Inside this issue:

The Future of Thyroid Diagnosis and Treatment

The Impact of Heavy Metals on Thyroid Health

#T3Campaign Update

The Parathyroids
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Blue Horizon Medicals makes a small donation to Thyroid UK.

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http://tinyurl.com/tuk-bluehorizon

Letter from Member

Dear Lyn

Just a note to thank you for including the article about goitrogens by Dr Westin Childs in the recent newsletter.

It was somewhat reassuring learning about the huge number of foods (most of which are otherwise nutritious and healthy) which are in this category and are therefore to be treated with caution by those of us with thyroid problems.

Who knew how many vegetables are brassicas, and far from being limited to the obvious ones such as cabbage, sprouts, kale, broccoli and cauliflower as one naively believed?

Dr Childs brought a sense of proportion and balance to this whole matter.

I’m certain that many other members will have found this information very useful.

Yours sincerely

Cynthia Reavell
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Disclaimer

Although we believe that the information in this magazine is correct, we cannot be held responsible for individual situations. Whilst every care is taken in preparing this material, Thyroid UK cannot accept any responsibility for any damage or harm caused by any treatment, advice or information contained in this magazine. You should consult a qualified health practitioner before undertaking any treatment. We are happy to forward any correspondence to individual readers, but we cannot be held responsible for the views in that correspondence. Views expressed in readers letters, articles, book reviews and advertisements do not necessarily reflect the views of Thyroid UK, nor should their placement in the magazine be taken as an endorsement by Thyroid UK.
Hello Everyone!

I hope you had a good Christmas and New Year. Let’s hope this year brings better things for thyroid patients.

I’m afraid the promised report of the T3 Symposium is not finished. I do hope that I will have time to write it in time for the next issue.

We had the training for the new website but unfortunately we’ve hit a few technical problems with putting content on which I hope to rectify over the next month. We have spent several hours trying to sort it out but I think we may need to find someone to help us. Technology!

The new Nice Guidance on thyroid disease has now been published and you can find information on this on page 14.

As I said in the last issue, we are going to be working with two new testing laboratories - Phoenix Pathology is one, where there is no need to book. They are in Harley Street and you can just walk in and ask for thyroid testing. You can find information about this here:

http://thyroiduk.org/tuk/testing/private_tests.html

The other company is MonitorMyHealth which is based in an NHS Hospital. We are just finalising things and so there will be more news of this in the next issue.

Discussions about the new partnership I spoke of previously are still ongoing but we hope to have further news in the next issue.

I thought I would let you know about some of the other work that Thyroid UK has to do.

Charities have to be very careful about the work that they do.

Thyroid UK has to abide by the rules and regulations of the Charity Commission and Companies House. We have to not only prove that we are working for the public benefit but we also have to show that we look at various aspects of risk and governance.

A lot of the work we do at board meetings is looking at how we are run, ensuring that we abide by these rules and codes.

One of our trustees deals with risk for a living and so she was extremely helpful in looking at what risks there are for Thyroid UK and what we can do to mitigate them. This includes financial risk, operational risk and the risk of not complying with various obligations such as data protection and the governance code.

At our next board meeting, we will be looking at the Charity Commission’s updated Governance code-

https://www.charitygovernancecode.org/en

All this is a lot of work for us but it’s very important.

Our two prospective trustees, who we hope to bring on board at the next meeting, work in the financial world and their skills will really help us.

I will keep you updated about things next time.

Best wishes,

Lyn Mynott
Chair/Chief Executive
We would like to sincerely thank everyone who has donated over the last few months. £5,493.00 was raised altogether which includes an amazing donation of £5,000 from someone who wishes to remain anonymous. This donation was Gift Aided so that means it brings us an extra £1,250. A huge THANK YOU goes to this donor!

We have also managed to reclaim £296.25 in Gift Aid. Thank you so much to everyone who has remembered to Gift Aid their membership fees – this makes a huge difference to Thyroid UK!

How You Can Help Us

eBay for Charity

Have you received any unwanted Christmas presents? Perhaps you have received the same gift from more than one person? You could help Thyroid UK by selling them on Ebay and donating part or all of the sale to us.

How does eBay for Charity work?
eBay for Charity has partnered with the PayPal Giving Fund to make it easy for sellers to donate 10% to 100% (or as low as 1% for eBay Motor vehicles) of your item's final sale price to a certified charity. It's as easy as 1 - 2 - 3!

