The Thyroid
Misunderstood, misdiagnosed, mismanaged or just plain ignored.

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Let me tell you ...

“Calm mind brings inner strength and self-confidence, so that’s important for good health.”

Dalai Lama

Il too often we, health care practitioners, concentrate all our energies on cardiovascular health, diabetes, mental illnesses, joint issues, but we rarely talk about thyroid health, unless the patient is screaming at us with all the symptoms that are applicable.

But if a patient has a bowel issue, or asthma, or eczema, rarely do we think to look at the thyroid. Why you ask? Good question, considering that every cell in the body that has a DNA has a receptor site for thyroid hormones. Read ahead and you will discover the magic of this little gland.

Thyroid dis-ease is on the rise. It affects over 7% of the Australian population; of that 11.5% are female aged 51 to 60 years. It goes up exponentially after that.

And when it begins to cause problems, the symptoms are wide and varied.

One of the questions I am asked on a regular basis by my thyroid patients is, ‘why do I have this huge array of different symptoms?’

Why is it affecting my hair making it thin and why is it falling out? Why am I suffering from constipation, or diarrhoea, why do I feel like my brain is swimming in a thick pool of fog, why don’t I have energy anymore, and the big one, why can’t I lose weight.

All too often, women who sit on my couch, bemoan the fact that they can put on weight with a glass of water. Frustration is high with most people that suffer from any thyroid issue.

So let me tell you and explain to you, once and for all what is going on and why all these symptoms are occurring.

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Counting the beats ...

“A person too busy to take care of their health is like a mechanic too busy to take care of his tools.” ~ Spanish Proverb

The heart is the most important organ in the human body, after all without it we are dead, all too obvious. The heart pumps blood all around the body, taking vital oxygen and nutrients to every living cell, so those cells can do their job.

The next most important organ considered in the hierarchy of the body is the brain; after all it’s job is to gather information from all over the body and then send messages to various other organs and glands to secrete hormones or to pump blood faster, or to stop doing a job so we can survive a given situation.

We are very familiar with these two organs, albeit we are forever uncovering new and exciting pathways in the brain and getting to understand more about the brain. Having said that, we all understand why there is so much research done into these two precious organs.

Heart and brain facts

Every day, your heart beats about 100,000 times, sending 7,500 litres of blood surging through your body.

Although it’s no bigger than your fist, your heart has the mighty job of keeping blood flowing through more than 97,000 kilometres of blood vessels that feed your organs and tissues.

Approximately 20% of the blood flowing from the heart is pumped to the brain. The brain needs constant blood flow in order to keep up with the heavy metabolic demands of the neurons. Brain imaging techniques such as functional magnetic resonance imaging (fMRI) rely on this relationship between neural activity and blood flow to produce images of deduced brain activity.
The next most vital organs to understand are the liver and the gut. And fair enough, without a healthy liver, our bodies will certainly be in a lot of trouble. After all its main function is to process all the nutrients we consume, process all the toxins that come into the body and send these wherever it feels they are needed or, if a substance is not needed, then send it out the back door.

The liver is the only organ in the body that will regenerate, which just goes to show how important it really is.

And as for the gut, well, we are learning more and more about it’s importance on a daily basis. Researchers are now spending countless hours trying to understand the true role of gut bacteria. The gut microbiome.

They are trying to understand the symbiotic relationship between our brain and the gut microbiome, and a whole host of new research dollars are being spent trying to make links between gut health, autoimmunity and brain function. And rightly so, gut health is paramount to good health.

Funny though, it has just taken us thousands of years to realize this. Hippocrates, the father of medicine, back in 435 BC, stated, that all death started in the gut. What a wise man.
The Thyroid - Misunderstood, misdiagnosed, mismanaged or just plain ignored

This little gland is the thyroid.

So here’s the thing. Did you know that every cell, and I mean every cell with a nucleus, so we are not talking about red blood cells, which is a good thing, has thyroid hormone receptors.

