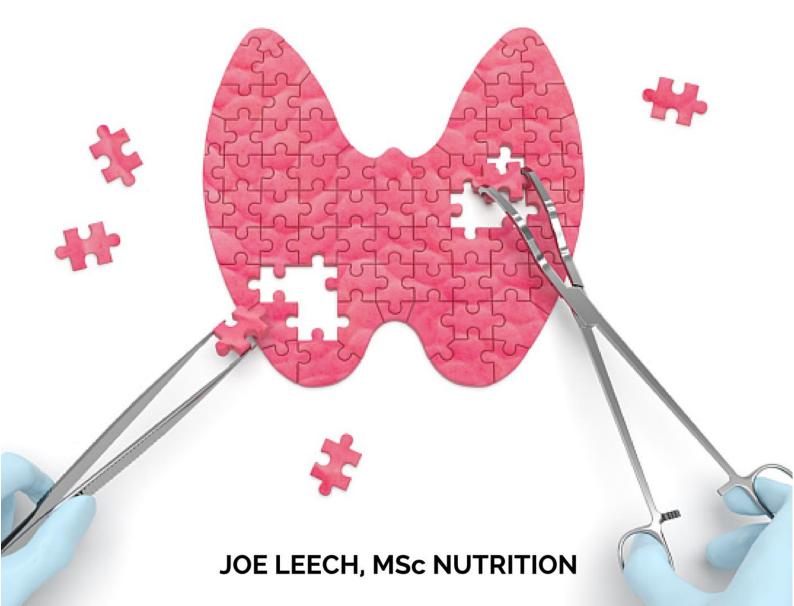
# UNDERACTIVE THYROID 101

THE FUNDAMENTAL STEPS TO TREAT HASHIMOTO'S & RESTORE YOUR HEALTH FROM DAY ONE



# **CONTENTS**

INTRODUCTION: A Serious Issue Requires A Serious Plan	3
CHAPTER 1: Understanding Your Hashimoto's and Autoimmune Disease	5
CHAPTER 2: Levothyroxine vs Desiccated Thyroid- Which Is Better?	7
CHAPTER 3: When To Take Thyroid Hormone?	9
CHAPTER 4: The Truth About Gluten and Thyroid Health	11
CHAPTER 5: The Most Important Nutrients For Your Thyroid Health	13
CHAPTER 6: Dietary Goitrogens and Your Thyroid- Safe Or Not?	16
CHAPTER 7: Will Thyroid Support Supplements Help?	18
CHAPTER 8: The Autoimmune Protocol Diet	20
CHAPTER 9: Additional Helpful Habits and Hacks	22
ABOUT THE AUTHOR	24
BONUS SECTION: 7-Day Meal Planner	25
INGREDIENTS SHOPPING LIST	29
RECIPES	30
MEDICAL DISCLAIMER	44

# INTRODUCTION: A SERIOUS ISSUE REQUIRES A SERIOUS PLAN

Known medically as Hypothyroidism, an underactive thyroid is more common than ever before.

Research has found that at the very least 3 in every 100 US adults have an underactive thyroid, a rate likely similar in other developed countries (1).



Left untreated, it can have

considerable consequences to heart health, weight gain, osteoporosis, infertility and more.

Effective treatment of hypothyroid symptoms and weight loss is realistic, but not without accurate recommendations and a structured plan. That's because if the issue is a big one, your response has to be equally measured and equally thought through.

Take, for example, if you had a friend in serious financial trouble. Simply lending him or her \$20 would not solve the problem. Helping this friend would be much more structured and take a bit of time. It would involve looking at their options, discussing known strategies and forming a written plan.

Likewise, a serious health problem - such as hypothyroidism - requires a structured plan. Reading the odd blog article or following an extreme diet for 1 week is not going to help manage your condition.

It takes some forward thinking and commitment to solve a serious problem.

It means being less reactive to symptoms as they arise, and more proactive in preventing symptoms from worsening or coming up in the first place.

By investing in this Ebook you've already made a proactive decision. You have made a commitment to improve your health; and that first step is never easy.

### So congratulations for investing in yourself.

Underactive Thyroid 101 equips you with the knowledge and tools necessary to formulate an effective plan from day 1. It outlines the fundamental steps required to treat an underactive thyroid (that your doctor may have missed), as well as common misconceptions that surround it.

If you only have time to skim, be sure to read the *Summary and Action* part of each chapter.

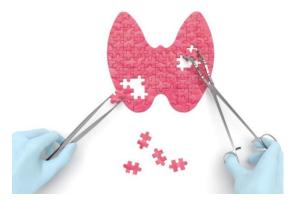
# A GOAL WITHOUT A PLAN IS JUST A WISH

# UNDERSTANDING YOUR HASHIMOTO'S AND AUTOIMMUNE DISEASE

Hashimoto's Thyroiditis (or Hashimoto's disease) is by far the most common form of hypothyroidism in the Western world.

It is actually a form of autoimmune disease— a condition where your body's immune system mistakenly attacks healthy substances and tissues in the body.

In the case of Hashimoto's, your immune system (specifically the antibodies) have



mistakenly attacked the cells of your thyroid gland, which causes irreversible damage. This leaves you with low levels of <a href="thyroid-stimulating-hormone">thyroid-stimulating Hormone</a> (TSH) (produced by the brain when thyroxine levels are low).

### What Causes Autoimmune Diseases?

Over 80 other illnesses are caused by autoimmunity, including Asthma, Celiac disease, <u>Fibromyalgia</u> and Type 1 diabetes. In fact, the National Institutes of Health (NIH) estimates that over 23 million Americans have an autoimmune disease (2).

The exact reason why autoimmune diseases develop remains unclear to researchers, but it appears to be multifactorial. Your <u>genetics</u>, environmental factors (including stress, infections or drugs), and the balance of gut bacteria (<u>gut dysbiosis</u>) are thought to play major roles in its development (<u>3</u>).

While diet and stress appear to be the most common triggers for autoimmune issues (based on case-studies and anecdotal evidence), your genetics is still the deciding factor. It is like the CEO of a company who makes the ultimate yes-no decision.