How do I add Thyroid UK to my listings?
When you list an item for sale look out for the charity ribbon and choose “Donate a portion to Charity” option. Select us from the list of available options and select the percentage you would like to donate. We will then be notified of your listing.

Charity fee credits
When you create a listing with eBay for Charity and that item sells, eBay will credit the insertion and final value fees back to you, equal to the percentage of the final sale price that you elected to donate. After the item sells and the buyer pays, dispatch the item. The donation is collected in approximately 21 days to ensure the transaction is complete. You will then receive a confirmation email.

At the end of each month, PayPal Giving Fund combines the donations from individual sellers and sends 100% to the selected charity.

It’s a great way to donate to us!

For more information, you can download the eBay For Charity guide here: https://tinyurl.com/tphms8l
Our Fundraisers

On 7th Sept Team Thyroid UK clambered over, through and under 5km of inflatable obstacles to raise funds for Thyroid UK.

The team included Louise Roberts, Neil Roberts, Jack Tomlin, Chris Mynott and Charlotte Beauclerk. They all did extremely well and raised an amazing £743.25 which includes a donation of £100 from Asda. Thank you guys for doing yet another challenge to support Thyroid UK!

In June, Margaret North did a Birthday Fundraiser on Facebook for Thyroid UK and raised a fantastic £102.

Thanks very much Margaret - hope you had a great birthday!

If you would rather donate to Thyroid UK than receive gifts for your birthday or anniversary, it’s very simple to do a Fundraiser on Facebook.

All you need to do is to scroll down the page to the “Fundraiser” box and click “Create a Fundraiser” and follow the instructions.

We will see that you are raising funds for us and how much you have raised.
The link between heavy metals and an underactive thyroid is not well understood, though there is now enough scientific research to argue that heavy metals can trigger a diagnosis of hypothyroidism and therefore diagnosis could be ultimately avoided.

Such heavy metals, along with other chemicals found in fertilizers and plastics are known as endocrine disruptors, in other words they disrupt all hormones. The thyroid gland produces 2 hormones: thyroxine (known as T4) which converts to the more metabolically active triiodothyronine (known as T3), mainly in the liver.

Heavy metals have been suggested to decrease levels of T4 and T3 by interfering with thyroid building enzymes, competing with micronutrients essential for thyroid hormone production and increasing thyroid antibodies. Eventually, thyroid stimulating hormone (TSH) increases due to low levels of circulating thyroid hormones; impacting energy, the nervous system, mood, cognition, weight and detoxification.

This could be diagnosed as hypothyroidism and a protocol of thyroxine medication is likely to mask metal toxicity, especially if the medication is not effective and the dosage is increased, whilst metal toxicity could be silently accumulating.

Mercury, cadmium, lead and aluminium are the most commonly correlated metals that wreak havoc on the thyroid and are found in:

- aerosol deodorants
- aluminium cookware

The good news is that the heavy metal toxins above can easily be decreased by choosing organic foods, consuming wild salmon and trout for oily fish intake, opting for white fillings over metal amalgams, eating foods to support liver enzymes and avoiding certain medication, cosmetics and cookware.

There are many mobile phone apps and websites that now list and source these heavy metals:

- [www.ewg.org](http://www.ewg.org)
- [www.thinkdirtyapp.com](http://www.thinkdirtyapp.com)
- [www.efsa.europa.eu](http://www.efsa.europa.eu)

Once you have lowered your metal toxic load by reducing your exposure to the above listed items, you can also support your liver by including the following foods as part of your daily diet.

Consume four handfuls of cruciferous vegetables including garlic, onions, broccoli, cauliflower, cabbage, and kale along with two handfuls of beetroot, squash, pomegranate, wild blueberries, sweet potato and red cabbage to provide antioxidant support (make sure you cook them).

Antioxidants help deactivate heavy metal toxicity and reduce inflammation, you can include these in a smoothie.

A healthy lifestyle will also assist in getting rid of those heavy metals through regular exercise involving sweating and use of saunas, due to the skin being the body’s biggest detoxification organ.

DNA testing is useful to check for predisposition for impaired detoxification.

Supplements to support heavy metal detoxification are glutathione, NAC, zinc, selenium and vitamins A, C and E. Always speak to your nutritional therapist for personalised supplementation.