For those of you suffering from a thyroid condition, isn’t the body a wise thing. Without our red blood cells doing their job properly, we would really be up the creek without a paddle or two.

Anyway, I digress, so we will go back to every cell within the human body contains a receptor site for thyroid hormones. Hmm why is that? Well thyroid hormones are like a key, which when turned, activates the DNA within the cell, so the cell is able to do its function.

Hmmm … what is the thyroid?
The word thyroid comes from the Greek word, Thyreos, meaning shield. And this is exactly part of its function, to act as a shield, protecting the body from what could be a harmful situation.

The thyroid acts as the starter gun for a body relay. Messages received by the brain are passed to the pituitary gland, and then onto the thyroid gland, which will pass on a message directly to cells throughout the body, telling those cells what needs to be done.
Let’s labour this point for a minute.

If a cell, (and remember, that can be every cell, or any cell in the body), does not receive its required dose of thyroid hormone, and by that we are talking about T3, then that cell is not able to function at it’s optimum level. Hence, why the symptoms of thyroid dysfunction are widespread throughout the body and so incredibly varied.

Ok so now can you see why I think it is the 5th most important organ/gland above all else. If this little gland, doesn’t make the right amount of thyroid hormone then the cells in our body are unable to function. That means that the brain will be affected, so will the heart, so will the liver and the gut. The brain, liver and gut also play a huge role in the making and conversion of thyroid hormones, so it is imperative they are also functioning at optimum level. However, they can’t do that, unless the thyroid is functioning at optimum level. So it is like the chicken and the egg thing, which comes first?

All too often, when a patient get’s symptoms and they go to see main stream doctors, (who are fabulous by the way, I’m not bagging them), they are treated just for the symptoms never the cause. Or should I say, rarely for the cause.

So what is the cause you ask?

Well let’s explore that. Ready for an anatomy and physiology lesson? I will try and explain this in really easy to understand terms, because it is uber complicated if you delve into the biochemistry of it all. So I’ll just explain it like I do to my patients.
It begins with the brain.

The brain, (the hypothalamus) the master controller, the reader of all things around us and in us, our internal and external environments, recognises there is a change needed. Something is not quite right, so a change within our internal environment needs to happen if survival is to continue.

So the hypothalamus will relay a message to the master operator, the pituitary gland. It’s small and sits just behind the ear deep in our brain. The pituitary gland hears the message and needs to get things moving, so it sends out its own message to the thyroid gland to make thyroid hormones, so the cells further down the line can perform their job. It does this via thyroid stimulating hormone (TSH).

The thyroid receives this message then set’s about making T3 and T4. So what are these and how are they made?

We ingest iodine (a mineral found in foods like sea vegetables) and tyrosine (an amino acid found in meat and vegetables) and this travels down to the gut, where it is absorbed, packaged in the liver and sent to the thyroid. Once, it is received by the thyroid all sorts of magic happens within the centre (colloid) of the thyroid cells. The iodine is converted to iodide, and this is then packaged together with tyrosine to make T3 and T4 – the T standing for tyrosine and the 3 means, 3 molecules of iodine and the 4 means 4 molecules of iodine.

T3 is the active version, which means the receptor sites on all cells are waiting for T3 to arrive to be used. T4 is not active. It must be further converted to T3. This happens in the liver, gut and peripheral tissues.

The thyroid itself only makes 7% active T3. Crazy isn’t it? This is one part of the grand design of the human body I think evolution or our maker got wrong. LOL.
So let’s look at the journey of T4 and how does the conversion happen. The thyroid makes T4 and this needs to get from the throat region to the liver and to the gut where the good bacteria of the gut can do it’s thing. It does this by binding to thyroid binding globulin (TGB), a protein that travels through the blood stream down to the liver and gut.

60% of the T3 then goes through two pathways (sulfation and glucoronidation) within the liver and is converted to T3, if these two pathways are working properly.

20% of the T3 is converted, through the same two pathways, into reverse T3 (rT3) and this never becomes active. It lays dormant, never to be activated. Scientists are not sure what the significance of this is.