This is why it is so difficult to pinpoint who may get Hashimoto's, as well as what the triggers are on an individual basis.

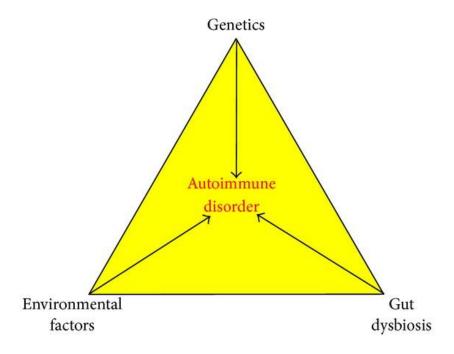


Image source.

There may have been a time in your life when you got very sick, or used a particular drug or medicine for an extended period. Or your dietary choices may have gradually upset the balance of bacteria in your gut over the years.

Or the combination of financial hardship and relationship turmoil may have caused more stress than you ever thought possible. It ultimately comes down to a variety of triggers that varies from one person to the next; that is just the nature of autoimmune diseases.

But while Hashimoto's cannot be cured, it can now be treated.

### **Summary and Action**

Hashimoto's disease is a form of autoimmune disease, where the immune system mistakenly attacks healthy substances and tissues in the body. In this case, it is the thyroid gland that has been damaged, compromising the amount of thyroid hormone that is produced.

Several factors are thought to trigger autoimmune diseases, including environmental factors (like stress) and diet (particularly related to gut health); but your genetics is the ultimate deciding factor.

### LEVOTHYROXINE VS DESICCATED THYROID-WHICH IS BETTER?

Before 1890, there was no medical treatment for an underactive thyroid.

During that time you had no choice but to deal with low thyroid hormone levels yourself. Unfortunately, food on its own cannot cure or independently treat diagnosed hypothyroidism (there are very rare exceptions of course).

Thank goodness for modern medicine.



In 1891 the first successful usage of a thyroid extract was published. By 1927, two British chemists managed to create the hormone Levothyroxine from organic compounds (4, 5). Levothyroxine is chemically identical to Thyroxine, and by the 1960s became the most common way to treat underactive thyroid.

Today using a form of thyroid medication is known as Hormone Replacement Therapy and is necessary to restore thyroid function and hormones to a healthy level.

### **Levothyroxine vs Desiccated Thyroid**

The default and most common treatment is still Levothyroxine (also known as Synthroid, LT4 or Thyroxine). It is simply an artificial form of the T4 hormone (a healthy thyroid normally produces T4 hormone and T3 hormone).

It is widely regarded as the safest and most effective form of thyroid hormone. However, undesirable <u>side-effects</u> are reported frequently and include symptoms such as fever, heat intolerance, irritability and difficulty with swallowing.

Several studies also found that long-term levothyroxine use at a dosage greater than 150 mcg per day may increase your risk of osteoporosis later in life, although other studies found no link (6, 7).

The alternative is Desiccated thyroid (known as Armour). It consists of a mixture of T4 + T3 hormones, usually made from ground up pig thyroid. It actually became a commercial thyroid treatment before Levothyroxine.

Clinical trials using a mix of T4 + T3 (desiccated thyroid) have found it is, at best, equally as effective as Levothyroxine treatment for replacing thyroid hormone levels in the blood (8, 9, 10). Note that it never surpasses the effectiveness of Levothyroxine.

This is why Armour is typically used as a back-up option for those who do not respond favourably with Levothyroxine.

Some forms of desiccated thyroid are also not tightly regulated for dose or quality. Even though they are FDA regulated, <u>supplements aren't subject</u> to the same strict safety and effectiveness requirements that pharmaceutical drugs are.

In fact, a <u>study</u> on "thyroid support" supplements found that half of brands contain a low range of T4, while 1 in 10 contained no T4 at all. In other words, taking desiccated thyroid comes with more risk for potentially no extra benefit than standard Levothyroxine.

However, most users (including the participants in the studies cited above) report better tolerance and preference of desiccated thyroid ( $\underline{11}$ ). Many claim it treats their symptoms effectively... without the common side-effects of Levothyroxine.

You need to weigh-up the pros and cons with your doctor to see what is best for your current situation.

Just remember that hormone medications are somewhat of a bandaid treatment for an underactive thyroid. They are 100% necessary, but will only help optimise your thyroid health when combined with specific dietary changes.

### Summary and Action

While Levothyroxine is on average more effective, Armour is reportedly much better tolerated. Your preferred choice should come down to how well symptoms are managed, and how well you tolerate the medication.

Therefore, consider trialling Armour if Levothyroxine has started to cause you problems, or increasing the dose (with your doctor) no longer seems to help. This is not uncommon in patients who have been using Levothyroxine for 10 years or more.

Otherwise, Levothyroxine should be your first choice.

### WHEN TO TAKE THYROID HORMONE

Thyroid hormone medication must be taken on a fasting stomach.

That means either before breakfast, before you go to bed, or any other time that is at least 1 hour outside of meal times.

This is because absorption of T4 hormone is greatly reduced if consumed alongside



food or drinks. Apparently even more-so if you have had soy, calcium-rich foods, iron-rich foods, high-fibre foods or coffee  $(\underline{12})$ .

This basically covers dairy foods, meat, eggs, nuts and fruits, which is why I recommend to wait 2 hours outside of meals (being conservative).

### Morning vs Night?

There have been 4 large clinical trials investigating which is the best time to take Levothyroxine.

Out of the 412 patients studied, one study found T4 hormone absorption was better in the morning, one found it was better at night, and two found no significant difference ( $\underline{13}$ ,  $\underline{14}$ ,  $\underline{15}$ ,  $\underline{16}$ ).

This inconsistencies are likely due to the different nationalities and dietary patterns across the different study populations. Different food choices would affect absorption of Levothyroxine differently.

In the end, neither option is better than the other.

If you want to have your medication in the morning, most find it easier to have a late breakfast (often at work). Alternatively, you can also get in the habit of skipping breakfast altogether.