For further advice call my clinic to arrange a complimentary ten minute chat, or book in for a full metal toxicity test along with a comprehensive thyroid test and nutritional protocol - 07780 955627

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[melissa@melissa-chen.com](mailto:melissa@melissa-chen.com)
#Melissacohennutrition

### Melissa’s Detox Smoothie

**Serves 1, take 1 x per day**

**Ingredients:**
- 1 cup of berries
- 1 cup of cruciferous veg (watercress, kale, collard)
- 1 large tomato
- 1 carrot
- 4 tbsps. pomegranate juice (no added sugar)
- 1 cup of green tea (optional/if sensitive to caffeine replace with milk thistle tea or just water)

**Method:**

Blend and Serve
The Future of Thyroid Diagnosis and Treatment?
By Peter Warmingham

The advisors to Thyroid UK have been working hard to establish a scientific basis for a major change in the diagnosis and treatment of thyroid conditions. To that end, they have published over 30 papers in respected journals over the last decade or so. Their new research takes into account for the first time the close involvement of the thyroid-pituitary system with homeostasis - the way the body keeps internal conditions stable when external influences might otherwise disturb them i.e. temperature and illness.

This enabled the research team to learn a lot more about how the pituitary-thyroid system works, and discredit the prominence currently given to the TSH test. They are now calling for an individual approach to thyroid problems and have outlined a new set of ideas (a paradigm) which it is hoped will eventually replace the current ones.

The following is a brief summary of those ideas as set out in the paper referenced at the end of this article:

1. The researchers found that the hypothalamic-pituitary-thyroid system balances the levels of thyroxine (T4), triiodothyronine (T3) and thyroid stimulating hormone (TSH) in a way that is unique to each individual and each given situation. The final balance is determined by a wide range of factors such as genetics, age, recent illness, etc.

2. As the three main hormones T4, T3 and TSH are closely interrelated it can no longer be assumed that if the TSH level is known the FT4 and FT3 levels are also known. This means that all three test results should be considered together and interpreted in relation to each other.

3. In future, new kinds of reference ranges for combinations of FT3, FT4 and TSH will need to be developed.

4. The current ‘one size fits all’ approach to diagnosis and treatment is no longer justifiable because of the wide variation in hormone levels needed by different individuals to feel well – a much more individual approach is needed.

5. It is now known that as well as controlling how much hormone the thyroid gland produces, TSH also partially controls the conversion of T4 into T3. It is also now known that more T3 is made in the thyroid gland, and less in other parts of the body, than was previously thought. Furthermore, individuals vary greatly as to how much T3 they are able to make from a given dose of thyroid hormone. This means that when too much thyroid tissue has been lost to thyroid antibodies, some patients may reach a point when they are unable to convert enough T4 into T3 in their liver, and other tissues, to satisfy their body’s needs and will only be able to feel better on liothyronine (L-T3).

6. Research shows that the balance of TSH and FT4 values (referred to by the researchers as either the 'equilibrium' or the 'set point') varies both between individuals and over time, because of homeostatic and other changes. This means that FT4, FT3 and TSH blood test results taken earlier in life can’t be depended on to provide a useful ‘base line’ for reference later in life.

7. In future, the best levels of TSH, FT4 and FT3 for the patient to feel well, first need to be decided by the doctor and thereafter used as reference against which to interpret the patient’s current levels and to set dose levels of thyroid hormone.

8. TSH is now seen as only being useful for diagnosing overt hypothyroidism or overt hyperthyroidism and, except at extreme levels, can no longer be regarded as a reliable indicator of thyroid health. This is because the reference levels for TSH are much too wide given that each individual’s levels will only ever vary over a small part of that range. Also, a high TSH accompanied by a
normal FT4 can no longer be taken to mean subclinical hypothyroidism and FT3 should always be taken into account.

9. A simplistic approach to diagnosis and treatment, i.e. thyroid tests alone, is no longer valid because the process of finding a homeostatic balance is very intricate and it is no longer acceptable to rely on laboratory tests alone.

10. TSH also no longer has an exclusive role in guiding treatment targets – its interpretation should be tied to the clinical signs and symptoms which are the main concern since they reflect both thyroid status and the patient’s well being.