20% of the T3 is processed and sent to the gut where the good bacteria does its thing and converts it into active T3. The defining word in that sentence is ‘good’. So what is ‘good’ bacteria. Well these are the vegetable eating ones. When I describe ‘good and bad’ bacteria, I like to think of them in terms of the foods they eat. The ‘good’ ones eat vegetables, whole grains, fruit, seeds etc., in other words they live on whole foods.

The ‘bad’ bacteria are the ones that thrive on processed and unrefined carbohydrates, meat and dairy. If the diet you are consuming is made up of foods that are processed or high in fat, sugar and salt then you probably have an imbalance within the ‘good and bad’ bacteria, and this will directly affect the gut’s ability to convert 20% of your T4 to active T3.

I must add here - not only does the food you eat affect your gut bacteria, but so too does your stress levels. So too does every negative emotion you feel throughout the day. The latest scientific research looking at the gut, is focusing on the gut/brain connection and how our mood and our mindset influences this gut bacteria.

This is a scary thought don’t you think?
If every negative thought you have during the day affects (potentially destroys) these little helpful creatures …

… prevents T4 converting to T3 …

… which means you don’t have enough keys to unlock the DNA in your cells …

… which doesn’t allow you to have the energy you need for the life you’ve created …

… how do you stop doing that?

Excellent question. I will discuss this further into the book.

In the meantime back to the bacteria.

So what I am saying is, whatever diet regime you are consuming, it needs to support your ‘good’ bacteria if you want optimal conversion of T4 to T3.
Thyroid impactors ...

“Today, more than 95% of all chronic disease is caused by food choice, toxic food ingredients, nutritional deficiencies and lack of physical exercise.”
Mike Adams

Here are a few things you should avoid because they directly impact your thyroid:

Gluten.

Gluten is a protein that is found in wheat, barley and rye. You need to avoid this at all cost. I tell my patients to consider themselves to be a coeliac, if necessary.

Consider that gluten is a poison and you will not recover from feeling the way you do if you do not avoid it at all cost. It is ubiquitous. Found in way more products than you would ever thought it could be. Like soy sauce, ice cream, coffee, beauty products, medications and supplements, hot chocolate and so many more. Oh my goodness that is just crazy, right?

Also be careful if the label says, wheat free, as it still may not be gluten free, because gluten is in barley and rye as well. The issue with gluten is that we, as human beings, do not have the enzymes necessary to break down the gluten so it can be absorbed via the intestinal cells. So instead the body releases a substance called Zonulin, which allows the gluten to slip through the wall of the gut into the blood stream. This is often called ‘leaky gut’ or ‘intestinal hyper-permeability’.

Once the gluten is in the blood stream it is seen by the immune system as a foreign invader, which then acts to rid the body of it. If we continually consume gluten, the immune system can become over reactive and begin to target other protein structures in the body that resemble gluten. The most common one of these in the body is the thyroid.

This is how most autoimmune diseases begin, with a ‘leaky gut’.
Dairy.

Dairy causes all sorts of issues for the gut. Again it is the protein in the dairy, casein, that is the problem. Casein causes inflammation in the gut and the overflow of this inflammation can cause an upstream reaction, which will eventually impact the thyroid.

Meat and Free (Bottled) Oil and Fat.

I could just repeat the dairy paragraph here. However, the fat content also needs to be considered. Fat in meat, or as a free oil/fat also causes some issues. Remember the Thyroid Binding Globulin, the thing that transports the T3 and T4 around the body, well this can become blocked if our diets are high in saturated fats or free oils. The problem with this is that the hormones now can’t get where they need to go to be converted.

Fluoride.

The thing about fluoride is it lives in the same part of the periodic table as iodine, so they look similar to the body. However, iodine is necessary for the production of thyroid hormones, and fluoride is not. The interesting thing is in the 1950s fluoride tablets were given to hyperthyroid patients to reduce thyroid function (Merck Index 1968) (McClaren 1969; Galletti 1958; May 1937).

