for the original, orange coloured solution, not the clear solution. Paint a small patch of skin with the iodine solution. Your abdomen or inside your forearm is best. It should take between 18 - 24 hours or more for the body to absorb the iodine stain if your iodine levels are sufficient. If the iodine patch absorbs more quickly, it is likely you are deficient in iodine.

**Iodine Loading:** To start, a urine sample is collected to establish a baseline level of iodine saturation in the body. This is followed by supplementation with 50mg of an iodine/iodide combination and subsequent 24-hour collections of urine. These samples are then sent to a lab for analysis.

The principle of an iodine loading test is if your level of iodine is adequate, most of the iodine ingested during the test will be excreted in the urine. If your body is deficient in iodine, a significant portion will be retained. Speak to your health practitioner about this iodine-loading test. Not all practitioners offer this as it is not generally regarded as a routine test.

**Selenium**

After iodine selenium is the next most important mineral affecting thyroid function. One important enzyme pathway relating to thyroid activity is activated by the iodide peroxidase.
enzyme. It plays a role in thyroid hormone metabolism by assisting conversion of thyroxine (T4) to triiodothyronine (T3). The iodide peroxidase enzyme is reliant on adequate selenium to work effectively and thereby regulates the concentrations of T3.

Individuals with low selenium intake or poor absorption of selenium are more likely to develop inflammatory thyroid disorders. Selenium plays an important role in protecting the thyroid gland from environmental factors as this mineral boosts glutathione activity. Glutathione is a potent antioxidant and is highly active within the thyroid. Glutathione is naturally produced by the body using selenium and a combination of three amino acids sourced from dietary protein – cysteine, glycine and glutamine.

A plentiful supply of selenium is found in Brazil nuts and to a lesser extent shellfish, tuna & salmon. When supplementing selenium it is important not to take excessive amounts as it does build up in the body. A daily limit of 300-400mcg from all sources should not be exceeded.

**Zinc**
Zinc is an essential mineral that may assist healthy thyroid activity. Low zinc status can be common along with hypothyroidism. A daily intake of zinc is required to maintain a steady state because the body has no specialised zinc storage system. To maintain zinc levels it is best to avoid supplements high in copper as this mineral quickly depletes zinc stores.

This mineral is high in seafood (especially oysters), beef, oatmeal, chicken, spinach, nuts and seeds.

**B Vitamins**
The B vitamins are termed the ‘stress vitamins’. The body’s requirement for these nutrients increases in response to the demands of daily life. As this group of vitamins are mostly water soluble and do not store in the body, it is necessary that they are topped up daily.

Vitamins B6, B12 and folate work synergistically to regulate homocysteine levels for maintenance of a healthy cardiovascular system. For women, taking a folate supplement before and during pregnancy can reduce the risk of having a child with spina bifida or neural tube defects.

Adequate B6 levels are important for the maintenance of healthy mood. Low B6 can lead to irritability, depression and confusion. Most B complex nutritional supplements contain the standard form of vitamin B6 known as pyridoxine hydrochloride. In order for pyridoxine hydrochloride to be utilised it must be converted to P5P. P5P is the active form of B6 and is more readily used by the body.

Pantothenic acid, known as vitamin B5 assists adrenal hormone production during times of

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mental and emotional tension. A high potency B complex supplement can supply a range of B vitamins to support day-to-day wellbeing. B vitamins are also found in a wide range of whole, unprocessed foods.

**Omega 3 & Omega 6 Oils: The Healthy Oils**

Without doubt you need fat in your diet. However it is wise to make sure you are consuming healthy fats. The best sources are listed later in Food Selection List 6: Fats & Oils. Beneficial fats are important structural components of thyroid cell membranes and assist the action of the thyroid cell receptors. In contrast, excessive amounts of harmful, manufactured fats in the diet will block thyroid receptor activity. It is possible to supplement your diet with fish oils, or consider flax seed oil if you are a vegetarian.

**Animal Glandular Extracts**

Many thyroid supplements contain whole animal glandular extracts. There can be an inherent risk with these products as your immune system may react to foreign animal tissue. I believe high quality nutritional and herbal products along with a healthy diet offer a safer option.

It is important to make sure your body is supported with the specific nutrients it requires to support ongoing thyroid activity.

**Note:** You should always consult your qualified health practitioner regarding your personal health issues. Most nutritional and herbal preparations have not been thoroughly tested for interactions with medications. If you have a medical condition, or are taking other drugs, herbs or supplements you should speak with a qualified health practitioner before starting a new therapy. Some natural supplements are not recommended during pregnancy or breast feeding due to a lack of scientific investigations. Consult a health practitioner immediately if you experience any possible side effects to a natural supplement you are taking.

**Chapter 19: The Estrogen Excess Connection**

Women are all too aware of that hormones have a profound effect on their mood and energy.

Estrogen is the most powerful female hormone. It is essential for healthy female reproductive function, playing a key role in determining a woman’s health at different life stages.

Estrogen is produced primarily by the ovaries. To be more precise, estrogen is not a single hormone, it is a collective term for estradiol (E2), estrone (E1) and estriol (E3).

Estradiol is the most potent and longer acting estrogen. The family of estrogens is balanced by progesterone which is the secondary female steroid hormone. Progesterone helps balance the effects of estrogens.
Estrogen and thyroid hormones have opposite effects: estrogen causes calories to be turned into fat, while thyroid hormones cause fat to be converted into energy. If progesterone is low and estrogen is dominant, even when TSH blood levels are normal, high estrogen levels could be impacting on thyroid health as too much estrogen interferes with thyroid function.

**Could It Be Estrogen Excess?**

For **women**, the common symptoms of estrogen excess include;
- Premenstrual syndrome (PMS)
- Mood swings & irritability
- Memory loss and ‘fuzzy thinking’
- Early puberty/late menopause
- Irregular or absent menstruation
- Unusually heavy or longer lasting menstruation
- Menstrual cramps
- Cyclical migraine headaches
- Fatigue
- Depression
- Weight gain
- Infertility & miscarriage
- Fibrocystic breasts
- Uterine fibroids
- Endometriosis

For **men**, the common symptoms of estrogen excess include;
- Muscle loss
- Weight gain
- Softer erections or impotency
- Low sex drive
- Emotional outbursts & irritability
- Memory loss and ‘fuzzy thinking’
- Fatigue
- Depression
- Infertility

**Testing Your Hormone Levels**

For women it is best to assess your hormones using a hormone saliva test. You should check the three forms of estrogen; estradiol, estriol and estrone along with progesterone. There is only one form of progesterone.

A saliva hormone test provides a very clear picture of the bioavailable hormones that are active in your body. This will quickly identify a hormonal imbalance.

Menstruating women should do their hormone test at the luteal phase of the menstrual cycle. The luteal phase is day 19, 20 or 21 of your cycle. Count forward from day 1 when menstruation
commences. If you are post-menopausal or are not currently menstruating you can perform the test on any day.

Men should check free testosterone and estradiol levels along with sex hormone binding globulin (SHBG). This can be done via a simple blood test with your doctor.

**Xenoestrogens Contribute To Estrogen Overload**

Xenoestrogens are chemicals that have a powerful estrogenic effect on the body. They are fat soluble, non-biodegradable and dangerously toxic. Xenoestrogens include a wide range of substances, both natural and man-made.

Pharmaceuticals, the ‘pill’, hormone replacement therapy (HRT), dioxin and dioxin-like compounds, polychlorinated biphenyls, pesticides and plasticisers such as bisphenol A all adversely affect the reproductive system.

Xenoestrogens can be found in many everyday products such as plastic containers, metal food cans, detergents, flame retardants, food, toys, cosmetics and pesticides. Extremely damaging pesticides can be found in imported crops and foods as some developing countries use prohibited pesticides.

**Estrogen Alert For Women**

The major source of estrogen for many women is from either the oral contraceptive pill or hormone replacement therapy (HRT). If a woman makes 1 unit of estrogen per day, the estimated daily dose of active estrogen from the contraceptive pill is 16,675 units and HRT is 3,350.\(^5\) This is a dangerous level of exposure to synthetic estrogens, possibly over many years.

**Chapter 20: The Thyroid-Adrenal Crisis**

Do you ever ask yourself...why do I feel so drained all the time? Why do I struggle through the day? Why does the slightest bit of over exertion leave me feeling flat and worn out?

Work pressures, illness, emotional conflicts, environmental stress and simply trying to squeeze more into less time eventually depletes and weakens the adrenals.

The adrenal glands sit on top of each of kidney. The main job of the adrenals is to help your body deal with stress. Prolonged stress not only zaps the thyroid, the small adrenal glands also suffer.

When adrenal reserves become depleted it is common to experience lethargy, chronic fatigue and feelings of being overwhelmed by life. These primary symptoms of adrenal fatigue closely resemble the symptoms of a sluggish thyroid. In fact, the indicators of adrenal fatigue are sometimes misdiagnosed entirely as hypothyroidism.

There is no doubt the thyroid and adrenal glands are inextricably linked. It is very common for individuals suffering a thyroid disorder to also suffer co-existing adrenal fatigue.

When the adrenal glands can no longer deal with stress effectively the thyroid gland attempts to compensate for this breakdown. The thyroid is forced to work harder to compensate for declining adrenal function. But the thyroid is often already over taxed and cannot provide the support the adrenals require. Often the first warning sign of an adrenal-thyroid crisis is a noticeably decreased ability to deal with stressful situations.

It is very difficult to successfully treat a sick thyroid if the underlying adrenal weakness is not addressed. The Natural Thyroid Diet helps strengthen and support your adrenals. In addition, natural strategies to aid recovery from adrenal fatigue are covered in the bonus e-book you received with The Natural Thyroid Diet. Please read your copy of Adrenal Fatigue & Your Thyroid to learn more.

Chapter 21: Does Soy Harm The Thyroid?

In Asia, small quantities of whole bean soy products are eaten as traditional foods. This includes tofu, natto, miso, tempeh, and boiled soy beans (edamame). These foods are fermented using traditional techniques. Fermenting soybeans makes an otherwise inedible food quite nutritious.

In contrast Western societies are now consuming an increasing amount of soy that is highly processed and unfermented.