11. The suitable TSH range is different in patients being treated with thyroid hormone to those that are not on treatment because the body reacts differently to receiving a whole day’s dosage in one go instead of being slowly drip fed with the same dosage over 24 hrs in someone who doesn’t have thyroid disease.

The following is what should happen in an ideal future consultation with a doctor:

A diagnosis should be made based on three elements:

a) the patient’s history and symptoms,

b) a complete physical examination including ultrasound of the thyroid gland,

c) a complete set of lab tests (TSH, FT4 and FT3).

All of these elements should be considered together in coming to a diagnosis.

Thyroid function tests should be interpreted according to homeostatic principles, by considering the balance between TSH, FT4 and FT3 levels.

At least two criteria should be used to adjust medication dose, these being a) symptoms and b) how far the patient’s test results are from what has been decided are the ideal ones for that particular patient.

Sadly none of these improvements are available at your GP surgery yet and furthermore the new NICE guidelines won’t help because the new research has been dismissed by its authors as being ‘beyond the level of detail they would normally consider’.

Reference:


Herefordshire Support Group
Debbie Ingram

We are pleased to say that Debbie Ingram has set up a new Thyroid UK Support Group in Herefordshire.

Debbie says, “Herefordshire Thyroid Support Group is very new and welcomes you to come along and have an informal chat. Let us know what you want from a support group.”

The group meets monthly on the first Tuesday of the month from 11am to 2pm at The Hub, Peterchurch Church, Peterchurch where lovely food and drinks are available to purchase. There is no charge at present but they hope to be moving to a new venue in April at the Village Hall in Bartestree which will be monthly on the first Thursday of the month from 2pm - 4pm where there will be a £1 entry free to cover the cost of the hall.

For more information contact debbie: 07885 189058 or email: debbie_ingram@hotmail.co.uk
Relevant Research

**Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada**

Rivka Green, MA; Bruce Lanphear, MD; Richard Horning, PhD; David Flora, PhD; E. Angeles Martinez-Mier, DDS; Raichel Neufeld, BA; Pierre Ayotte, PhD; Gina Muckle, PhD; Christine Till, PhD

We know that there has been a lot of controversy over whether fluoride affects people or not and there hasn’t been very much research on the topic recently. However, these authors wanted to look at the association between fluoride exposure during pregnancy and IQ scores in the babies.

They used information from the Maternal-Infant Research on Environmental Chemicals cohort and looked at children who were born between 2008 and 2012, 41% of whom lived in communities supplied with fluoridated water.

The study included 601 mother-child pairs recruited from 6 major cities in Canada. Data was analysed between March 2017 and January 2019.

The mothers were tested using urinary fluoride tests and they recorded their fluoride intake from water and beverage consumption.

The children’s IQ was assessed at ages 3 to 4 years to examine associations between each fluoride exposure and their IQ score.

The results showed that women living in areas with fluoridated tap water compared with non-fluoridated water had significantly higher mean concentrations of fluoride.

Children had average IQ scores of 107.16 (range 52-143) with girls showing significantly higher average scores than boys.

A 1-mg/L increase in urinary fluoride was associated with a 4.49-point lower IQ score in boys, but there was no statistically significant association with IQ scores in girls.

A 1-mg higher daily intake of fluoride among pregnant women was associated with a 3.66 lower IQ score in boys and girls.

The authors concluded that maternal exposure to higher levels of fluoride during pregnancy was associated with lower IQ scores in children aged 3 to 4 years. These findings indicate the possible need to reduce fluoride intake during pregnancy.

To read the abstract go here:
https://jamanetwork.com/journals/jamapediatrics/fullarticle/2748634

**Hypothyrodism as a risk factor of periodontitis and its relation with vitamin D deficiency: mini-review of literature and a case report**

Nermin M. Yussif; Fatema Mohammed El-Mahdi; Rasha Wagih3

The authors of this study wanted to investigate the role and efficiency of the intra-ligamentary (the space between the tooth and the gum) injection of vitamin D and calcium in the treatment of chronic periodontitis (gum disease) associated with hypothyroidism.

In this case report, they report on a 43-year-old female with suspected hypothyroidism and severe chronic periodontitis with grade III mobility (very loose teeth).

Intra-ligamentary injectable vitamin D with calcium was given and showed great improvement of the injected teeth.