Contrary to popular belief, this meal is not necessary for good health and does not lead to weight gain (this topic is outside the scope of this book, but generally speaking, only growing children need breakfast) (17).

For those who prefer to take their medication at night time, that typically means committing to no food or drink after 8pm (which is a good thing). But insomnia is a common complaint of those who take their medication before bed, as is increased urgency to urinate during the night.

### **Summary and Action**

Thyroid medication must be taken on a fasting stomach.

That means at least 1 hour (but preferably 2 hours) before or after food and drink.

The weight of evidence indicates no great difference between taking Levothyroxine in the morning vs evening. Choose what is easier for you to adhere to.

# THE TRUTH ABOUT GLUTEN AND THYROID HEALTH

Gluten is a protein found in grain and wheat.

It's poorly digested by roughly 6% of the population, and numerous studies have shown a strong link between so-called gluten sensitivity (as well as celiac disease) and hypothyroidism.

In fact, around 16% of those with celiac disease have antibodies that



attack the thyroid ( $\underline{18}$ ). Remember that like celiac disease, Hashimoto's is caused by your immune system mistakenly attacking healthy cells.

Going by this link, an individual with Hashimoto's may improve when gluten is removed from the diet... but what does the current research tell us?

### **Current Research**

Many studies have found a gluten-free diet reduces the number of "anti-thyroid" antibodies, which is favourable for treatment. This means it helps reduce the number of antibodies mistakenly attacking the thyroid gland (19, 20, 21).

Now I could leave it there and sell you a gluten-free cookbook, but to be fair many studies also found no improvements when patients followed a gluten-free diet (22, 23, 24, 25).

The truth is researchers don't actually know how influential gluten is, and it likely affects some much more than others. For the average person there is no harm in trialling a strict gluten-free diet and then re-assessing after a month. Gluten-containing foods do not provide any unique nutrients anyway.

### **Summary and Action**

Based on current research it remains unclear if a gluten-free diet is beneficial to every person with hypothyroidism. The only way to know is to trial and see.

Due to the link between celiac disease and hypothyroidism, it's important to get tested for celiac disease by your doctor first thing.

If you have a family history of autoimmune disease or food intolerance, or you experience symptoms of hypothyroidism despite using hormone replacement therapy, then it makes sense to trial a gluten-free diet (under medical supervision).

The same goes for those who are struggling with weight loss, or feel like their health improvements have plateaued. Trial a strict gluten-free diet for one month and then re-assess.

But if you don't have symptoms to gluten and don't feel any different on a gluten-free diet, then it's likely not a problem for you. Weigh up the social aspect vs the health aspect and go from there.

# THE MOST IMPORTANT NUTRIENTS FOR YOUR THYROID HEALTH

Thyroid function and health can be greatly influenced by our eating pattern.

This is why understanding key nutrients is so important, especially when your thyroid is underactive.

There are three nutrients directly involved in thyroid function you need to be aware of: lodine, Selenium and Zinc.



### **Iodine**

Iodine is a trace element the thyroid gland requires in order to produce thyroid hormones. For that reason, a deficiency in iodine can lead to an underactive thyroid.

However, a lack of iodine is very rarely the cause of hypothyroidism in developed countries, where it is abundant in our food supply (26).

As an example, the World Health Organization (WHO) deems a population iodine deficient if urine concentration levels are less than 100 microgram/L. Americans had a median level of 160 microgram/L in 2003-2004 (27), while <u>Australians</u> were at 124 microgram/L in 2011-2012.

And just as a precautionary measure, more than 100 countries have adopted mandatory iodization of all food-grade salt or bread. Note this process isn't mandatory in the US, but more than half of all salt sold there does contain added iodine (28, 29).

Nevertheless, including iodine-rich foods can be a good idea to be extra safe. The best sources of iodine include:

- Navy beans
- Potatoes
- Eggs
- Cow's milk
- Seafood
- Iodised salt.

Note that some may be sensitive to harmful side effects from extra iodine. Taking concentrated iodine sources such as iodine drops, seaweed or kelp tablets may worsen hypothyroidism, and should be discussed with your doctor.

### Selenium

Selenium is an essential mineral that helps the body to recycle iodine. That's the reason the thyroid has the highest selenium content (per gram of tissue) of all our organs (30).

Therefore, it's thought that low selenium levels contribute to hypothyroidism through alternate mechanisms related to iodine. For this reason it's fundamental to eat a diet that contains many selenium-rich foods, such as:

- Brazil nuts
- Tuna and sardines
- Beef and chicken
- Eggs
- Legumes

### Zinc

Zinc is an essential mineral required to regulate the thyroid hormone TSH.

In fact, the metabolism of zinc and thyroid hormones are closely interlinked, which is why a deficiency can lead to hair loss (known medically as alopecia) (31).

Studies show that zinc deficiency is very uncommon in the developed world (32).

In any case, it is still recommended to eat a variety of zinc-rich foods. This includes:

- Oysters and shellfish
- Beef and chicken
- Legumes, nuts and seeds
- Milk and yoghurt.

### **Summary and Action**

Iodine is required for thyroid hormone production, but low levels is highly unlikely to contribute to your hypothyroidism. Iodine-rich foods are still encouraged, but concentrated sources such as seaweed or kelp should be discussed with your doctor first.

Selenium and zinc are fundamental to optimal thyroid function too, and additional food sources are encouraged to "top up".

To ensure you consume these nutrients regularly, your diet should be rich in legumes, nuts, potatoes, seafood, eggs and dairy.

You are more at risk of a deficiency in one or more of these nutrients if you are vegetarian or vegan.

### DIETARY GOITROGENS AND YOUR THYROID-SAFE OR NOT?

Goitrogens are substances that disrupt the production of thyroid hormones.

Several drugs and chemicals are classified as goitrogens, but it's the natural goitrogens in food we are concerned with.

Cruciferous vegetables such as broccoli, cauliflower and cabbage are a richest source of goitrogens. Peanuts, walnuts and several other plant foods contain goitrogens too.

As large doses of goitrogens can aggravate the thyroid, eating these foods would certainly aggravate an underactive thyroid as well. At least, in theory.