Soybeans alone are not a major food in the diet but soy based additives are now added to a wide range of food products. Processed soy foods and foods containing soy ingredients should be strictly avoided.

Large amounts of refined and unfermented soy products have found their way onto our supermarket shelves. Soy is now found in bread, breakfast cereals, biscuits, crackers, margarine, chocolate, sauces and soups. Soy is also used to make soy milk, soy cheese, soy ice cream, soy protein, texturised vegetarian soy protein, soy protein bars, soy lecithin and soy oil. Check the ingredient list on the nutritional panel to find out if a food item contains soy oil or soy isolate. Note: soy oil is often labeled as ‘vegetable oil’. This makes it sound healthy but it is far from healthy.

- Soy is a common allergen. Soy intolerances are becoming more widespread as soy is used in a wide variety of processed foods. Intolerances to soy are fairly mild and do not usually a pose risk of anaphylaxis. However a soy intolerance will contribute to a thyroid problem.

- Processed soy products are high in phytates. The problem with these ‘anti-nutrients’ is that they rob the body of vital minerals such as zinc, iron, magnesium, copper and calcium. If you have been over doing soy products you may be low in these minerals.
Phytates are not normally found in traditionally fermented soy foods as the fermentation process destroys the phytates.

- **Some chemical additives** in soy foods can have a goitrogenic effect on your body. For example soy is contaminated with hexane, a toxic chemical solvent. Soybeans are bathed in hexane to process nearly all soy protein ingredients and edible oils. Hexane is prohibited when processing organic soy foods.

- The biggest changes in farming methods occurred over the last century, particularly with the introduction of ‘monocultures’. These are areas dedicated to a single crop. As traditional farming methods are lost and the modern monoculture system of production emerges there is an increasing susceptibility of crops to insects and disease. This then pushes up the indiscriminate use of pesticides.

- **Genetically modified** (GM) soybeans are now widely grown in the world’s major soybean producing countries. Soy is modified to make it resistant to toxic herbicides that are used to improve crop production. Apart from the issue with genetic modification, insect resistant GM soy is contaminated with pesticide residues. These pesticide contaminants can easily find their way into the food supply.

Soy plantations are monocultures favoured by large agribusiness. The majority of the world’s soy is grown for commercial food supply and is used in animal feed. Soy has also become a major ingredient in processed food products. Large soy plantations are viewed by environmentalists as a menace as they add to deforestation of the globe.

**Chapter 22: The Dangers of Thyroid Disrupting Chemicals**

Along with the widespread industrialization of our planet, a cocktail of dangerous environmental chemicals have flooded the environment. Emerging evidence suggests that the thyroid gland is extremely vulnerable to the effects of pollution. It is not surprising that as we eat more toxic foods and become increasingly exposed to pollution that thyroid problems are escalating. Harmful substances from our increasingly polluted world irritate and inflame the thyroid.

The most dangerous toxins to the thyroid are organochlorine pesticides, polychlorinated biphenyls (PCBs), heavy metals, halogens, dioxins and furans.

Thyroid disrupting chemicals (TDCs) interfere with thyroid health on many levels. TDCs alter the structure and function of the thyroid gland, alter regulatory enzymes associated with thyroid hormone balance or change circulating or tissue concentrations of thyroid hormones.

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Several environmental toxins strongly resemble thyroid hormones and interfere with binding of the thyroid hormones to receptors or transport proteins.

Hashimoto’s thyroiditis, the major cause of hypothyroid conditions, is triggered by an autoimmune response. The body’s immune system does not normally attack itself. So why does it begin to view the thyroid tissue as a threat? What has confused the immune system? It is proposed that the development of this autoimmune response is linked to the exposure to hazardous environmental chemicals, infections, unrelenting stress and heavy metal toxicity. These are key factors that irritate and inflame the thyroid.

**Toxic Halogens**

Halogens are a class of chemicals that are very closely related. The group includes; fluoride, chlorine, perchlorate & bromine. Halogens are highly reactive, making them harmful in small quantities. Iodine is closely related to these compounds but is often crowded out. Iodine offers the best protection against toxic halogens.

**Perchlorate**, the explosive ingredient of rocket and missile fuel is an example of a man-made chemical with well known anti-thyroid effects. This environmental toxin interferes with iodine uptake into the thyroid gland. Serious concerns now exist that perchlorate, has seeped into the drinking water of the Pacific Southwest region of the United States.

Perchlorate contamination is most prevalent in California, Arizona and Nevada. To protect against percholate and other halogens consider boosting your iodine intake. Healthy sources are iodine rich sea vegetables and seafood.

For more information on percholate visit the Environmental Protection Agency, USA website: [http://www.epa.gov/swerffrr/documents/perchlorate.htm](http://www.epa.gov/swerffrr/documents/perchlorate.htm)

**Fluoride** has a strong potential to block thyroid function. This is best illustrated by the fact that fluoride can be used as a thyroid suppressing medication for hyperthyroid conditions. Fluoride reduces activity of the thyroid gland, even at small doses.

The major sources of exposure to fluoride are drinking water, food, dental products and pesticides. Fluoride is routinely added to urban water supplies. Fluoride may help prevent tooth decay if used externally. But drinking it makes as much sense as eating sunscreen to prevent sunburn.

Check your local water supply; the USA and Australia have the highest fluoridation rates. Most European countries choose not to pollute their water supply with fluoride.

Symptoms of fluoride toxicity are strikingly similar to the symptoms of hypothyroidism. For more information about the dangers of fluoride, visit the Fluoride Action Network, USA website: [http://www.fluoridealert.org/](http://www.fluoridealert.org/). For truly healthy water in your home you will need a water filtration system that removes toxic halogens.
Heavy metals also act as TDCs. The sensitive thyroid gland can be affected by; cadmium, aluminium, fluoride, arsenic, mercury and lead. Heavy metals accumulate in the thyroid and block normal function.

Toxic heavy metals also tip your nutritional balance. For example; mercury displaces selenium, the mineral critical for conversion of T4 to T3.

The nutrients selenium, alpha lipoic acid, zeolite, vitamin C, reduced glutathione and specialised fibre supplements assist clearance of toxic heavy metals.

This table lists heavy metals along with the common sources and adverse effects.

<table>
<thead>
<tr>
<th>Toxic Metal</th>
<th>Common Sources</th>
<th>Adverse Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>Drinking water, antiperspirants, antiperspirant crystals, antacids, cooking utensils, baking powder &amp; bentonite</td>
<td>Immune suppression, lowered brain function &amp; dementia</td>
</tr>
<tr>
<td>Arsenic</td>
<td>Preserved wood (playground equipment &amp; garden borders), drinking water, pesticides &amp; seafood</td>
<td>Decreased thyroid function, digestive disturbance, vascular damage, nerve damage, skin pigmentation &amp; immune suppression</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Cigarettes, air pollution, seafood, agriculture &amp; drinking water</td>
<td>Decreased thyroid function, kidney damage, vascular damage &amp; lowered brain function</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Fluoridated dental products, drinking water, agriculture, air pollution &amp; seafood</td>
<td>Decreased thyroid function, toxic accumulation in bone &amp; teeth, dental fluorosis &amp; lowered IQ</td>
</tr>
<tr>
<td>Lead</td>
<td>Lead based paint, water pipes, drinking water, air pollution, cigarettes &amp; mining</td>
<td>Decreased thyroid function, lowered brain function, hypertension &amp; vascular disease</td>
</tr>
<tr>
<td>Mercury</td>
<td>Seafood, dental amalgam fillings, broken mercury thermometers &amp; vaccines (some contain a mercury based preservative called thimerosal)</td>
<td>Decreased thyroid function, depression, anxiety, intellectual impairment, chronic fatigue, autoimmune disorders, dementia</td>
</tr>
</tbody>
</table>
Water Quality
An abundant intake of clean, pure water allows your body to perform all the healing processes that it is naturally capable of. The problem is water quality has become a major public health concern.

Pharmaceutical/recreational drug residues, heavy metals and other chemicals contaminate our urban water supplies. Water treatment plants are not designed to remove these residues. Reverse osmosis filters may be the best option to help clean up your water.

If you buy bottled water check the source. It is not always from pristine, natural source such as mountain springs. Your bottled water may in fact be filtered tap water.
Chapter 23: Reduce Exposure to Thyroid Toxic Chemicals

Overtime, our exposure to TDCs wreaks havoc on thyroid health. We cannot simply remove ourselves from all pollution, but reducing exposure can help.

Here are 11 strategies to help minimise exposure to toxic chemicals.

1. **Bypass processed foods in the supermarket.** This simple strategy reduces your exposure to synthetic dyes, flavouring agents, chemical preservatives, emulsifiers, texturisers, humectants, ripening gases, bleaching agents and chemical sweeteners. Make it your personal mission to seek out the best tasting and most nutritious food available!

   Whenever possible choose organic produce. Certified organic food is produced without the standard array of toxic and persistent chemicals commonly used in conventional food production.

   So not only has conventional produce been sprayed with serious chemicals such as pesticides, herbicides and fungicides it is also grown in soil that is seriously depleted of minerals. If the nutrients are not in the soil, they are not on your plate.

   Going organic can also help the planet. Organic farmers don’t plant genetically modified (GM) crops. Your everyday organic purchasing decisions therefore support farmers committed to an environmental legacy that is not tainted by GM contamination.

2. **Quit smoking** if you smoke. Research shows smoking is responsible for both decreasing secretion of thyroid hormone and blocking their action, thus exacerbating the symptoms of hypothyroidism. Cigarettes contain thyroid disrupting chemicals; nicotine, tar, carbon monoxide (found in car exhausts), formaldehyde (found in embalming fluid), hydrogen cyanide (found in pesticides), hydrochloric acid (a corrosive acid), toluene (found in solvents), ammonia (found in some cleaning products) and acetone (found in nail polish remover).
3. **Filter all your water** for drinking and cooking. Urban tap water has become a toxic cocktail. Filter contaminants out of your water and avoid dental products containing fluoride.

   Use glass or stainless steel water bottles. Over time plastic bottles leach chemicals into the water. If you taste plastic, you are drinking it so get yourself a new water bottle.