There was marked reduction of mobility, pocket depth and bleeding.

The authors concluded, “Injectable vitamin D is an injunctive treatment modality that needs to be discovered in another way. It may provide further solutions for the periodontal regeneration problem. Clinical studies with large sample sizes and long term follow up are needed.”

Lyn Mynott: Of course, it could be that the hypothyroid patient wasn’t treated with enough levothyroxine which would have prevented the periodontitis in the first place.

To read the full text go here:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5762221/
The Parathyroids

The parathyroid glands are very small glands (about the size of a grain of rice) situated in the neck just behind the thyroid gland. There are usually four parathyroid glands – two on each lobe of the thyroid gland – which produce a hormone called parathyroid hormone.

The parathyroid glands control calcium levels in the bloodstream. If calcium levels drop, the parathyroid glands release parathyroid hormone into the blood which then causes the bones to release calcium. Parathyroid hormone also causes the kidneys to stop releasing calcium into the urine and stimulates the kidneys to increase vitamin D metabolism. The vitamin D then increases calcium absorption from the gut.

If calcium or vitamin D levels are low, the parathyroid glands produce more parathyroid hormone to bring levels up to normal.

The most common form of hyperparathyroidism is called primary hyperparathyroidism. Similar to hypothyroidism, it is more common in women, and most commonly seen in women aged 50-60.

Hyperparathyroidism causes too much parathyroid hormone - hyperparathyroidism. This causes high calcium levels (hypercalcaemia).

In 75-85% of cases the cause is a single benign (non cancerous) growth or nodule (adenoma) in one gland. Growths in more than one gland are not very common and cancer in the parathyroid glands is very rare.

In rare cases, primary hyperparathyroidism can have genetic causes.

Some people have no symptoms and the condition is found via a routine blood test. Symptoms can vary depending on the length of time you have had the problem:

- increased thirst
- increased urine production
- abdominal pain
- constipation
- aches and pains
- mood changes
- nausea
- loss of appetite
- tiredness
- poor concentration
- confusion
- depression

It may take some time for hyperparathyroidism to be diagnosed because the symptoms are similar to symptoms of other conditions so other potential causes need to be excluded.

If the condition has gone on a long time undetected, calcium in the bones can be lost to the blood and urine hence high blood and urine levels of calcium. This can eventually cause osteoporosis, calcium stones in the kidneys, peptic ulcers and pancreatitis (inflammation of the pancreas).

This can then cause further symptoms:

- vomiting
- drowsiness
- dehydration
- muscle spasms
- bone pain or tenderness
- joint pain
- irregular heartbeat
- high blood pressure (hypertension)

In very severe cases hyperparathyroidism can cause the high calcium levels to lead to kidney failure, loss of consciousness, coma and heart rhythm abnormalities.

It is important that hyperparathyroidism is diagnosed quickly. It is diagnosed by looking at calcium and parathyroid hormone levels in the blood and urine. Phosphorus levels can also be checked for low levels.

It is also recommended to have a bone density scan (DEXA), X-rays, CT scans or ultrasound scans of the kidneys to check for osteoporosis and kidney stones.

Depending on the severity of the condition, conservative management only may be required, or another option is to remove the affected parathyroid gland/s. Medication may be given to lower calcium levels as a short-term treatment to stabilise levels.

Secondary hyperparathyroidism is due to a condition outside of the glands such as kidney failure or vitamin D deficiency.

Treatment for secondary hyperparathyroidism depends on whether it is caused by vitamin D deficiency or kidney disease. Vitamin D deficiency is treated with oral vitamin D.

This is long-standing secondary hyperparathyroidism usually associated with very advanced kidney failure.

Another condition can be caused when the parathyroid glands do not produce enough parathyroid hormone – hypoparathyroidism. This causes low blood calcium levels (hypocalcaemia).

This can happen after neck surgery such as a thyroidec- tomy.

The main symptoms of hypoparathyroidism are tingling, pins and needle sensations and muscle cramps/spasms.

Hypoparathyroidism is diagnosed by looking at calcium and parathyroid hormone levels in the blood and urine. Treatment includes vitamin D or calcium supplementation.

The prognosis of treating conditions of the parathyroid gland depends on the cause of the condition. If you have mild hyperparathyroidism, not needing surgery, you may not develop any problems or need any treatment in the future. However, some people will find that their calcium levels will slowly rise so you may need further treatment.