However, this only appears to be the case if you are iodine deficient (incredibly rare in developed

countries as explained in Chapter 5) or you consume ridiculously large quantities.



### Why All The Fuss?

The idea that goitrogens harm the thyroid really took off in the mid 1990s.

Rats fed a diet rich in raw cabbage suffered thyroid problems after 60 days, even with optimal iodine intake. However, for the purpose of that study, cabbage made up a whopping one-third of the rats' diet (33). For a human to eat this amount of raw cabbage for 60 days straight - is impossible.

Then there was a stand-alone case study of a Chinese lady that "overdosed" on goitrogens. She was diagnosed with severe hypothyroidism (<u>myxedema coma</u>) after eating an estimated 3.3 lbs (1.5 kgs) of raw bok choy per day for several months (<u>34</u>). She believed it would help control her diabetes.

Assuming you don't eat phenomenal amounts of raw cruciferous vegetables every day, they are safe to eat. In fact, cruciferous vegetables are so nutrient dense that they will do you

much more good than harm. Frequent intake will only aggravate issues if your iodine intake is poor (again, very unlikely) or you have a goiter.

Additionally, cooking cruciferous vegetables and other foods containing goitrogens are thought to greatly reduce its potential impact. A small study in 10 subjects showed that eating 0.3 lbs (150 g) per day of cooked brussels sprouts for four weeks straight had no negative effects on thyroid function (35).

The other concern is that goitrogens inhibit the absorption of thyroid hormone if consumed at the same time. While this may be true, thyroid hormone should always be taken on an empty stomach at least 1 hour before any food.

### **Summary and Action**

If you don't have a goiter or an iodine deficiency, cruciferous vegetables are safe to eat.

Cooking food is thought to greatly reduce the activity of goitrogens in any case. The risk only outweighs the benefit if cruciferous vegetables are consumed in ridiculously large quantities and/or raw.

# WILL THYROID SUPPORT SUPPLEMENTS HELP?

Should I invest in some natural thyroid support supplements?

This is a very common question, and rightly so, because you can't expect an unbiased answer from the supplement manufacturer.

To answer the question, we need to look at the 4 main nutritional aspects that these supplements promise to help with.

Iodine, Selenium, Zinc and Vitamin B12.



### **Iodine Supplements**

I'll come right out and say that iodine supplements are unnecessary. Iodine deficiency is almost never the cause of hypothyroidism in developed countries (as explained in chapter 5).

The big exception to this rule is if you are <u>pregnant</u> or breastfeeding. Iodine requirements increase by more than 60% as iodine is required for mother and child. Women who fall into this category should definitely be supplementing with iodine, as per the World Health Organisation's <u>recommendations</u>.

Note that in some instances of Hashimoto's, iodine supplementation can actually irritate the thyroid. This is another reason to be weary of iodine supplementation, and you should certainly inform your doctor before trying anything new.

### **Selenium Supplements**

Selenium is a popular thyroid supplement, and theoretically it could help... especially if you are actually deficient in selenium.

A large review of the research in 2013 concluded evidence is lacking to definitively support or refute the use of selenium for thyroid health. Some studies found it could help, but they were heavily biased (36).

In other words, it is unclear if is beneficial from a scientific stand-point. It does look promising for those with <u>Graves' disease</u>, and anecdotally it helps, but you need to try for yourself (37).

Note there is also the risk of side-effects to consider, including digestive issues, fatigue, irritability and even hair loss if used long-term.

### **Zinc Supplements**

There are few studies on zinc supplementation, with one finding it may only be beneficial for patients with goiter (38). Again, there is no way to give a solid recommendation for or against its use.

For what it's worth, if you are experiencing hair loss, I would certainly consider trialling a zinc supplement on its own (as opposed to a supplement that also contains selenium).

### Vitamin B12 supplementation

Lastly is Vitamin B12, a micronutrient that helps regulate energy release. Low levels can make you feel exceptionally lethargic, so in theory this supplement could help fight fatigue that comes with underactive thyroid.

Generally speaking it doesn't hurt to give it a try, and anecdotally they work very well. But much like iodine, low levels of vitamin B12 is very rare in developed countries if you eat a wholesome and varied diet.

### **Summary and Action**

The majority of thyroid support supplements base their claims around the nutrients iodine, selenium, zinc and vitamin B12.

Generally speaking, supplemental iodine and vitamin B12 are not necessary as your levels are likely optimal. Consuming extra vitamin B12 is not harmful, while extra iodine should be supervised by your doctor.

Selenium and zinc supplements are certainly beneficial if you have low levels, but effectiveness will vary greatly between individuals. I recommend trialling zinc on its own if you are experiencing hair loss.

It is difficult to give any recommended dosages as there is no scientific proof that thyroid supplements work (or don't work). Therefore the best guide will be what is recommended on the bottle.

And as will all supplements and major dietary changes, you must consult with your personal doctor before trying anything new.

### THE AUTOIMMUNE PROTOCOL DIET

The Autoimmune Protocol (AIP) is an elimination diet designed to help treat all forms of autoimmune disease.

It is said to have emerged from the Paleo movement (and sometimes referred to as Autoimmune Paleo), but to label it Paleo seems too unscientific and like a fad diet.



The AIP goes by the premise that

certain food chemicals and compounds upset the balance of bacteria in your gut- especially the foods you are sensitive towards. This is known as gut dysbiosis (mentioned in chapter 1)

This is thought to cause low-grade inflammation in the gut of individuals with an autoimmune disease (in this case <u>Hashimoto's disease</u>). Low-grade inflammation appears to be a driving factor behind many modern health conditions, including autoimmune diseases, metabolic disorder and obesity too (39).

By removing the everyday trigger foods in your diet, inflammation subsides giving your body the opportunity to recover and "reset"; known medically as remission. This is what celiac patients experience when they go gluten-free, or most IBS patients when they follow a <u>low</u> FODMAP diet.

### Is It Evidence-Based?

I'll admit I was highly sceptical of this theory at first; researchers in the area of rheumatology/immunology rarely do <u>randomised trials</u> on elimination diets (the only way to prove "cause and effect"). That means we still cannot reliably say what foods influence autoimmune diseases and their symptoms (nor to what extent).