4. Use cast iron, ceramic or stainless steel **cooking pans**. Teflon cooking utensils emit toxic particles and gases. These chemicals are known to be poisonous to birds with DuPont warning that fumes from Teflon coatings can be fatal for pet birds. In humans the fumes cause headaches, chills, backache and fever.

5. **Eat fish** with lower contamination issues such as local reef fish, mackerel & sardines. Fish with higher contamination rates include; flake (shark), orange roughy, catfish and swordfish. This advice is particularly important for pregnant women as the unborn baby is more vulnerable to the harmful effects of environmental toxins.

6. Avoid chemicals that have leached into food by buying **fresh food**. Avoid canned food, convenience foods & products stored in plastic. Food that is **microwaved** is a source of phthalates when heated in plastic. The safest option for you and your family is to stop using a microwave.

7. **Buy clothing garments locally made from natural fibres** such as organic cotton, cotton, hemp, silk & wool. These are safer fabrics to place against your skin, reducing absorption of chemicals such as formaldehyde resins through the skin.

   Chemicals such as formaldehyde are effective in softening fabrics and rendering them wrinkle free. Without strict controls, especially in developing countries the tendency is to use these chemicals freely to develop more user friendly products. These chemicals are difficult to remove from textiles, they are designed to persist. Unfortunately they are just as difficult to remove from the body. So they accumulate and can contribute to an allergy or toxicity problem.

8. **Eliminate toxic lifestyle habits** such as smoking, high alcohol intake and recreational drug use. Consider a gentle detox program once a year to rid yourself of accumulated toxins. This is especially important if you suspect chemical sensitivities or are planning for pregnancy. This recommendation applies both to the prospective mother and father. It can make a difference to the health of the soon to be conceived baby.

   When undergoing any detoxification program, using a health practitioner with particular expertise in this field provides the greatest assurance of a safe and effective outcome.

9. If you suspect **mercury toxicity** consider removing silver amalgam fillings with a qualified holistic dentist. The thyroid gland is in close proximity to this source of mercury. Over
time these fillings break down releasing mercury into your body. Replace fillings with non-metal (composite) fillings.

Mercury is not the only dental hazard. Root filled teeth can become a haven for pathological bacteria that enter systemic circulation and eventually find their way to the thyroid. There is now research to show root canal treatments can cause systemic illness and autoimmune reactions. Read more at the Weston A. Price website: http://www.westonaprice.org/dentistry/

10. Choose non-toxic personal care products. Avoid perfumes, cologne & other products with synthetic fragrances. It is ironic that cosmetic companies invest heavily into developing new products that may disguise the signs of ageing yet they use ingredients that are possible carcinogens, neurological toxins, immune suppressants and hormone disruptors, so this means the overall effect can be drastically ageing.

Check what’s really in your personal care products at the Skin Deep: Cosmetic Safety Review website: http://www.cosmeticsdatabase.com/. Your local health food store stocks personal care products and cosmetics that won’t damage your health.

11. Go for green in your home by choosing natural building products, try non-toxic pesticide control alternatives and use environmentally safe cleaning products and air fresheners.

The Environmental Working Group (EWG) think keeping your home clean shouldn’t be a health risk. Their new Guide to Healthy Cleaning shines the spotlight on household cleaning products. One of the key concerns raised by the EWG is the lack of disclosure regarding the numerous ingredients found in cleaning products. For example; a lemon fresh or pine scent isn’t necessarily healthy or natural. Fragrances are often synthetic aromas engineered by combining dozens of chemicals. Their online resource will help you sidestep harmful cleaning products and find eco-friendly alternatives. www.ewg.org/guides/cleaners
Chapter 24: Fertility, Pregnancy & Your Thyroid

Hypothyroidism can reduce your ability to fall pregnant, and even maintain a fit and healthy pregnancy. So if you are having problems conceiving it is important to include a thyroid function test along with other medical investigations.

Pregnancy can have a profound impact on the health of the thyroid. In fact, pregnancy is akin to a stress test for the thyroid. Pregnancy can often lead to hypothyroidism when there is borderline low thyroid activity or there is a coexisting iodine deficiency.

Optimal iodine reserves at the start of, and during pregnancy is essential for maintaining healthy thyroid function in the mother and encouraging healthy brain development in the baby. This is due to the fact that the baby relies on a surge of maternal thyroid hormones to provide the essential fuel for higher brain development and optimal genetic expression.

*A plentiful supply of thyroid hormones is critical in the first trimester.*

If you are considering pregnancy, or are pregnant or breastfeeding then adequate intake of iodine is essential for the brain development of your baby. The World Health Organisation (WHO) recommends women living in iodine deficient areas should take an iodine supplement before and during pregnancy and while breastfeeding.

Australian research shows that 50% of pregnant women are iodine deficient. Therefore Australian health professionals routinely recommend iodine to support all stages of pregnancy and breastfeeding.

As for your diet, it is recommended that you switch to sea salt and increase consumption of fresh fish. Note: Shellfish such as prawns and lobster are not recommended in pregnancy.

Some of the symptoms of hypothyroidism such as exhaustion and weight gain are common during and after pregnancy so the diagnosis of poor thyroid function is often overlooked. However hypothyroidism associated with pregnancy is more common than most people think and does not always show up in thyroid blood tests that only test for thyroid stimulating hormone (TSH). If you think your thyroid is causing problems I recommend you discuss getting
comprehensive thyroid testing done with your healthcare practitioner. This will help determine whether your symptoms are due to an under active thyroid.

For most women it is safe to take **thyroid hormone medication** during pregnancy. But this should be done in consultation with your prescribing healthcare practitioner. If you are already taking thyroid medication prior to pregnancy the dose should be checked regularly as the requirements may change throughout the pregnancy.

**Postpartum thyroiditis** can develop within a few months after having a baby. This form of thyroid inflammation is painless and causes little or no gland enlargement. However, postpartum thyroiditis can interfere with thyroid hormone production. Thyroid hormones may leak out of the inflamed gland in large amounts causing hyperthyroidism that lasts for several weeks. Later, the injured gland may not be able to make enough thyroid hormone resulting in temporary hypothyroidism.

Postpartum thyroiditis usually resolves on its own after several months. Following The Natural Thyroid Diet can help bring your thyroid back into balance.

**Post-natal depression** (PND), also known as postpartum depression is associated with severe mood swings and depression after child birth. Post-natal depression may appear to be the 'baby blues' at first but the symptoms are more intense and last longer. Take a look at the common signs and symptoms used to evaluate and diagnosis PND:

- Severe mood swings
- Overwhelming fatigue
- Feelings of shame, guilt or inadequacy
- Difficulty bonding with the newborn
- Thoughts of harming yourself or the newborn
- Withdrawal from family and friends

Some of these symptoms strike a remarkable resemblance to hypothyroidism, and make in fact indicate a low thyroid problem. As hypothyroidism has become so common it makes sense that all women with postnatal depression have a complete thyroid assessment to rule out hypothyroidism as the cause.

The standard medical treatment for PND is anti-depressant medication. This type of medication aims to correct possible chemical imbalances in the brain. However this may not be an effective treatment approach if the underlying cause of PND is a low thyroid. Treating the thyroid may be the best solution.
Chapter 25: The Natural Thyroid Diet - Introduction

One of the most important first steps you can take to recover your thyroid is to eat well. Today, more than ever it is important to educate yourself about the value of good nutrition and healthy eating. A natural thyroid diet provides a variety of fresh, natural foods that supply a wide range of nutrients to support healthy thyroid activity.

- The Natural Thyroid Diet contains an abundance of thyroid nourishing foods such as fruits, vegetables and nutrient dense whole foods such as healthy grains, legumes, seeds and nuts. One of the many benefits of a mainly plant based diet is the high fibre intake. Dietary fibre contributes to improved blood sugar control, healthy bowel function and has a protective effect on the cardiovascular system.

- The Natural Thyroid Diet is designed to help you lose weight. Many people with an exhausted thyroid find it difficult to maintain a healthy body shape. The goal is to achieve healthy body fat levels and good muscle tone.

- The Natural Thyroid Diet will help you identify and eliminate thyroid damaging foods. It may surprise you to learn that everyday foods may be sabotaging your thyroid. The most damaging are: artificial sweeteners, Canola oil, soy oil, hidden soy and corn (maize) ingredients and high fructose corn syrup (HFCS). Soy and Canola oil are often labeled deceptively as 'vegetable oil'.

Goitrogenic Foods: Do They Hurt Your Thyroid?

Goitrogens are substances that block thyroid hormone synthesis and interfere with iodine activity. Foods can act as goitrogens. There are two general categories of goitrogenic foods: soy foods and cruciferous vegetables.

- **Cruciferous vegetables** include cabbage, Brussels sprouts, turnips, bok choy, kale, cauliflower and broccoli. These vegetables should be limited but not avoided all together. The health benefits of these foods outweigh a possible negative effect on the thyroid. Isothiocyanates are the category of substances in cruciferous vegetables that are associated with decreased thyroid function. When you cook or ferment these vegetables you deactivate their goitrogenic activity. Isothiocyanates appear to be heat sensitive, with cooking lowering availability. The goitrogenic effect of these foods is only significant when consumed in large amounts and there is a coexisting iodine deficiency. Also remember to rotate your vegetable choices so you are not eating the same ones every day.

Avoid gluten.

It is common for individuals with thyroid problems to experience significant improvements in their symptoms when they eliminate gluten from their diet. Gluten is a protein component of grains such as wheat, rye, barley, triticale and oats. Gluten irritates the lining of the digestive
system and can trigger systemic inflammation.

Take care when selecting ‘gluten-free’ foods as food manufacturers often use corn (maize) and soy ingredients as substitutes. These ingredients can be just as problematic. Inflammation, poor nutritional status, and even a ‘leaky gut’ can persist while on a gluten-free diet if you continue to eat these gluten-free substitutes. My gluten free options are listed later in the Food Selection Lists 3 & 4.

**What is a Leaky Gut?**
The term ‘leaky gut syndrome’ describes a gut permeability problem. The lining of the digestive tract has become porous which allows larger, undigested food molecules and other unhealthy compounds such as yeast, toxins, and other forms of waste that your body normally doesn’t allow through to flow freely into your bloodstream. Once in circulation these food particles and unhealthy compounds can find their way into the thyroid as this gland has a rich blood supply. You could say, whatever is in the blood is 'washing' through the thyroid, including contaminants from within the body.