If you have had surgery and it was successful, things should return to normal although some generalised symp- toms may remain such as fatigue.

If you have hyperparathyroidism, you need to ensure that you eat a healthy, balanced diet. There is no need to avoid calcium as this may cause osteoporosis although you should avoid a high-calcium diet and avoid becoming dehydrated.
I have been treated with thyroxine for about three years now, after being ill probably for at least five years before treatment.

I was gaining weight, feeling cold (my temperature was about 34.5°C), had itchy skin and was depressed with thinning hair but the worse thing was the gritty left eye.

I asked for a thyroid test and the results showed low thyroxine (10) and high TSH (8.9). The doctor gave me 50 mcg of levothyroxine and I was pleased that at last my health problems were going to be resolved. I remember how after the first dose in the morning I went shopping to the town centre to celebrate. I used to manage work but not much else.

For a while I did not notice much difference but I persisted knowing that some drugs take time to work. After a while (not sure how long, days, weeks?) I noticed that I was actually feeling worse, with headaches after taking the levothyroxine. I just could not believe it - did not want to believe it.

I started taking it at night, but eventually I took the tablet during the night after I woke up to go to the toilet (about 3am). The strange thing was and is, it appears to help me sleep although I still wake up with a headache in the morning. The symptoms seem to be worse if I also take vitamin D.

I continued to take levothyroxine because when I stopped, my hair started to fall out and the gritty eye problem returned.

The doctor suspected that I may have high calcium levels in the blood and had a blood test for parathyroid levels.

As a result, I have recently also been diagnosed with hyperparathyroidism, which appears to be the result of low vitamin D in the blood.

The parathyroid becomes active in order to increase calcium levels in the blood by increasing calcium absorption from the gut and bone.

Thyroxine also increases the levels of calcium in the blood so could have an adjuvant effect.

Taking vitamin D appears to make the symptoms worse and I take it only occasionally and only when I miss a thyroxine dose.

I have overcome some of the problems by cutting down on foods high in calcium such as dairy, sardines, sesame seeds and nuts. (My calcium levels do not show up as very high but they have only been taken in the morning.)

I no longer have surgery visits and try to control it myself and only have annual blood tests. My thyroxine levels are just inside the bottom of the range, but I cannot take any more.

To conclude: it is disappointing that I have not had the increase in energy I expected from taking the thyroxine.

I decided to write this because there must be other people who find problems with taking thyroxine and it could well be that they have problems with calcium metabolism and the parathyroid gland.

Lyn Mynott:

You can read more about the parathyroids on page 11.

Hyperthyroidism can lead to hypercalcaemia in some patients which then causes the parathyroid gland to produce less parathyroid hormone.

It is not known if taking too much levothyroxine than the body needs can lead to hypercalcaemia but do bear this in mind if you start getting symptoms of hypoparathyroidism.
Zinc - Do You Need It?
By Dr Westin Childs

Zinc is perhaps one of the most important, and often missed, nutrient deficiencies found among hypothyroid patients.

In fact, there is a good chance that you have sub-optimal levels of zinc present in your body as you are reading this and this doesn't bode well for your thyroid, given how many thyroid processes zinc is involved in.

One of the most important of these functions is the role that zinc plays in the conversion of T4 to T3.

Because zinc is required for thyroid conversion (T4 to T3 conversion), low levels of zinc may predispose you to develop high levels of reverse T3 and which may limit thyroid function (10).

These changes can also be identified through lab tests as low free T3 and low total T3.

But that's not all zinc does. The other benefits of zinc, as it relates to your thyroid, includes:

- Enhanced immune function (11) - This is particularly important if you have Hashimoto’s thyroiditis or other autoimmune diseases.
- Increases T4 to T3 conversion - This helps normalize your free thyroid hormone levels (required for weight loss and symptom management)
- Acts as an anti-inflammatory agent - Helpful in those with Hashimoto’s or other causes of thyroiditis.
- Plays a role in reducing oxidative stress.

A severe deficiency in zinc may result in hypothyroid symptoms which can be reversed with supplementation (12).

Zinc deficiency is also associated with hair loss and alopecia, a troubling symptom that many hypothyroid patients face despite taking thyroid medication.