Does it help because you cut out specific trigger food components? Or because such restriction inadvertently forces you to eat healthier consistently? Or is it a combination of both?

It's hard to say, but we cannot ignore the abundance of non-trial and anecdotal evidence (personal testimonial) that indicate AIP helps with a variety of symptoms.

### What Foods Are Eliminated?

This is a very large topic area, and certainly outside the scope of this book. I recommend reading this post if you want to delve into this area more.

To summarise, the AIP temporarily cuts out numerous food groups including dairy, grains, nuts and seeds, legumes, nightshade vegetables and more. As you can tell, it is highly restrictive and can get complicated if you take medications for other medical conditions or are at risk of nutrient deficiencies. It's fundamental you speak with your doctor before beginning.

All things considered, the AIP is a promising tool for Hashimoto's patients that are consistently struggling to manage their symptoms, as well as those who have multiple autoimmune disease or health problems that seem to stack on one another.

### **Summary and Action**

The Autoimmune Protocol (AIP) is a highly restrictive elimination diet designed to treat all forms of autoimmune disease.

The theory is that by removing all foods that may cause low-grade inflammation, your body has the opportunity to recover and "reset"; known medically as remission.

Research on the effectiveness of AIP does not yet exist, so currently we are relying on observational and anecdotal evidence.

It is a promising tool for Hashimoto's patients that are consistently struggling to manage their symptoms, as well as those who have multiple autoimmune disease or health problems that seem to stack on one another.

I recommend it as a back-up option if all else fails to help. Due to the highly restrictive nature of AIP, it is fundamental you speak with your doctor before beginning.

### ADDITIONAL HELPFUL HABITS AND HACKS

This is a bonus list of several other important factors you want to consider when treating an underactive thyroid (with emphasis on weight management).

Aim to focus on one point at a time (after successfully changing your diet) in order to avoid overwhelm.

- 1. **Consider your stress:** Psychological stress is an often overlooked lifestyle component that influences health. In fact, retrospective studies have found that up to 80% of patients reported uncommon emotional stress before the onset of disease (40). The theory is that long-term stress changes hormonal regulation and immune response.
- 2. **Prioritise sleep:** Alongside poor diet and exercise, short sleep duration is one of the strongest risk factors for weight gain and health problems. <u>Good quality sleep</u> is fundamental for your all around health.
- 3. **Use smaller plates and small spoons:** Studies show the smaller the plate and the smaller the cutlery, the fewer calories we consume (<u>41</u>). This proven phenomenon is called the <u>Delbouef illusion</u>, and is an important hack for those who want to lose weight.
- 4. **Drink lots of water:** Keep a water bottle on hand wherever you go. Research suggests the more water we drink before meals, the fewer calories we eat overall (42).
- 5. **Be mindful:** Mindful eating is about becoming more aware of your experiences, physical cues and feelings about food. It is based on a form of meditation called mindfulness, and typically encourages fewer calories consumed overall.

# I'M NOT DIETING I'M JUST CHANGING MY LIFESTYLE

**DIET**VS**DISEASE** 



# **ABOUT THE AUTHOR**

Joe Leech is a fully qualified dietitian from Australia.

He first studied a Bachelor's degree in exercise science, but realised he was truly fascinated in nutrition- specifically diet-related health conditions and diseases. He went on to complete a Master's degree in Nutrition and Dietetics.

Joe has worked as a clinical dietitian since 2011. He specialises in autoimmune and metabolic diseases, and has more recently been learning about gut health and food intolerance.

He also has a strong interest for health and medical writing, culminating in the launch of DietvsDisease.org in 2015.

### IF YOU HAVE QUESTIONS

You can get in touch with Joe at Hello@DietvsDisease.org.
To learn more about him and his mission click here.

### **BONUS SECTION**

### 7-DAY MEAL PLANNER

Congratulations on making it through the book.

It's time to marry all the different chapters of this book into something actionable; a plan you can follow right away.

Think of this 7-day meal plan as a new tool or piece of fitness equipment.

It's designed to help you explore new (and simple) recipes, develop healthy eating habits that nurture thyroid health, and kick-start your health goals. It was adapted from <a href="this 14-Day meal plan">this 14-Day meal plan</a>, but now gives you more control and flexibility.

Recipes are supportive of thyroid health, glutenfree and gut-friendly. However they are not suitable for those on the autoimmune protocol.



Don't stress if you can't follow all the recipes, or you eat out occasionally on weekends.

That's normal... That's life.

The idea is to get familiar with easy new recipes, and to get comfortable with making time to plan meals ahead. Planning your weekly meals is the difference between staying consistent and motivated, or grabbing take-away and feeling like you've failed (again).

Remember that the hardest part to eating better and getting healthy is taking that first step. By downloading this Ebook, you've already done it.

### **HOW THE MEAL PLANNER WORKS**

- 1. Decide on your favourite recipes from the recipe pool. Recipes are in descending order: Breakfast, Lunch, Dinner and Snacks.
- 2. Add the names of your selected recipes into the 7-day Meal Plan template. This is the meal plan you will follow for the next week, so you can print it out or save it to your phone.
- 3. Add the ingredients from your selected recipes into the Ingredients Shopping List, accounting for serving sizes and how many times per week you plan to have it. Print this out or save it to your phone for shopping.
- 4. Go shopping for the ingredients.
- 5. Make time to prepare or cook appropriate meals before the week starts. Some recipes are suitable for batch cooking and freezing. For example, if you are starting the plan on a Monday, I recommend preparing on Sunday evening.
- 6. Bon appetite! If you have questions or concerns particularly if you have additional medical conditions and unsure about changing your diet please email me Hello@DietvsDisease.org.