**Avoid Refined Salt.**
Resist liberally sprinkling table salt over your food or in cooking. Only use small amounts of Himalayan or sea salt during food preparation. Too much salt will amplify problems with fluid retention.

**Eliminate Sugary Foods.**
This includes sugar, soft drinks (soda), cookies, cakes, chocolate, sweets and processed breakfast cereals. These are all loaded with sugar and play havoc with blood sugar control. Problems with blood sugar control go hand in hand with low thyroid function.

**Eat Regular Meals**
Ensure you eat regularly and choose healthy snacks mid-morning and mid-afternoon to balance your blood sugar levels throughout the day. This can help ease sugar swings and fatigue. Fruit, nuts, seeds, fresh organic juices or protein shakes are healthy snack options.

**Choose Quality Protein**
A balanced diet includes high quality protein such as fresh fish, organic lean red meat, organic chicken, organic eggs or legumes. Protein foods should be eaten at least once a day to help stabilise blood sugar levels. Consuming organic red meat, chicken, and dairy foods can reduce your exposure to farming chemicals. Avoid deli meats as they contain nitrate compounds which are considered carcinogenic (cancer causing).

**Choose Good Fats**
Increase the essential good fats in your diet. Cold water fish, organic eggs, avocados, extra virgin olive oil, coconut oil, macadamia nut oil and raw nuts and seeds are rich in essential fatty acids.

**Become a Food Label Detective**
Food companies are experts at seducing consumers into buying ‘health foods’. How do they pull that off? They slap health oriented buzz words onto the front of packages expecting consumers not to flip over to the nutritional information to learn the real deal. So don't let advertising fool you. The truth is usually only revealed when you read the nutritional panel or ingredient list as there are strict guidelines on the accuracy of this information. The rest can be simply marketing hype.

**Choose Organic Fruit and Vegetables Whenever Possible**
Conventional produce can harbor multiple pesticide residues. Organic food = less thyroid disrupting pesticides and herbicides. Organic farmers also take a firm stance on biotechnology that modifies the genetic makeup of a plant by saying 'NO to GM foods'. If possible visit a local farmers market to stock up on a healthy organic produce for the week.

**Do Not Cut Calories to Lose Weight**
You may be tempted to lower your caloric intake to lose weight. However this is not sure-fire strategy when you have hypothyroidism. Drastically cutting calories lowers the conversion of T4 to T3 which further slows metabolism. Instead choose thyroid nourishing foods to aid thyroid health recovery. Side step packaged and processed foods that are high in calories but have a low nutritional potential.

**Do Not Go Raw!**
Sure, there are good reasons to enjoy some raw food in your diet. However I do not agree with embracing a 100% raw food diet when you have a thyroid issue. It is best to emphasis foods that are warming and nourishing. In short, stay away from hyped-up and restrictive diet recommendations. Choose foods that suit your environment and foods that have the greatest potential to nourish your thyroid.

**Thyroid Damaging Foods**
You can change the course of your health by avoiding thyroid damaging foods. Here are some of the worst offenders.

- **Trans fats** or ‘plastic fats’ found in margarine, TV dinners, bakery foods, commercially prepared snack foods and deep fried food are damaging to the thyroid. These very unhealthy fats are formed when liquid vegetable oils are partially hydrogenated or ‘hardened’ for use in spreads such as margarine, cooking fats for deep-frying and shortening for baking. Some trans fats are formed during high temperature cooking. These fats are very damaging to the thyroid cell membranes.

- **Coffee + Tea.** Some foods over excite the nervous system and with time can take a toll on your adrenal gland reserves. The most common dietary stimulant is coffee. It’s not a healthy option if you drink excessive amounts or make it with added syrup, soy milk, sugar or artificial sweeteners. Caffeine loaded drinks such as black tea, soft drinks and energy drinks should also be avoided.

- **Energy drinks** are a new alternative to coffee and soft drinks. They contain a large
amount of sugar and caffeine or Guarana which is a herbal source of caffeine. The caffeine energises your body temporarily. The problem is the sugar and caffeine combination in energy drinks will quickly spike your blood sugar giving you a temporary energy high. However soon enough you will come crashing down and your body will tell you it needs another sugar and caffeine hit.

- **Soft drinks.** Kicking the soft drink habit is a critical step for achieving lasting health. Shifting to diet soft drinks isn’t enough. Avoiding the refined sugars found in regular soft drinks by turning to diet soft drinks simply trades one metabolic disruptor ingredient for another.

- **Alcohol** is a known thyroid suppressor. Not only that, alcohol is packed with empty calories and places enormous stress on your liver. This is a problem when you have low thyroid function as the liver plays an important role in thyroid hormone activation.

- **Genetically modified (GM) foods.** Genetic engineering is the process of transferring specific traits or genes from one organism into a different plant or animal. These ‘frankenfoods’ as they are sometimes called are not always identified as such on ingredient labels.

Canola, soy and corn are used in many food products and are the most prevalent GM ingredients. GM foods can also contain foreign, high lectin insecticidal material. The problem with lectins is discussed later in - Food Selection Lists 3 & 4: BREADS, GRAINS AND STARCHY VEGETABLES

- **Avoid foods that contain sugar compounds** such as high-fructose corn syrup, sorbitol, fructose, mannitol, maltitol, isomalt & glycerol. **High fructose corn syrup** is believed to interfere with messages to the brain that signal satiety (appetite satisfaction), which can lead to over eating. This sugar compound also decreases the effectiveness of insulin, the hormone that helps you burn sugar for energy.

- **Avoid foods containing dangerous artificial sweeteners.** A range of artificial sweeteners are found in diet products including soft drinks, chocolate, chewing gum, lollies, desserts, yoghurt, table top sweeteners, snack food and meal replacements. They can also be found in medications and nutritional supplements.

The most common artificial sweeteners are **aspartame** (such as Equal, Hermesetas and Nutrasweet) and **sucralose** (Splenda). Other artificial sweeteners include saccharin (Sweet’N Low), neotame, tagatose and acesulfame K. The diet industry is worth trillions of dollars to food corporations, and they protect their profits by keeping the truth about the dangers of artificial sweeteners hidden from the public. There is compelling evidence to show sweeteners have the potential to cause cancer, weight gain and neurological disease. Safe alternatives to harmful artificial sweeteners are small amounts of natural honey, stevia, coconut sugar, xylitol and raw agave nectar. Only use small amounts of agave syrup as it is high in fructose.
Chapter 26: The Natural Thyroid Diet Basic Guidelines

Our modern diet is a recipe for thyroid chaos. Our diet is very different from what our ancestors ate as the emergence of corporate farming and the mass production of our food supply has drastically changed food quality. The high calorie, nutrient deficient foods now filling our supermarkets are extremely damaging to the thyroid.

*When your thyroid doesn’t get the nutrition it needs it becomes exhausted which impacts on whole body health.*

The **Daily Meal Plans** and **Food Selection Lists** are a step by step guide to choosing foods that nourish the thyroid. I don’t regard this as an ‘exclusion’ diet which would only make you feel deprived. Sure there are some foods that do need to be avoided. For example artificial sweeteners, soy oil, Canola oil and corn/maize ingredients. Rather The Natural Thyroid Diet is about bringing the good food back in so you can nourish your thyroid on a deeper level. Along with regular exercise, targeted nutrients from specific supplements and reducing stress this will help you feel inspired, purposeful, well and thriving!

**The Natural Thyroid Diet - Overview**

The Natural Thyroid Diet is in three parts. It is recommended that you read through the three sections prior to commencing the diet program:

<table>
<thead>
<tr>
<th>✔</th>
<th>Daily Meal Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>Food Selection Lists</td>
</tr>
<tr>
<td>✔</td>
<td>Exercise To Boost Metabolism!</td>
</tr>
</tbody>
</table>
Chapter 27: Daily Meal Plans

What You Need to Know

* The Natural Thyroid Diet is set out using a **Daily Meal Plan**. Use this to plan your meals for each day. In addition, there are nine **Food Selection Lists** representing each major food group. The Food Selection Lists divides similar kinds of foods into groups. For instance, there is a fruit list, a vegetable list, a starch list, and a meat list.

* Portion sizes are specified for each food. You should be able to choose any food on a list for another food on the same list. For each meal, choose foods from the specified Food Selection List to construct a meal.

* Whenever you can, **prepare your own meals** at home. It is recommended that your compile a shopping list before you go to your local market. With a grocery list in hand, you are less likely to make unhealthy impulse purchases.

* Eat **three main meals** a day. Take time to chew each mouthful to assist good digestion and increase satiety. Eat when you are relaxed, not stressed. Enjoy a healthy mid-morning and mid afternoon snack to help balance your blood sugar levels through the day. Eat at least **one fruit or vegetable** serve at every main meal.

* Choose **high quality protein** sources. A protein shake made with fresh fruit and either sprouted brown rice or pea protein can be a convenient way to increase daily protein intake.

* Be careful with **dressings, cooking oils and condiments**. They are often sneaky sources of sugars and refined oils that damage the thyroid. Soy and Canola oil are commonly listed as ‘vegetable oils’.

* Be aware that most commercial salad dressings contain harmful canola, soy or palm oil. These are usually listed as ‘vegetable oils’.

* Do not drink **alcohol or sugary drinks**. Limit **coffee** to one cup per day if you normally drink coffee. Definitely avoid diet soft drinks.

* Natural honey, stevia, xylitol, coconut palm sugar and small amounts of agave nectar can be used as **natural sweeteners**.

* Do not use a **microwave**. This destroys the nutritional value of your food.

* Drink 1-2 litres of **purified water** daily.