The real benefit to using zinc is that supplementing may help to improve thyroid function (if you are deficient) and help to reduce hair loss and improve hair quality.

Testing for zinc in the serum or plasma is generally not recommended as many people with “normal” values still present with the symptoms of zinc deficiency.

This idea was highlighted in a study which showed that the best way to confirm and treat zinc deficiency is with a trial of zinc supplementation. In fact, this is considered to be the "gold standard" (13).

If you suspect that sub-optimal zinc levels may be contributing to your hypothyroid symptoms then a trial of zinc may be appropriate.

Combining zinc with selenium

Zinc is an incredibly important mineral if you have hypothyroidism but I've found that most thyroid patients experience superior results when they combine zinc with other nutrients. This benefit is most likely related to the synergistic effect that multiple nutrients have on thyroid function.

It's probably also due to the fact that many people with zinc deficiency probably also have other nutrient deficiencies.

If you combine zinc with selenium (and other nutrients) the total dose necessary for either will decrease and you will obtain the same benefit at a smaller dose.

Dosing zinc

The dosage of zinc necessary to improve thyroid function varies anywhere from 5mg up to 50mg per day. If you are severely zinc deficient then you may benefit from using a higher dose (toward the 50mg per day range) for 1-2 months. This will allow you to build up your zinc 'storage'.

Once you have repleted zinc stores in your body, you can safely back down to a smaller daily dose which is just as effective in helping to improve thyroid function.

If you decide to use zinc make sure you find a supplement which has zinc bound to either 'Citrate' or 'Picolinic acid'. These formulations of zinc tend to be better absorbed compared to other formulations.

Dr Westin Childs is an Osteopathic physician whose mission is to provide you with actionable information that will help you take control of your health, live a long and healthy life so that you can spend it doing the things that you love and get the most out of life. He has a unique approach to hormone management and a new, fresh, approach to thyroid management.

His website has includes lots of informative blogs - https://www.restartmed.com/blog/
Research for this article is available on his blog - https://www.restartmed.com/thyroid-supplements/#tab-con-9
The NICE guidance was published in November - https://tinyurl.com/yfhercpcv. Stakeholders were allowed to comment if there were any “substantive errors”. Thyroid UK contacted them saying we were disappointed at the wording used because it was the exact wording that NHS England used before we contacted them and asked them to change it to something clearer for patients and doctors which led to the RMOC guidance being changed. However, they did not see this as an error.

NICE only use randomised controlled trials in their guidance and there were only seven that could be used for evidence. Because of this, NICE used the experience of the panel a lot in this guidance and this, we feel, is unfortunate.

The only paragraph about liothyronine in the NICE guidance itself stated, “Do not routinely offer liothyronine for primary hypothyroidism, either alone or in combination with levothyroxine, because there is not enough evidence that it offers benefits over levothyroxine monotherapy, and its long-term adverse effects are uncertain.”

In respect of NDT, NICE stated, “Do not offer natural thyroid extract for primary hypothyroidism[1] because there is not enough evidence that it offers benefits over levothyroxine, and its long-term adverse effects are uncertain.”

However, NICE do make further comments in their Rational and Impact statement on page 34 where they state: “Potential treatments are levothyroxine, usually prescribed to everyone, liothyronine, which is sometimes prescribed when levothyroxine fails, and natural thyroid extracts (which is currently unlicensed for use in the UK).”

They go on to say that the evidence did not offer any important health benefits compared with levothyroxine alone and that it was significantly more expensive.

They did note that some trials did show some small benefits in some quality of life domains and that anecdotal evidence from some committee members suggested beneficial effects in some patients.


Because of the lack of good quality evidence NICE recommended further research into the use of liothyronine which is a good thing.

Thyroid UK is continuing our campaign and has a further meeting with Lord Hunt soon where next steps will be discussed.