### 7-DAY MEAL PLAN TEMPLATE

	DAY 1
Reme	mber to wait at least 1 hour after taking thyroid hormone before you eat.  BREAKFAST:
	LUNCH:
	DINNER:
	SNACKS (OPTIONAL):
	SNACKS (OF HONAL).
	DAY 2
	BREAKFAST:
	LUNCH:
	DINNER:
	SNACKS (OPTIONAL):
	DAY 3
	BREAKFAST:
	LUNCH:
	DINNER:
	SNACKS (OPTIONAL):
	DAY 4
	BREAKFAST:
	LUNCH:
	DINNER:
	SNACKS (OPTIONAL):

### 7-DAY MEAL PLAN TEMPLATE

DAY 5
Remember to wait at least 1 hour after taking thyroid hormone before you eat.  BREAKFAST:
LUNCH:
DINNER:
SNACKS (OPTIONAL):
DAY 6
BREAKFAST:
LUNCH:
DINNER:
SNACKS (OPTIONAL):
DAY 7
BREAKFAST:
LUNCH:
DINNER:
SNACKS (OPTIONAL):

# **INGREDIENTS SHOPPING LIST**

Fruit & Vegetables	Meat, Seafood, Eggs,	Tinned/Bottled Foods	
Bananas	Tofu	Peanut butter (85%+	
Berries (fresh or frozen)	Eggs	peanut is healthier)	
Mango (fresh or frozen)	Chicken breast	Black beans (or other legumes)	
Lemon or lemon/lime juice	Ground (minced) beef	Can coconut milk (regular or light)	
Apples	Salmon fillet		
Sweet potatoes	Extra firm tofu	Bottle soy sauce	
Yellow (brown) onions	Nuts & Seeds	Can of tuna	
Bags of baby spinach	Bag of Brazil nuts	Diced tomatoes	
Pumpkin	Bag of roasted almonds	Chicken or vegetable stock	
Garlic	Bag of unsalted cashews		
Celery	Sunflower seeds (optional)	Maple syrup	
Carrots	Sesame seeds (optional)	Honey (optional)	
Cucumber	Rice, Pasta & Grains	Mayonnaise (optional)	
Courgettes (zucchinis)	Box of quinoa		
Bell peppers (capsicum)	Box of chia seeds	Condiments & Spices	
Chipotle peppers (or jalapeno)	White or brown rice	Cinnamon	
	Fats and Oils	Vanilla extract	
Dairy & Milk Alternatives	Extra virgin olive oil	Cumin	
Milk (full cream or skim)	Balsamic vinegar	Cocoa powder	
Greek yoghurt	Butter (optional)	Greek seasoning (optional)	
Feta cheese	butter (optional)	Chilli powder (optional)	
Cheddar cheese		Paprika (optional)	
Cottage cheese			
Unsweetened almond milk			

### **COCONUT BREAKFAST QUINOA**

Adapted from Fannetastic Food, Serves 4

### Ingredients

- 1 cup quinoa
- 1 can (13-15 oz or 400 mL) coconut milk (regular or light)
- 1 cup water
- 1 teaspoon cinnamon
- 1 teaspoon vanilla extract
- 1 tablespoon pure maple syrup
- Optional toppings: bananas, berries, coconut flakes, sliced nuts, etc



- 1. Combine all ingredients (except optional toppings) in a medium pot. Bring the mixture to a boil.
- 2. Reduce the heat to medium-low and allow the quinoa to simmer for 20-25 minutes, stirring occasionally, until tender and thickened (look for the consistency of oatmeal).
- 3. Serve immediately or store in the fridge and heat up or serve cold throughout the week!

### SWEET POTATO HASH WITH FETA AND EGG

Adapted from EA Stewart, Serves 4

### **Ingredients**

- 2 medium sweet potatoes (about 4 cups shredded)
- 2 tablespoons extra virgin olive oil
- 1 medium onion, finely chopped
- 4 cups chopped baby spinach
- 1 tablespoon dried Greek seasoning\*
- ¼ teaspoon sea salt, or to taste
- fresh ground black pepper to taste
- 4 eggs
- 4 ounces feta cheese
- Fresh oregano for garnish, optional



- 1. Prepare the veggies: Peel the sweet potatoes, then shred them with a food processor, and set aside, then chop the onions by hand or in a food processor, and set aside. Chop the baby spinach, and set aside.
- 2. Heat the olive oil over medium in a 12-inch cast iron, or other, skillet. Add the shredded sweet potatoes and toss to coat in the oil. Cook the sweet potatoes over medium for about 5 minutes, tossing regularly so they don't burn. Add the chopped onion and cook for an additional 4 minutes, then add the chopped spinach and cook for 1-2 minutes, or until wilted.
- 3. Stir in the Greek seasoning, sea salt and ground black pepper to taste.
- 4. Spread the veggie mixture evenly across the pan, and make 4 holes in the veggies. Next, crack one egg in each hole, and cook for ~ 2 minutes, then place a lid over the pan and cook for an additional 3 minutes, or until eggs are cooked to your liking.
- 5. Remove skillet from heat, and top with crumbled feta cheese and fresh oregano for garnish before dividing in to 4 servings.

<sup>\*</sup>You can use a combination of dried mint, dried oregano, and garlic salt in place of the Greek seasoning.

### **CHOCOLATE PEANUT BUTTER SMOOTHIE**

Adapted from **Smart Nutrition**,

Serves 2

### Ingredients

- 1 banana (cut into chunks and frozen)
- 3 tbsp cocoa
- 2 tbsp peanut butter
- 1 tbsp honey (optional)
- ¾ cup plain greek yogurt
- ¾ cup milk

- 1. Place all ingredients in blender.
- 2. Turn on low then slowly up to high speed.
- 3. Blend until smooth.