* Take your **nutritional supplements** as directed.
### Your Daily Meal Plan

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BREAKFAST</strong></td>
<td>1 Grain</td>
<td>1 Grain</td>
<td>1 Bread</td>
<td>1 Bread</td>
<td>1 Grain</td>
<td>1 Bread</td>
<td>1 Bread</td>
</tr>
<tr>
<td></td>
<td>1 Milk or Yoghurt</td>
<td>1 Milk or Yoghurt</td>
<td>1 Fats &amp; Oils</td>
<td>1 Fats &amp; Oils</td>
<td>1 Cheese, Milk &amp; Eggs</td>
<td>1 Cheese, Milk &amp; Eggs</td>
<td>1 Cheese, Milk &amp; Eggs</td>
</tr>
<tr>
<td></td>
<td>1 Fruit</td>
<td>1 Fruit</td>
<td>1 Cheese, Milk &amp; Eggs</td>
<td>1 Fruit</td>
<td>1 Fruit</td>
<td>1 Fruit</td>
<td>1 Fruit</td>
</tr>
<tr>
<td><strong>MID MORNING</strong></td>
<td>1 Fruit</td>
<td>1 Fruit</td>
<td>1 Protein Shake</td>
<td>1 Protein Shake</td>
<td>1 Cheese, Milk &amp; Eggs</td>
<td>1 Cheese, Milk &amp; Eggs</td>
<td>1 Fruit</td>
</tr>
<tr>
<td></td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Milk serve &amp; Seeds</td>
<td>1 Milk serve &amp; Seeds</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Milk serve &amp; Seeds</td>
<td>1 Nuts &amp; Seeds</td>
</tr>
<tr>
<td><strong>LUNCH</strong></td>
<td>1 Legumes</td>
<td>1 Meat &amp; Fish</td>
<td>1 Grain</td>
<td>1 Meat &amp; Fish</td>
<td>1 Legumes</td>
<td>1 Meat &amp; Fish</td>
<td>1 Legumes</td>
</tr>
<tr>
<td></td>
<td>1 Bread</td>
<td>1 Salad</td>
<td>1 Vegetable</td>
<td>1 Salad</td>
<td>1 Salad</td>
<td>1 Vegetable</td>
<td>1 Vegetable</td>
</tr>
<tr>
<td></td>
<td>1 Fats &amp; Oils</td>
<td>1 Greens serve</td>
<td>1 Fruit</td>
<td>1 Greens serve</td>
<td>1 Greens serve</td>
<td>1 Fruit</td>
<td>1 Greens serve</td>
</tr>
<tr>
<td></td>
<td>1 Fats &amp; Oils</td>
<td>1 Fats &amp; Oils</td>
<td>1 Starchy Vegetable</td>
<td>1 Starchy Vegetable</td>
<td>1 Fats &amp; Oils</td>
<td>1 Fats &amp; Oils</td>
<td>1 Fats &amp; Oils</td>
</tr>
<tr>
<td><strong>MID AFTERNOON</strong></td>
<td>1 Fruit</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Fruit</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Protein Shake</td>
<td>1 Milk serve &amp; Seeds</td>
<td>1 Fruit</td>
</tr>
<tr>
<td></td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Fruit</td>
<td>1 Nuts &amp; Seeds</td>
<td>1 Milk serve &amp; Seeds</td>
<td>1 Fruit</td>
<td>1 Nuts &amp; Seeds</td>
</tr>
<tr>
<td><strong>DINNER</strong></td>
<td>1 Meat &amp; Fish</td>
<td>1 Meat &amp; Fish</td>
<td>1 Legumes</td>
<td>1 Meat &amp; Fish</td>
<td>1 Meat &amp; Fish</td>
<td>1 Meat &amp; Fish</td>
<td>1 Meat &amp; Fish</td>
</tr>
<tr>
<td></td>
<td>1 Vegetable</td>
<td>1 Vegetable</td>
<td>1 Legumes</td>
<td>1 Vegetable</td>
<td>1 Vegetable</td>
<td>1 Vegetable</td>
<td>1 Vegetable</td>
</tr>
<tr>
<td></td>
<td>1 Starchy Vegetable</td>
<td>1 Fats &amp; Oils</td>
<td>1 Legumes</td>
<td>1 Vegetable</td>
<td>1 Starchy Vegetable</td>
<td>1 Starchy Vegetable</td>
<td>1 Starchy Vegetable</td>
</tr>
</tbody>
</table>
Chapter 28: Food Selection Lists

There are nine Food Selection Lists representing each major food group. The Natural Thyroid Diet is set out using a Daily Meal Plan. This is used to construct your meals for each day. And for each meal, choose foods from the specified Food Selection List.

Food Selection List 1: VEGETABLES - Your # 1 Food Choice

Food Selection List 2: FRUITS

Food Selection List 3: BREADS

Food Selection List 4: GRAINS & STARCHY VEGETABLES

Food Selection List 5: LEGUMES (BEANS)

Food Selection List 6: FATS & OILS

Food Selection List 7: NUTS & SEEDS

Food Selection List 8: CHEESE, MILK & EGGS

Food Selection List 9: MEAT & FISH

It may be useful to print out the Daily Meal Plan & Food Selection Lists to help plan your meals for each day. Remember to make the healthiest choices possible when selecting which foods to eat.

Optimal nutrition is the cornerstone of thyroid health
Food Selection List 1: VEGETABLES - Your # 1 Food Choice

Vegetables are highly nutritious, providing a wide range of vital nutrients. The best way to consume vegetables is in their fresh form. Vegetables are naturally low in fat and calories so they also help you lose weight if you are struggling to shed extra kilos.

Many environmentalists and health experts agree that a local farmers market is the best place to get fresh produce at lower prices. Check your local area for locations and times. Seeking out and preparing healthy food is part of your healing journey. If possible choose organic produce. Conventional produce is tainted by harmful agricultural chemicals. If you are not buying organic fruit and vegetables it is best to wash and scrub them thoroughly.

Cooking Vegetables

When cooking vegetables it is very important not to overcook them. Overcooking not only results in loss of important nutrients, but also alters the flavour of the vegetable. Light steaming, baking and quick stir-frying is best.

Do not boil vegetables unless you are making soup. Avoid cooking your vegetables in the microwave as this destroys their vitality. If fresh vegetables are not available, frozen vegetables are preferred over canned vegetables. Check they are produced locally, not from countries such as China.

Sea Vegetables

Sea vegetables are a rich source of iodine so these should be eaten regularly. Approximately 80% of the body's iodine is found in the thyroid gland. This trace mineral is critical to thyroid hormone production.

Vegetable Free List

In List 1 you will notice there is also a list of ‘free’ vegetables. These vegetables are termed ‘free’ as they can be eaten in any desired amount because the number of calories you burn in digesting them often offsets the calories they contain. These vegetable can also be used to help you feel satisfied between meals.

Cruciferous Vegetables

Broccoli, cauliflower, Brussels sprouts, Bok choy, broccolini, Chinese cabbage, kale, kohlrabi, radish, mustard greens, collard greens, choy sum, horseradish and turnips belong to the cruciferous vegetable family. They are healthy for most people however they can inhibit thyroid function and should only be eaten in moderation when you have a thyroid disorder. If you choose to include these vegetables in your diet they should be lightly steamed. When your body’s iodine stores are adequate cruciferous vegetables tend to be less goitrogenic.

I do not advocate raw juices that include cruciferous vegetables such as kale. Apart from this issue juicing is a great daily ritual.
**List 1 - VEGETABLES**

Note: that starchy vegetables like potatoes and sweet potatoes are included in List 4: Grains and Starchy Vegetables

*One vegetable serve = 1 cup cooked vegetables or 2 cups raw OR 1 cup fresh vegetable juice*

<table>
<thead>
<tr>
<th>Artichoke (1 medium)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus</td>
</tr>
<tr>
<td>Bean sprouts</td>
</tr>
<tr>
<td>Beetroot</td>
</tr>
<tr>
<td>Bok Choy</td>
</tr>
<tr>
<td>Broccoli</td>
</tr>
<tr>
<td>Broccoflower</td>
</tr>
<tr>
<td>Brussels sprouts</td>
</tr>
<tr>
<td>Cabbage</td>
</tr>
<tr>
<td>Capsicum</td>
</tr>
<tr>
<td>Carrots</td>
</tr>
<tr>
<td>Cauliflower</td>
</tr>
<tr>
<td>Celery</td>
</tr>
<tr>
<td>Chard</td>
</tr>
<tr>
<td>Choko</td>
</tr>
<tr>
<td>Cucumber</td>
</tr>
<tr>
<td>Eggplant</td>
</tr>
<tr>
<td>Garlic</td>
</tr>
<tr>
<td>Green Beans</td>
</tr>
<tr>
<td>Kale (small amounts when cooked)</td>
</tr>
<tr>
<td>Leeks</td>
</tr>
<tr>
<td>Mushrooms</td>
</tr>
<tr>
<td>Mustard Greens</td>
</tr>
<tr>
<td>Okra</td>
</tr>
<tr>
<td>Onions</td>
</tr>
<tr>
<td>Radish</td>
</tr>
<tr>
<td>Rhubarb</td>
</tr>
<tr>
<td>Sauerkraut</td>
</tr>
</tbody>
</table>
Snow Peas
Spinach
Squash
String beans, green or yellow
Tabouli, 1 cup
Tomatoes
Turnip
Zucchini

Free List: The following vegetables may be used as often as desired, especially in their raw form:

Alfalfa sprouts & mung beans
Chicory
Chili
Endive
Herbs – fresh varieties
Salad & Dandelion greens (non-crusiferous varieties)
Sea vegetables
Watercress

Food Selection List 2: FRUITS

Fruits are a rich source of nutrients, including minerals, vitamins, enzymes and fibre. By choosing from a wide variety of seasonal fruit you gain benefits from an extensive range of health promoting nutrients. Fruit is also an ideal substitute for foods containing refined sugars or chemical sweeteners.

Fruit contains fructose or fruit sugar. The sweetness of fructose can help reduce sugar cravings and unlike white sugar, fructose has a low Glycaemic Index (GI). Fructose in fruit is absorbed slowly into the bloodstream to provide energy. The Natural Thyroid Diet also advocates consuming fruit with other healthy snack foods or with main meals to reduce their possible impact on blood sugar levels.