In the meantime, if you are struggling to get T3 prescribed, please ensure that your clinician is aware of the Rational and Impact section of the guidance and also of the RMOC guidance. Also try contacting your local healthwatch - www.healthwatch.co.uk/your-local-healthwatch/list

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#T3Campaign Update

Recipe

**Gluten Free Crumpets**

**Ingredients**
- 400 ml milk (dairy free milk or lactose free milk can also be used)
- 1 tsp caster sugar
- 1 tbsp gluten free yeast (I use dry active yeast)
- 300 g gluten free self raising flour
- 1/2 tsp salt
- 1/2 tsp bicarbonate of soda

**Instructions**
1. Place your milk into a glass jug and heat up to around 43°C.
2. Add your caster sugar and yeast to the warm milk and stir. Leave until the mixture starts to get a little frothy - about 10 minutes.
3. In a mixing bowl add your flour, bicarbonate of soda and salt. Then add in your milk mixture. Stir together until smooth. It should be quite thick, but not too thick! Do this for a couple of minutes, I used a handheld whisk.
4. Leave to prove, covered in a warm place for about 90 minutes (no less than an hour). My oven has a proving setting so I left it in there. Make sure your bowl is big enough so it doesn't over prove, there should be some air bubbles on the top once it's done.
5. If your mixture has thickened too much you could add a little warm water at this stage (a tbsp or two, but it should be ok).
6. Heat up a frying pan and add some oil to it. Place either a couple of egg rings or biscuit cutters in the pan.
7. Once the pan is hot enough (medium heat), put two and a half tbsp in each ring and allow to cook for about 5 minutes. Little air bubbles should start to appear on the surface (hopefully!). If they don't then don't worry too much.
8. Using tongs, lift off the rings and then flip the crumpets onto the other side for about a minute (The top of the crumpet should basically be dry so when you flip it there should be no mess).
9. Remove from the pan and repeat with the rest of the batter.
10. Serve hot from the pan or place in your toaster to reheat. Serve with butter, spread, golden syrup, jam, cheese... or whatever you fancy! Enjoy with a cuppa!

Taken from: https://glutenfreecuppatea.co.uk/ (an excellent site for gluten free recipes!)
This is a strange little book. And I mean little – 34 pages for a whopping £7.64.

The only review, obviously from a friend, talks about ‘finally’ finishing the book. He must read exceedingly slowly!

The story is basically ‘get sick, lose thyroid, try levothyroxine, doesn’t work, find whole thyroid, healed’.

It’s easy reading all right but so basic that I’d be surprised if anyone, other than a total beginner, would learn anything.

I’d qualify even that, as you’ve nearly finished it before he explains anything about the thyroid.

You briefly learn about his journey through his thyroid removal and then his search to find something to make him feel better, as levothyroxine wasn’t working. He ends up with ‘whole thyroid’, which includes T4 and T3, which works.

In the final two pages, he adds a lot of more interesting options, such as meditation, natural foods, exercise, sea swimming and vitamins. It would have been more interesting if he’d expanded on his journey to these conclusions.

For me, the layout and editing left a lot to be desired. As a publisher, this sort of stuff bothers me but may well not bother you.
Have a question to ask? Not sure about something? Don’t know where to turn?

Don’t forget that Thyroid UK has a Support Network which consists of a mixture of local support groups; email support and telephone support across the UK.

Our network includes Thyroid UK groups as well as independent groups that wanted to be listed along with ours to help people with thyroid disease and related disorders.

Going to a group gives you the opportunity to chat with others in the same position as yourselves. Some groups organise speakers but some just meet for a cuppa and a chat and some have their own newsletters.

The telephone and email Support Networkers are there to give you support and chat with you about your thyroid problems and answer your questions.

Our Support Networkers are not medically qualified but you can chat to them about your thyroid problems and they can tell you what worked for them.

The Support Network list is included in our Information Pack and also available by emailing: tukadmin@thyroiduk.org

Thyroid UK is always looking to set up more Support Groups. If you are interested in becoming a Support Networker for Thyroid UK please contact us on: enquiries@thyroiduk.org

Research suggests that a commonly inherited variation in the DIO2 gene is associated both with impaired baseline psychological well-being on levothyroxine and enhanced response to combination T4/T3 therapy, but did not affect serum thyroid hormone levels.

If you are not doing well on levothyroxine, you can see if you have this gene by a test available via Regenerus Laboratories.

The DIO2 test requires a saliva sample. Which can be carried out at home and posted back to Regenerus Labs using the supplied return packaging and Royal Mail or other postal service. Costs exclude local return postage.

It is a requirement that every patient must receive pre & post support “Counselling” for this test which Regenerus can organise for you.

For more information go to: http://www.thyroiduk.org.uk/tuk/testing/DIO2_test.html

Thyroid UK receives a donation for each test ordered.