### **BANANA SPINACH SMOOTHIE**

Adapted from Fannetastic Food,

Makes 1 serve

### **Ingredients**

- Half a large or 1 small very ripe banana
- 1 cup milk (or dairy substitute)
- Baby spinach (suggest 2 huge handfuls)

### Method

1. Just toss it all in the blender with a few ice cubes. Voila!



### PUMPKIN SOUP LIKE YOU'VE NEVER TASTED

Adapted from <u>The Nutrition Guru and the Chef</u>, Serves 3-4

### **Ingredients**

- 500 grams (1.1 lb) pumpkin
- 2 whole onions (skin on)
- 1 whole knob of garlic (skin on)
- Sprinkle with salt and pepper
- 1.5 L (50 oz) of chicken or vegetable stock



- 1. Cut the pumpkin into wedges and chop the skin off
- 2. Cut into rough pieces. The larger the size, the longer they will take to cook.
- 3. Bake on a tray lined with non-stick baking paper at 180°C (356 °F) for approximately 30-40 mins, until the pumpkin is nice and soft.
- 4. Remove from the oven.
- 5. Get a large saucepan ready on the stove to prepare the soup.
- 6. Squeeze out the onion from their skins into the saucepan. Do the same with the knob of garlic and discard the skins. Place pumpkin into the saucepan.
- 7. Add chicken or vegetable stock and bring to boil.
- 8. Let boil for 5 mins.
- 9. Remove from the heat and blend with a stick blender until smooth.
- 10. Serve and enjoy!

# ROASTED SWEET POTATO & QUINOA WITH MANGO BALSAMIC VINAIGRETTE

Adapted from **Popsugar**, Serves 1

### **Ingredients**

### For the salad:

- 1 small sweet potato, unpeeled, diced small
- 1 tablespoon olive oil
- Salt and pepper to taste
- 1/4 cup quinoa
- 1/2 cup black beans
- 1/4 red pepper, diced
- 2 cups greens (you choose)
- 1 tablespoon salted sunflower seeds

### For the dressing:

- 1/4 cup mango, fresh or frozen
- 1 tablespoon balsamic vinegar
- 1 1/2 tablespoons water



- 1. Preheat oven to 400°F (205°C).
- 2. Place the sweet potatoes in a bowl, add oil, and stir to coat. Sprinkle with a touch of salt and pepper. Spread evenly on a pan, and roast for 20 or so minutes, stirring a couple times, until the potatoes are soft.
- 3. Place the quinoa and half a cup of water in a covered pot on high. Bring to a boil, reduce to simmer, and cook for 15 to 20 minutes or until the liquid is all soaked up and the quinoa is tender.
- 4. Puree the mango with the balsamic vinegar and water, and set aside.
- 5. Allow the roasted potatoes and quinoa to cool to room temperature.
- 6. Start layering the salad in the jar beginning with the black beans. Add the cooked quinoa, and pour the mango balsamic vinaigrette on top.
- 7. Top with diced red pepper, greens, roasted sweet potatoes, and sunflower seeds.
- 8. Screw top on securely, and store in the fridge.
- 9. When you're ready to eat, give the jar a good shake to mix everything up and enjoy!

### OVERNIGHT CHOCOLATE CHIA SEED PUDDING

Adapted from The Minimalist Baker, Serves 4

### **Ingredients**

- 1 1/2 cups (360 ml) unsweetened almond milk
- 1/3 cup (63 g) chia seeds
- 1/4 cup (24 g) unsweetened cocoa powder
- 2-5 Tbsp (30-75 ml) maple syrup if not blending (can sub 5-9 dates, pitted if blending)
- 1/2 tsp ground cinnamon (optional)
- 1/4 tsp sea salt
- optional: 1/2 tsp vanilla extract



- 1. Add all ingredients except sweetener to a mixing bowl and whisk vigorously to combine. If not blending (which I preferred!), sweeten to taste with maple syrup at this time. If blending, you can sweeten later with maple syrup or dates.
- 2. Let rest covered in the fridge overnight or at least 3-5 hours (or until it's achieved a pudding-like consistency).
- 3. If blending, add to a blender and blend until completely smooth and creamy, scraping down sides as needed. Sweeten to taste.
- 4. Leftovers keep covered in the fridge for 2-3 days, though best when fresh.
- 5. Serve chilled with desired toppings, such as fruit.

### **GREEK YOGHURT TUNA SALAD**

Adapted from The Yooper Girl, Serves 2

### **Ingredients**

- 1/4 cup plain greek yogurt
- 1 tbsp mayo (I bet spicy mustard would work too)
- 1 small can of tuna
- 1 small apple, diced
- 2 stalks celery, diced
- 1 tsp chopped onion (I used a spice, otherwise you could use 1/4 of a real onion)
- 1/4 tsp garlic salt
- salt & pepper
- lemon juice



- 1. Chop the apple and celery. Add to a bowl
- 2. Drain tuna and add it to the bowl.
- 3. Add 1/4 cup of greek yogurt and 1 tbsp of mayo to the bowl.
- 4. Add spices, salt & pepper, and lemon juice.
- 5. Mix thoroughly and enjoy!

### **HEALTHY CHIPOTLE CHICKEN POTATO SKINS**

Adapted from Half-Baked Harvest, Serves 3 (main) or 6 (as a side)

### **Ingredients**

- 3 medium sweet potatoes
- 3/4 lb (about 2 small) boneless skinless chicken breast
- 1/4 cups olive oil
- 2 tablespoon fresh lime juice
- 2 cloves garlic, minced or grated
- 3 whole chipotle pepper, minced
- 1 teaspoon cumin
- 2 teaspoons chili powder
- salt and pepper
- 2 (half a 10 oz bag) cups spinach
- 5 ounces sharp white cheddar cheese, grated
- Greek yogurt, for serving



- 1. Preheat your oven to 350°F (175°C). Wash your sweet potatoes and prick all over with a fork. Place in the oven and bake for 50-60 minutes or until fork tender.
- 2. Place your chicken in a baking dish and rub with a tablespoon of olive oil, salt and pepper. Place in the oven with the potatoes and bake for 25 minutes. Allow to cool and shred the chicken with a fork or your hands. When the sweet potatoes are done cut in half and allow to cool for 5-10 minutes.
- 3. In a medium size bowl combine the olive oil, lime juice, garlic, chipotle peppers, cumin, chili powder, salt and pepper. Set aside.
- Heat a small skillet over medium heat and wilt the spinach (this can also be done
  in the microwave). Toss the spinach and shredded chicken together, set aside and
  keep warm.
- 5. Turn the oven up to 400°F (205°C). Scrape the sweet potato out of the peel, leaving a medium size layer of flesh inside with the peel so that it can stand up on its own (I reserved the remaining flesh, for another use) and place in a baking dish. Brush the skins with a little of the chipotle sauce and bake for 5-10 minutes until nice and crisp.
- 6. While the skins bake mix the spinach, chicken and chipotle sauce together.
  Remove skins from the oven and stuff with the chicken mixture, top with shredded cheese and bake for 10 minutes or until the cheese has melted and the skins are hot and crisp. Serve with greek yogurt if desired.