List 2 – FRUITS

Each of the following serves equals one serve:

<table>
<thead>
<tr>
<th>Fruit Type</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh juice</td>
<td>1 cup (200 ml)</td>
</tr>
<tr>
<td>Fruit Salad, fresh</td>
<td>1 cup</td>
</tr>
<tr>
<td>Fruit, stewed with 1 tspn honey</td>
<td>1 cup</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Apple</td>
<td>1 medium</td>
</tr>
<tr>
<td>Apricots, fresh</td>
<td>2 medium</td>
</tr>
<tr>
<td>Apricots, dried. Note: can be high in sulphur dioxide (220)</td>
<td>30g</td>
</tr>
<tr>
<td>Avocado</td>
<td>½ medium</td>
</tr>
<tr>
<td>Banana</td>
<td>1 medium</td>
</tr>
<tr>
<td><strong>Berries</strong></td>
<td></td>
</tr>
<tr>
<td>Blackberries</td>
<td>1 cup or ½ cup frozen</td>
</tr>
<tr>
<td>Blueberries</td>
<td>1 cup or ½ cup frozen</td>
</tr>
<tr>
<td>Cranberries</td>
<td>1 cup or ½ cup frozen</td>
</tr>
<tr>
<td>Raspberries</td>
<td>1 cup or ½ cup frozen</td>
</tr>
<tr>
<td>Strawberries</td>
<td>1 cup or ½ cup frozen</td>
</tr>
<tr>
<td>‘Creative Gourmet’ Antioxidant Berry Mix (frozen)</td>
<td>½ cup frozen</td>
</tr>
<tr>
<td>‘Sara Lee’ Mixed Berries (frozen)</td>
<td>½ cup frozen</td>
</tr>
<tr>
<td>Cherries</td>
<td>12 medium</td>
</tr>
<tr>
<td>Custard Apple</td>
<td>1 small</td>
</tr>
<tr>
<td>Dates</td>
<td>2</td>
</tr>
<tr>
<td>Dried fruit, no sugar</td>
<td>30 g</td>
</tr>
<tr>
<td>Figs, fresh</td>
<td>2 medium</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>1 medium</td>
</tr>
<tr>
<td>Grapes</td>
<td>20/1 small bunch</td>
</tr>
<tr>
<td>Guava</td>
<td>1 medium</td>
</tr>
<tr>
<td>Mango</td>
<td>1 medium</td>
</tr>
<tr>
<td><strong>Melons</strong></td>
<td></td>
</tr>
<tr>
<td>Rockmelon</td>
<td>1 cup cubed</td>
</tr>
<tr>
<td>Honeydew</td>
<td>1 cup cubed</td>
</tr>
<tr>
<td>Watermelon</td>
<td>2 cups cubed</td>
</tr>
<tr>
<td>Nectarine</td>
<td>2 medium</td>
</tr>
<tr>
<td>Olives</td>
<td>5 small</td>
</tr>
<tr>
<td>Orange</td>
<td>1 medium</td>
</tr>
<tr>
<td>Paw Paw</td>
<td>½ medium</td>
</tr>
<tr>
<td>Peach</td>
<td>1 large</td>
</tr>
<tr>
<td>Pear</td>
<td>1 medium</td>
</tr>
</tbody>
</table>
Persimmon, native          2 medium
Pineapple                1 cup cubed
Plums                    2 medium
Prunes                   3 medium
Star Fruit               1 medium
Tangerine                2 medium

Additional fruit exchanges (Maximum one per day):
Canned Fruit, no added sugar or artificial sweeteners   ½ cup
Honey                                                   1 tspn

Free List
Wheatgrass juice shots

AVOID
Processed fruit & vegetable juices, jam, fruit jelly & fruit bars.

Food Selection Lists 3 & 4: BREADS, GRAINS AND STARCHY VEGETABLES

Breads, grains and starchy vegetables are classified as complex carbohydrates. These healthy carbohydrates are a vital source of energy. Complex carbohydrates are made up of long chains of simple carbohydrates or sugars. This means the body has to digest or break down the large sugar chains into simple sugars. Therefore, the sugar from complex carbohydrates enters the bloodstream slowly. This allows better blood sugar control and these foods provide energy over time.

As part of a natural thyroid diet these complex carbohydrates are best obtained from gluten free sources. Gluten is a protein found in a wide range of grains. Gluten intolerance contributes to a wide range of autoimmune responses. It is particularly important therefore to avoid gluten if you have been told you have Hashimoto’s thyroiditis. This thyroid disorder is frequently associated with gluten sensitivity and it is common to notice improvements in symptoms when gluten is strictly avoided.

The foods listed here are gluten-free but are not necessarily ‘lectin free’. If you suspect you are sensitive to lectins you need to avoid all types of grains in your diet. If you have been diagnosed with an autoimmune thyroid problem such as Hashimoto’s thyroiditis you will certainly want to learn more about lectins.

What Are Lectins?
Lectins are ‘sticky’ glue-like proteins found in all foods, especially plant foods such as grains, nuts, seeds and legumes. They are naturally occurring in plants as lectins help ward off pests.
Traditional cultures around the world process their grains, nuts, seeds and legumes by methods akin to pre-digestion before cooking and eating them as many plant compounds including lectins are resilient to high temperature cooking.

Unfortunately, the time consuming steps of soaking, sprouting and fermenting foods are generally skipped with modern cooking techniques. In addition, grain and soy ingredients are highly favoured by food manufacturers and end up in many processed food items. This means today’s diet is high in lectins.

The human digestive system has a tough time breaking down lectins and they do not fully degrade. Due to the stickiness of lectins they can bind to the lining of the digestive tract. When lectins attach to the wall of the digestive tract they trigger an inflammatory reaction which causes damage. This destructive process can lead to problems with gut permeability, or ‘leaky gut’ syndrome as it is commonly called. This is often the root cause of many complaints in the body that involve some type of inflammatory or autoimmune response.

**Lectins in Your Diet**

Going gluten-free may not be the perfect dietary solution to overcome your thyroid problem when you have co-existing lectin sensitivity. If you suspect lectin sensitivity may also be linked to your thyroid problem it’s necessary to take the ‘gluten-free’ dietary approach a step further by adopting a ‘grain-free’ approach.

Thankfully there is more awareness surrounding lectin sensitivity and some good websites offer easy to follow grain-free recipes. If you are in Australia or New Zealand I can personally recommend Tania Hubbard’s cookbook titled; “Gluten Free, Grain Free...Food We Love”.

**Testing For Lectin Sensitivity**

Remove high lectin foods such as grains and soy for a minimum of two weeks, ideally for at least three weeks. After two to three weeks, introduce one food at a time from one food group. Wait 72 hours before adding another food. During the 72 hour waiting period, document any symptoms you feel. Food intolerances commonly show up as changes in energy levels and digestive complaints.

**Gluten-Free Food Lists**

Use this list of foods to avoid the wide range of foods and beverages that contain gluten:

- Grains: wheat, rye, burghul, triticale, coucous, barley, spelt, kamut and semolina all contain gluten.

- Flours: rye, plain, self-raising and wholemeal flours contain gluten.

- Breads: spelt, rye, white and wholemeal breads and rolls contain gluten.

- Pizza bases, biscuits, crackers, scones and pretzels usually contain wheat ingredients.
• Breakfast cereals: most commercial cereals include wheat. For example Bran Flakes, Wheeties, Weet-bix, Vita-brits and Special K. Also wheatgerm, oat porridge, wheat bran and muesli contain gluten.

• Pastries and desserts: most cakes, biscuits, doughnuts, pies and puddings contain gluten.

• Some chocolates and sweets contain wheat derived ingredients.

• Pasta: spaghetti, lasagne, macaroni, cannelloni made from wheat will contain gluten.

• Noodles: Hokkein, soba, udon and many buckwheat noodle brands contain gluten.

• Soy sauce and shoyu are both made with wheat.

• Miscellaneous foods. Crumbed and battered foods, gravy, ice-cream cones, sausages, stuffing, pancake and cake mixtures, sauces, some yeasts, thickening in some ice-creams, waffles, powdered and canned soups. Most fast foods contain gluten.

• Beverages such as Ovaltine and Milo.

Most health food shops, supermarkets and speciality baker’s sell ‘gluten-free’ products. There are some foods you may not suspect contain gluten so it is best to check the ingredient list carefully to make sure they are truly gluten free. Choose organic or low sugar options when available.

Here are some suggested alternatives to gluten containing products (this is not a lectin free list);

• Breads: rice, buckwheat + 'wheat free' varieties.

• Breakfast cereals: organic corn flakes, rice bubbles, chia seeds, Amaranth, puffed buckwheat + gluten free muesli. Quinoa, rice + Polenta porridge.

• Flours: 100% buckwheat, rice, Besan (chickpea), Lupin + coconut.

• Noodles: rice + 100% buckwheat.

• Pasta: vegetable + rice varieties.

• Rice: brown rice + white rice varieties.

• Tamari is a wheat free soy sauce.

• Gluten free sausages can be bought at specialty butchers.
**List 3 – BREADS**

*One of the following equals one serve:*

<table>
<thead>
<tr>
<th>Breads</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice bread</td>
<td>1 slice</td>
</tr>
<tr>
<td>Wheat free, rye (no wheat flour)</td>
<td>1 slice</td>
</tr>
<tr>
<td>Mountain Bread, Lavash (wheat free)</td>
<td>1 slice</td>
</tr>
<tr>
<td>Tortilla (corn)</td>
<td>1 slice</td>
</tr>
</tbody>
</table>

**AVOID**

Bagels, English muffins, fruit muffins, croissants, raisin bread, hot cross buns & crumpets. All products with wheat flour and soy flour.