The dose they were given was between 2 – 5 mg per day for several months, we are now consuming on a regular basis, if your community has fluoridated water, between 1.6 – 6.6 mg. This sure is food (water ☕️) for thought. I strongly recommend using a water filter that takes out the fluoride. I personally use one from OptiLife.
Stress.

The last, but by no means the least, is controlling stress. Both internal and external stressors.

External are the easy ones, keep pesticides, herbicides, chemicals and other external toxins out of your life. Read labels, and if you are unable to understand what a particular ingredient is on that label, if you are unable to grow it in your back yard, then best avoid.

The internal stressors are the tricky ones. One way I do this regularly is by asking myself a question when I am confronted by a chore, a request from a loved one, or an argument with someone, I ask myself, what will be the benefit to me if I say, yes, act in a certain way, or do this.

This does not mean that I don’t do things I don’t like doing. Sometimes I have to because the benefit/s outweigh the discomfort. It means the job is then done and I don’t need it to worry any longer. I hope that makes sense. I find if I have asked myself “what is the benefit to me?” - I find that nearly all the horrible chores have silver linings, and therefore my stress levels are lowered.

“The part can never be well unless the whole is well.” Plato
Stress comes from the inside and out

Internal stress can also come via the food we consume. Again, ask yourself, what will be the benefit to my body if I eat this particular food?

Most of the time, your own body will tell you the truth. For example, confronted with a Krispy Crème, what will be the benefit to my body? NONE is usually the answer. However, it just could be that your brain and emotions will respond with, YES the benefit is I will feel comforted, happy, and it I will satisfy the craving.

OK so now there appears to be a benefit, so can I eat it then. NO not yet, you need to keep asking yourself more questions. For example, the Krispy Crème will satisfy the craving, make you feel good for a minute or two, but now you need to ask, why do I need to feel better than I am already? What is stressing me out to crave such a sugary fat laden food? What could I do instead to satisfy this emotion? Who is it that is stressing me and how could I deal with this differently.

The whole internal voices in our heads, internal stress, needs to be addressed constantly and daily, if you are wishing to have optimal health and optimal thyroid health, optimal metabolism.

It is truly amazing, how well your body responds, if you ask it what it needs to diminish stress levels. Meditation is always a winner and there are now loads of research confirming the healing benefits of meditation. Intimacy and relationship with any human being or maybe a pet, improves health outcomes exponentially.
The best advice I can give any of my patient’s is to eat the correct foods that will give you optimal thyroid health. Stay away from things that block conversion or liver function. Eat foods that allow your ‘good’ bacteria to flourish. Engage in activities that aid stress reduction and love those around you for who they are and what they bring to your life.

Good health is a birth right, and it is my opinion that we should not follow the doctrine that everyone will get something wrong with them, it is just a matter of time. I do not believe this at all. Sure, we may find ourselves facing a health crisis, I certainly have had my share of these over the years, however, I will not be defined by them. I do not allow myself to focus on how horrible they were, or why me, or that shouldn’t have happened.

No I try my best to learn from each experience, I believe each one of my health crises over the years, has allowed me to become a far more empathetic practitioner, I understand most things and how people feel as I myself have had the experience. Not all of them, but a fair few.

I know what it is like to face a diagnosis and feel helpless and hopeless, it’s a terrible feeling, but I also know what it is like to prove the diagnosis wrong. I know what it is like to take charge of my health, to make the decisions necessary to change outcomes and to reverse disease processes. And may I say, doing this, is far more empowering and gives you such courage that all the hard changes you make, all the so called, restrictions you have had to apply, pale into insignificance. As soon as health returns, energy returns, life returns and most of all respect of self returns. This is empowering.

I hope that this little eBook has taught you a thing or two. I hope it empowers you, the reader, to be able to ask more questions, and I pray that your thyroid returns or remains in optimal health, and therefore you have all the energy required for the life you have created.

Should you wish to engage with me further, please feel free to contact me. I live and work in Melbourne, but I also do Skype consults all around the country, so don’t let that stop you from contacting me. I look forward to hearing from you.
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