### **ONE POT CHEESY TACO SKILLET**

Adapted from **Sweet C Designs**, Serves 6

### **Ingredients**

- 1 lb (450 g) lean ground beef
- 1 large yellow onion, diced
- 2 bell peppers, diced
- 1 can diced tomatoes with green chilis
- 3 cups baby spinach
- 1½ cup shredded cheddar cheese



- 1. In a large pan, lightly brown ground beef and crumble well.
- 2. Drain excess fat.
- 3. Add onions and peppers, and cook until browned.
- 4. Add canned tomatoes, and any water needed for taco seasoning to evenly coat mixture (up to 1 tbsp- the liquid from the tomatoes will help)
- 5. Add greens and let fully wilt.
- 6. Mix well.
- 7. Cover with shredded cheese and let cheese melt.
- 8. When cheese is melted, serve over a bed of lettuce, rice, corn taco or corn chips!

### **BIBIMBAP NOURISHING BOWL**

Adapted from My Gut Feeling, Serves 2

### **Ingredients**

- ½ cup brown or white rice
- 1 cup water
- · Pinch of salt
- 1 cup baby spinach, chopped
- 1 medium rainbow carrot, peeled and julienned
- 1 medium courgette (zucchini), julienned
- 3 tbsp olive oil
- ½ block of extra firm tofu
- Pinch of salt
- 2 eggs
- Sesame seeds (optional)



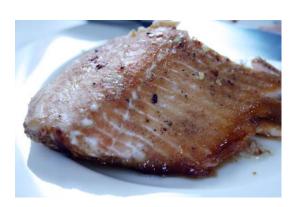
- 1. Place the rice in a sauce pan with boiling water and a pinch of salt. Cook on a low heat, until all the water has been absorbed and the rice is cooked.
- 2. Slice half of the tofu block into another half and wrap with paper towel. Place a plate and a heavy object on top of the tofu and set aside for 15 minutes. This process will help tofu drain faster. After pressing the tofu, cut into medium rectangular strips and coat both sides with salt. In a hot grill pan, grill 5 minutes per side or until crispy and golden brown.
- 3. For the spinach, carrots and zucchini, simply heat up 2 tbsp of olive oil in a skillet, then sauté the vegetables (separately, one type at a time) with salt until tender. Spinach will take 5-7 minutes, carrots about 5 minutes, and zucchini 2-4 minutes.
- 4. Fry the eggs with a tbsp of olive oil and add a pinch of salt.
- 5. Place the rice in two bowls, top with veggies and tofu, and finish with a sunny side up egg.
- 6. Top with sesame seeds (optional), stir everything up and serve.

### MAPLE GARLIC GLAZED SALMON

Adapted from <u>Kate Scarlata</u>, Serves 2

### **Ingredients**

- 1/2 lb (450 g) salmon filet
- 2 tablespoons pure maple syrup
- 1 tablespoon garlic infused oil
- 1 tablespoon soy sauce
- Salt and pepper, to taste
- Dash of crushed red pepper or sesame seeds



- 1. Preheat oven to 400°F (205°C).
- 2. In small bowl mix maple syrup, soy sauce, garlic infused oil, salt, and pepper
- 3. Place salmon in small glass baking dish and coat with maple and garlic infused mixture.
- 4. Marinate in refrigerator for 25-30 minutes.
- 5. Sprinkle with crushed red pepper flakes or sesame seeds, as desired
- 6. Bake uncovered in oven for 20 minutes or until flaky and cooked through.

### **SWEET POTATO FRITTERS**

Adapted from The MerryMaker Sisters, Serves 4

### **Ingredients**

- 3 cups grated sweet potato (about 1 large sweet potato)
- 4 eggs whisked
- 2 tsp. paprika
- salt and pepper
- Butter for the pan



- 1. Squeeze out any excess juice from the grated sweet potato and place in to a bowl.
- 2. Add the eggs, paprika, salt and pepper and mix well.
- 3. In a fry pan on medium heat melt some butter.
- 4. Use a 1/4 cup to scoop out fritter batter, carefully form in to a fritter with your hands and place in to the fry pan.
- 5. Cook for 5 minutes, flip, press down with a spatula, then cook for a further 5 minutes.
- 6. Continue to do this with all the fritter batter, it will make about 10-12 fritters.

# **ADDITIONAL SNACK IDEAS**

Fast and nutritious snacks on the go or at work:

- 1 cup of carrot and cucumber sticks + cottage cheese
- 200g (7oz) plain Greek yoghurt + 1
   small banana
- 1-2 handfuls of Brazil nuts, roasted cashews or almonds (30-50 grams)







### MEDICAL DISCLAIMER

### No advice

This Ebook contains general information about medical conditions and treatments. The information is not personal advice, and should not be treated as such.

### Limitation of warranties

The medical information in this Ebook is provided "as is" without any representations or warranties, express or implied. We make no representations or warranties in relation to the medical information in this Ebook.

Without prejudice to the generality of the foregoing paragraph, we do not warrant that:

- the medical information on this website will be constantly available, or available at all; or
- the medical information on this website is complete, true, accurate, up-to-date, or non-misleading.

### **Professional assistance**

You must not rely on the information on this Ebook as an alternative to medical advice from your doctor or other professional healthcare provider.

If you have any specific questions about any medical matter you should consult your doctor or other professional healthcare provider.

If you think you may be suffering from any medical condition you should seek immediate medical attention.

You should never delay seeking medical advice, disregard medical advice, or discontinue medical treatment because of information on this website.

### Liability

Nothing in this medical disclaimer will limit any of our liabilities in any way that is not permitted under applicable law, or exclude any of our liabilities that may not be excluded under applicable law.

Thanks to http://www.freenetlaw.com for this disclaimer template.