---

**List 4 – GRAINS & STARCHY VEGETABLES**

*One of the following equals one serve:*

<table>
<thead>
<tr>
<th>Grains</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cooked cup of grain equals one serve</td>
<td></td>
</tr>
<tr>
<td>Amaranth, quinoa and polenta</td>
<td></td>
</tr>
<tr>
<td>Rice. Arborio, basmati, brown, jasmine &amp; wild blend varieties.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crackers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice cakes, plain</td>
<td>3</td>
</tr>
<tr>
<td>Wheat free, rye crackers</td>
<td>4</td>
</tr>
</tbody>
</table>

**Crisp breads (wheat free)**

| Flour, all wheat free varieties       | 2½ tbsp    |
| Muesli varieties – natural or toasted (gluten free) | 1 cup     |

| Noodles – gluten free                 | 1 cup cooked |
| Porridge, rice or gluten free variety | 1 cup uncooked |
| Puffed cereal, unsweetened (Rice or Corn) | 1 cup     |
| Pasta, wheat free                     | 1 cup cooked |

**Starchy vegetables**

<p>| Corn                                  | ½ cup      |
| Corn on cob                           | 1 small    |
| Parsnips                              | ½ cup      |</p>
<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potato, mashed</td>
<td>½ cup</td>
</tr>
<tr>
<td>Potato, white</td>
<td>Medium - 150g</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>½ cup</td>
</tr>
<tr>
<td>Sweet potato</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

**AVOID**

Muesli bars, breakfast bars, snack bars, potato chips & corn chips.

**Food Selection List 5: LEGUMES (BEANS)**

Legumes, also known as pulses, are among the oldest cultivated plants and remain the mainstay in most traditional diets of the world. They contain a wide variety of nutrients and are a healthy and economical food source.

Compared with grains, they supply around the same number of total calories, but usually provide greater nutritional value. Legumes are low GI and are high in dietary fibre to keep your bowels healthy.

Including legumes into your healthy eating plan does not mean you have to eat completely different meals. There are lots of ways you can slightly change your favourite recipes to include more legumes. When using dry legumes, these need to be soaked for at least an hour and then rinsed thoroughly prior to cooking.

**List 5 – LEGUMES (BEANS)**

**Half a cup of the following cooked or sprouted beans equals one serve:**

| Black-eyed peas | Lentils |
| Chick peas | Lima beans |
| Felafel, chickpea patties – 2 medium | Miso Soup – 1 cup |
| Garbanzo beans | Pinto beans |
| Hummus – 1 tbsp | Split peas |
| Kidney beans | |

**AVOID**

Avoid highly refined soy foods such as soy milk, soy cheese, soy protein, texturised vegetarian soy protein, soy protein bars, soy ice cream, soy lecithin and soy oil. This also includes foods marketed as ‘dairy free’ that contain soy derivatives.

Only consume small amounts of traditionally fermented soy foods if this is part of your normal diet. This includes traditionally fermented soy milk, tofu, natto, miso, tempeh, and boiled soy beans (edamame).
Food Selection List 6: FATS & OILS

Fats, including oils are a very important part of a healthy diet. (Oils are fats in a liquid state). However, too much fat or the wrong type of fat will cause health problems including a low thyroid disorder. One of the keys to a healthy diet is to eat an adequate amount of good quality fats. It is tricky to know exactly how much good fat you are getting in your diet as most healthy fats are ‘hidden’ as a natural component of food.

The Natural Thyroid Diet limits total fat intake to less than 30% of your total calories.

You can ensure you are getting adequate healthy fats by eating foods such as: raw nuts and seeds, salad dressings based on cold pressed extra virgin olive oil, coconut oil or macadamia nut oil, avocados, organic eggs and cold water fish. These healthy dietary fats are important to improve the health of the thyroid gland and also promote weight loss.

Many everyday packaged foods are now loaded with thyroid damaging oils. When it comes to thyroid health the worst offenders are ‘vegetable oils’ and polyunsaturated oils. Canola, palm and soybean oil are often disguised as vegetable oil. They sound healthy but they actually block thyroid function. Check the ingredient list on the side of the bottle to discover the true oil source.

Use extra virgin Olive oil, organic Macadamia nut oil, Avocado oil or good quality coconut oil as a salad dressing. Mix with one third Balsamic vinegar if desired. Do not use ‘lite’ olive oil.

Avoid unnatural trans fats which damage the thyroid. These manufactured fats are found in margarine, TV dinners, bakery foods, commercially prepared snack foods and deep fried food.

These very unhealthy fats are formed when liquid vegetable oils are partially hydrogenated or ‘hardened’ for use in spreads such as margarine, cooking fats for deep frying and shortening for baking. Some trans fats are formed during high temperature cooking. Trans fats are also found naturally in meat and milk.

<table>
<thead>
<tr>
<th>List 6: FATS &amp; OILS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Each of the following equals one serve:</strong></td>
</tr>
<tr>
<td>Polyunsaturated &amp; Monounsaturated Oils</td>
</tr>
<tr>
<td>Vegetable oils</td>
</tr>
<tr>
<td>Avocado oil: use for cooking</td>
</tr>
<tr>
<td>Extra Virgin olive oil * not light, do not overheat</td>
</tr>
<tr>
<td>Macadamia nut oil: use with cooking or salad dressings</td>
</tr>
<tr>
<td>Flaxseed oil *organic – do not heat</td>
</tr>
<tr>
<td>‘Udo’s oil’ * do not heat</td>
</tr>
</tbody>
</table>
Coconut Oil | 1 tsp
---|---
Avocado | ½ medium

**AVOID**

Commercial salad dressings, margarines, deep fried food and commercial snack foods. Thyroid **damaging vegetable oils**; sunflower, peanut, corn, soy and Canola oil. Canola or 'Canadian oil' is not natural; it is from genetically modified (GM) sources.

**Food Selection List 7: NUTS & SEEDS**

Nuts and seeds should be consumed in a natural, active state. To achieve this nuts and seeds should be soaked overnight in water to minimise the nutritional inhibitors contained within. Ensure all nuts and seeds are rinsed thoroughly and dried after soaking before consuming.

Avoid roasted or dry roasted nuts as the oil in the nut has been overheated. Also avoid salted nuts and seeds.

**List 7: NUTS & SEEDS**

*Each of the following equals one serve:*

<table>
<thead>
<tr>
<th>Nuts</th>
<th>Seeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almonds</td>
<td>10 whole</td>
</tr>
<tr>
<td>Brazil nuts</td>
<td>6 whole</td>
</tr>
<tr>
<td>Cashews</td>
<td>15 whole</td>
</tr>
<tr>
<td>Macadamias</td>
<td>6 whole</td>
</tr>
<tr>
<td>Nut variety mix</td>
<td>30g</td>
</tr>
<tr>
<td>Nut Pastes. From cashews, almonds &amp; brazil nuts. Not peanuts.</td>
<td>1 tspn</td>
</tr>
<tr>
<td>Pecans</td>
<td>10 whole</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumpkin</td>
</tr>
<tr>
<td>Sesame</td>
</tr>
<tr>
<td>Sunflower</td>
</tr>
<tr>
<td>Tahini (from sesame seeds)</td>
</tr>
</tbody>
</table>

*Saturated Fats (use sparingly)*

<table>
<thead>
<tr>
<th>Saturated Fats (use sparingly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter, low salt</td>
</tr>
<tr>
<td>Cream, light or sour</td>
</tr>
<tr>
<td>Cream cheese</td>
</tr>
</tbody>
</table>

**AVOID**

Nut bars, pine nuts, walnuts, peanut paste & peanuts.
Food Selection List 8: CHEESE, MILK & EGGS

Choose dairy products that are low in fat and free from added sugar, vegetable oils, artificial sweeteners or food additives. Avoid highly refined soy milk and soy products. In Asia, small quantities of soy are consumed as traditional foods, rather than the large amounts of refined and unfermented soy products that are now found in Western supermarkets. Replace with traditionally fermented soy milk, organic dairy milk or quinoa, rice or oat milk.

If you drink milk, choose A2 milk. All milk contains a variety of biologically active factors known to activate the immune system. A2 milk does not contain the A1 protein which is often responsible for allergic reactions.

Organic eggs are more nutritious and come from farms that must also qualify for free range status. Organic eggs are sourced from farms that are free from pesticides, chemical fertilisers and antibiotics, and the birds are fed organically grown grain.

<table>
<thead>
<tr>
<th>Food Selection List 8 – CHEESE, MILK &amp; EGGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
</tr>
<tr>
<td>Cream cheese. ‘Philadelphia’ light or spreadable</td>
</tr>
<tr>
<td>Firm cheddar.</td>
</tr>
<tr>
<td>Ricotta &amp; Cottage</td>
</tr>
<tr>
<td>Eggs. Organic, medium</td>
</tr>
<tr>
<td>Oat milk</td>
</tr>
<tr>
<td>Organic milk</td>
</tr>
<tr>
<td>Rice Milk. Organic</td>
</tr>
<tr>
<td>Yogurt, dairy. No added sugar or artificial sweeteners</td>
</tr>
<tr>
<td>Yogurt, goat's.</td>
</tr>
</tbody>
</table>

AVOID

Avoid fat reduced cheese (higher in A1 protein). Highly refined soy foods and ingredients such as soy milk, soy cheese, soy ice cream and soy lecithin.

Food Selection List 9: MEAT & FISH

When choosing from this list, it is important to choose primarily from the low fat group and to remove the skin of poultry. Organic eggs and seafood are better protein sources as they contain less fat. Chicken, turkey, pork and red meat are higher in fat.

Emphasise cold-water fish such as wild salmon, sardines and herring as they are higher in essential omega-3 fatty acids. These beneficial oils have a positive effect on cholesterol ratios and triglyceride levels.
Farmed or wild salmon, which is best? A study of salmon fillets obtained from supermarkets in sixteen cities in North America and Europe discovered elevated concentrations of organochlorine compounds such as polychlorinated biphenyls (PCBs), dioxins and chlorinated pesticides in farmed salmon compared to wild caught salmon.\(^8\) Despite the presence of beneficial omega-3 fatty acids the net health gains of consuming farmed salmon may be outweighed by the high concentration of toxins that find their way into these fish.

### Food Selection List 9 - MEAT & FISH

*Each of the following equals one exchange:*

#### Low fat (less than 15% fat content)

<table>
<thead>
<tr>
<th>Item</th>
<th>Exchange Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef – lean cuts</td>
<td>120 g</td>
</tr>
<tr>
<td>Fish – fresh, local varieties. Grilled or baked</td>
<td>150 g</td>
</tr>
<tr>
<td>Fish – canned. Paramount Wild Salmon, tuna varieties in water.</td>
<td>100 g</td>
</tr>
<tr>
<td>Lamb – lean cuts</td>
<td>100 g</td>
</tr>
<tr>
<td>Oysters – shelled</td>
<td>6 medium</td>
</tr>
<tr>
<td>Poultry – free range or organic chicken or turkey, without skin</td>
<td>120 g</td>
</tr>
<tr>
<td>Prawns/shrimp – shelled</td>
<td>100g</td>
</tr>
<tr>
<td>Sea scallops</td>
<td>100g</td>
</tr>
<tr>
<td>Veal – lean cuts</td>
<td>100 g</td>
</tr>
</tbody>
</table>

#### Medium fat (for each omit ½ fat exchange)

<table>
<thead>
<tr>
<th>Item</th>
<th>Exchange Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef – ground (15% fat), canned corned beef, rib eye, round (ground commercial)</td>
<td>100 g</td>
</tr>
<tr>
<td>Organ meats</td>
<td>90 g</td>
</tr>
<tr>
<td>Pork</td>
<td>100 g</td>
</tr>
</tbody>
</table>

#### High fat (for each exchange omit 1 fat exchange)

<table>
<thead>
<tr>
<th>Item</th>
<th>Exchange Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef – mince, hamburger</td>
<td>90 g</td>
</tr>
<tr>
<td>Duck or goose</td>
<td>90 g</td>
</tr>
<tr>
<td>Lamb – breast</td>
<td>100 g</td>
</tr>
</tbody>
</table>

### AVOID

Cured meats such as bacon, ham, hot dogs & deli meats as these foods are high in nitrate compounds which are carcinogenic (cancer causing). Fried or smoked fish. Also some fish varieties should be avoided as they contain concentrated amounts of environmental contaminants. In Australia avoid swordfish, marlin, tuna, shark (flake), catfish (basa), broadbill & orange roughy (sea perch). Check which fish have lower contamination levels in your area.

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Chapter 29: Exercise to Boost Metabolism

A natural thyroid diet provides your body with the energy it requires to perform at its peak. Together with regular exercise, this is a powerful combination. Exercise naturally boosts thyroid hormone activity to enhance the rate at which energy is utilised by your body. The net total effect is a boost to your metabolic rate.

The Benefits of Exercise on Thyroid Health

Regular exercise naturally boosts your thyroid activity and ensures the cells of your body are more receptive to the effects of the thyroid hormones. Exercise also has specific advantages to improve your overall health including:

- Burns body fat to assist weight loss.
- Strengthens and tones the muscles.
- Improves nervous system communication.
- Combats stress and elevates your mood.
- Encourages strong bones.
- Improves blood sugar control.
- Boosts immune function.
- Protects the heart and blood vessels.
- Improves healthy hormone balance.

Regular physical activity needs to become a habit in your life. Choose activities that fit your energy levels and always exercise within your limits. When you are physically fit you can expect improved physical strength, flexibility, balance and cardiovascular endurance.

Remember, if you feel unwell when exercising it is best to slow your workout down. As your energy levels improve you will be able to tolerate a greater amount of exercise.

Walking

There are many activities that can improve your overall cardiovascular fitness. Regular walking is one of the best overall activities. It can be done almost anywhere, it places very little strain on your joints and involves all the major muscle groups. Walking is a great fitness activity. It is ideal as it can be performed alone or with a group at your individual pace.

Yoga

Yoga is a great way to improve your cardiovascular fitness and flexibility. There are different forms so I recommend you participate in a less intensive form that focuses on breathing and flexibility as opposed to some forms of yoga that .

Expert Tip

Here are some tips to get the most out of your workout:

- Walk as fast as you can. Walk within your limit and gradually increase your workout time and pace.
• Conquer some hills. Walking up hills or over hilly terrain adds to the intensity of the workout. This increases fat burning and will help tone your buttocks and thighs.
• Walk whenever you can. Think about leaving your car at home when you go out to social activities or go shopping. Walk for 20 minutes in your lunch break. Walk up the stairs instead of taking the lift. Incidental exercise over a day does add up.

When doing any form of exercise it is important to warm up and cool down. A warm up can be as simple as starting your activity at a low level and then gradually increasing the intensity over a five-minute time span.

When you are cooling down, decrease the intensity of your workout. Stretching can be incorporated in to a cool down.

Intensity
Taking your heart rate, which is measured in beats per minute, can monitor the intensity of your exercise session. The easiest way to take your heart rate is to count your pulse over 15 seconds, then multiply this number by 4. This then gives you the beats per minute.

The pulse is most effectively measured over the carotid artery in the neck. You could also take your pulse at the elbow (brachial artery) or the wrist (radial artery).

To improve your fitness level it is recommended that you work at 60 - 80% of your maximum heart rate. At this moderate level you can maintain your workout for a longer period of time. The following equation can be used to determine your ideal heart rate:

\[
\text{For men} \quad \text{Maximum Heart Rate (MHR)} = 220 - \text{age} \\
\text{For women} \quad \text{Maximum Heart Rate (MHR)} = 225 - \text{age}
\]

Example: A female aged 45 has a MHR of 180. To exercise at safe rate her heart rate should be around 126 beats per minute. (70% of 180 = 126)

Expert Tip
• Increase the intensity of your exercise sessions over time. Once you become comfortable with a routine, it is important to increase the intensity in order to continue benefiting.

Frequency and Duration of Exercise Sessions
It is recommended that you exercise at least 4-5 times a week to improve your fitness levels. The morning is the ideal time to exercise as this kick starts your metabolism for the day. You will burn more calories, even after you have stopped exercising.

Has a sluggish thyroid caused weight gain for you? Are you ready to optimise weight loss? Then it is best to aim for a minimum of 40 minutes of physical activity.

If you are just starting out with an exercise plan, work within a comfortable level. If you are breathless or feel stressed, slow the pace down.
Doing too much exercise too soon could result in injury. When you start an exercise program that is realistic you are more likely to make lifelong changes.

**Expert Tip**
- The more exercise you do the greater capacity you have to burn calories for energy. Even incidental exercise drives your metabolic rate.
- A daily walk in the morning will result in more calories being burned during the day. This is also a great way to start the day.
- Avoid exercising on main roads and other polluted areas. Walking in a park or by the beach is healthier and more enjoyable.

**Remember to Stretch**
Do you have trouble touching your toes? Do you suffer from back pain? If so, you could benefit from regular stretching to improve flexibility. Stretching reduces post workout muscle tension and helps prevent injuries.

Flexibility is an important aspect of physical fitness. It’s recommended that you perform a set stretching routine as part of your cool down after any form of exercise. You may also want to try a gentle yoga or Pilate’s session to improve flexibility.

**Steps for Success**
- Take your time stretching. Relax into the stretch and hold the stretch for at least 20 seconds. Do not bounce in the stretch. This increases the risk of injury and actually tightens the muscles.
- Remember to breathe while stretching. This improves circulation and oxygen supply to the muscles. Stretching should not cause pain. Stretch to the point where you can feel the muscle lengthening. If you are sore and your muscles feel tight the next day you may have overstretched your muscles.

**Keep Hydrated**
- Drink 1-2 litres of purified water daily to stay well hydrated. Your body is composed of 60% water. It therefore it requires constant hydration.
- Even a 2% drop in body water can trigger fatigue and poor concentration. Thirst may also be mistaken for hunger. Avoid drinking at meals as this dilutes the digestive enzymes and reduces absorption of important nutrients. Drink water or fresh juices at least one hour away from meal times.
Conclusion – The Natural Thyroid Diet

I sincerely hope you have gained a holistic perspective to recovering your thyroid in a natural, safe and effective way. By choosing healthy foods that nourish the thyroid, adding nutrients that support thyroid activity, reducing stress and performing regular physical activity it is really is possible to start recovering your health in just a few short weeks.

This can help you lose weight, increase your energy, and get back the vibrant and happy life you want and deserve!

The Natural Thyroid Diet. The 4-Week Plan to Living Well, Living Vibrantly can be life changing. If you are inspired, motivated and celebrating renewed health please share your experience with those who are also struggling with low thyroid function. Refer them to The Natural Thyroid Diet website to purchase their personal copy.

Feedback
If you would like to provide feedback on The Natural Thyroid Diet. The 4-Week Plan to Living Well, Living Vibrantly I would love to hear from you!

Disclaimer
The Natural Thyroid Diet. The 4-Week Plan to Living Well, Living Vibrantly is a source of information for educational purposes only to assist you in living well. The information presented in The Natural Thyroid Diet. The 4-Week Plan to Living Well, Living Vibrantly should not be considered a substitute for advice from your qualified healthcare practitioner who should always be consulted before beginning any new diet, exercise or health program. Never ignore or delay seeking professional advice relating to your personal health issues.

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To introduce myself... my name is Louise O’Connor and I am a registered Australian Naturopath.

For many years I had my own private practice where I treated numerous clients suffering with hypothryoidism. My clients felt such relief when they first met with me. Finally someone understood their thyroid problem!

Often the clients who came to me were extremely frustrated with the conventional medical approach. They were finding it hard to get a proper diagnosis, the synthetic thyroid medication was not making them feel any better or they felt their symptoms were being downright ignored by their doctor when the thyroid TSH test was considered ‘normal’.

I gave them HOPE. YES it really was possible to recover their thyroid health...to finally feel better.

Because of my professional experience and my ongoing interest in thyroid health research I have developed a unique depth of understanding of thyroid problems and the best natural solutions to recover thyroid health.

I can also help you end the frustration with your thyroid health. The Natural Thyroid Diet. The 4-Week Plan to Living Well, Living Vibrantly is the exact same step-by-step plan I gave my clients. You can now use this guide to help recover your thyroid health - literally starting today.

**My Focus as a Naturopath**

*My focus as a Naturopath is thyroid health. I want to reach out to as many people as possible to plant the seed of hope. Armed with credible information and the courage to create change it really is possible for you to finally take control of your thyroid health...to reclaim the vibrant health you deserve.*

Live well, live vibrantly.

*Louise O’Connor*

Naturopath + Wellness Coach
Want more?
To read my blog articles, product recommendations and research updates and so much more connect with me!

Be sure to subscribe to my thyroid health eNewsletters to get the latest information on thyroid health delivered straight to your inbox. Just opt in at The Natural Thyroid Diet homepage: http://www.the-natural-thyroid-diet.com

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