SNEAK PEEK

HASHIMOTO'S FOOD PHARMACOLOGY

Chapter 1

1.

Hashimoto's and the Healing Potential of Food

After my own Hashimoto's diagnosis in 2009, I wanted to figure out what I could do to be the healthiest person with Hashimoto's that I could be. I wanted to know if there was anything I could do to address my symptoms, and if there was anything that could be done to reverse my condition or at least stop its progression. So I set out to find the root cause of my condition and ended up on a health journey that got me out of my comfort zone—which was that of a conventionally trained pharmacist, skeptical of all things natural—and on the way to vibrant health!

Throughout this journey, I've been able to eliminate all of my symptoms and get the condition into remission by using a variety of interventions, most of which have been discussed in my books *Hashimoto's: The Root Cause* and *Hashimoto's Protocol*. The most profound of these strategies were those that centered around food and nutrition, and although there may be many moving pieces to resolving a Hashimoto's diagnosis, we can always start to heal ourselves using food and nutrition!

As I've gone on to work with thousands of other people with Hashimoto's, either in person or through my programs (as well as hearing feedback about interventions shared in my first two books or my blog), I've found that food always plays an indispensable role in helping people feel better. In this book, I'll show you how to use food for healing. Before we get into the dietary details—and the cooking fun!—I want to offer an overview of Hashimoto's thyroiditis and why it is that diet has such a powerful impact on the condition.

WHAT IS THIS THYROID GLAND YOU SPEAK OF?

Chances are, if you picked up this book, you already know what the thyroid is. Just so that we're on the same page (no pun intended), the thyroid gland is a butterfly-shaped organ located in the neck below

the Adam's apple. It produces thyroid hormones, which affect the function of just about every organ system in the human body, including stimulating the metabolism of the foods we eat, extracting vitamins, and producing energy from food. They are also vital to the production of other hormones as well as to the growth and development of our nervous system. The thyroid has been called the "thermostat" of the body, as it maintains our temperature. Indirectly, thyroid function affects every reaction in the human body, since the temperature has to be just right for these reactions to take place properly.

UNDERSTANDING HASHIMOTO'S

Hashimoto's thyroiditis is an autoimmune disease, which means it is a disease characterized by the immune system's attack on our own cells. In Hashimoto's, the cells under attack are located in the thyroid gland; in other autoimmune conditions they are in different parts of the body. When the immune system attacks the thyroid the way it would attack a bacterium, virus, pathogen, or other harmful invader, it causes damage to the thyroid gland, which will likely result in a reduced ability of the thyroid gland to make sufficient thyroid hormones for the whole body. This is known as *hypothyroidism*, or *an underactive thyroid*.

Hashimoto's causes most cases of hypothyroidism in developed countries, including the United States, Canada, Europe, and other countries that add iodine to their salt supply (in developing countries that do not fortify with iodine, iodine deficiency is the primary cause of hypothyroidism). Yet very few of those who are diagnosed with hypothyroidism will ever be tested for Hashimoto's or even informed that they may have an autoimmune condition. Instead, they are usually advised to take synthetic thyroid medication to correct their underactive thyroid, a step that, although necessary and helpful, does not address or correct the underlying destruction of the thyroid gland. This unfortunate oversight can allow the immune system's attack on the thyroid to continue.

In many cases, this oversight is a product of the conventional medical model, which instructs doctors to treat the majority of thyroid disorders, no matter what the cause, with synthetic thyroid medicine. Once on this path, a patient's typical treatment plan will entail regular testing of thyroid hormone levels and adjustments of medication as needed, as well as screening for additional autoimmune conditions.

One of the problems with this treatment plan is that pharmacological restoration of normal thyroid-stimulating hormone (TSH) levels doesn't always result in the resolution of symptoms. In other words, on-paper improvement doesn't translate to a state in which the person actually feels better. I've had some clients share with me that this is the "worst part

of the condition," because a doctor will end up insisting that their symptoms must be all in their head, since the blood-test results are normal. In this scenario, no one wins. The patient only grows increasingly frustrated, and the doctor, even a well-meaning one, comes across as increasingly dismissive. And still the discussion of Hashimoto's is unlikely to arise.

If you have an autoimmune thyroid condition, there is another factor that can add to the confusion: a fluctuation between or even simultaneous occurrence of hypothyroid and hyperthyroid symptoms. As thyroid cells are damaged and destroyed by the immune system, thyroid hormones that are usually stored inside of the cells are released into circulation, leading to an *excess level of thyroid hormones*. This causes what is referred to as transient or temporary *hyperthyroidism*, which can create symptoms such as weight loss, anxiety, and irritability. Then, once the extra thyroid hormones are cleared out of the body, the damaged thyroid gland will have a difficult time making enough thyroid hormones, and symptoms of hypothyroidism will emerge. These symptoms include fatigue, cold intolerance, and joint pain (see the sidebar on page 15 for a more complete list of symptoms).

Beyond the clinical discussion of symptoms, another aspect of Hashimoto's that doesn't get enough attention is what it really feels like to be someone with the condition—what thoughts and feelings can dominate your life and how profoundly the disease can impact your internal world. I know what it's like, and I hope sharing my experience and the experience of others with the condition will reassure you that you're not alone, and you can get better!

WHAT IT FEELS LIKE TO HAVE HASHIMOTO'S

I have a confession: I used to think that thyroid conditions were "boring" in pharmacy school! After all, you either had too much thyroid hormone and needed a pill to suppress it or not enough and needed a pill to boost your levels! My own personal health journey has taught me that Hashimoto's is anything but boring and that there's much more to it than just test results and thyroid hormone levels. Of course, working with thousands of people with the condition has confirmed this every time! What I've discovered is that the experience of Hashimoto's is one that is filled with not just a wide range of symptoms, but a wide range of emotions too.

In reality, medications don't always resolve thyroid conditions or lead to a disappearance of symptoms. For people with Hashimoto's, this can lead to feeling a loss of control over their physical body and even their mind. When I asked my Facebook community, "What does it feel like to have thyroid disease?" a lot of the responses centered around this sense of loss. One woman described it as feeling "like you don't recognize yourself anymore in many ways."

She said, "You keep trying to find the old 'me,' but she's long gone. I miss the girl I was before Hashimoto's." Another said, "I feel like a completely different person, and I can't seem to get that person back. I hate that. What is worse is, no one gets it, not your friends, family, doctors. Kind of breaks the spirit."

After my thyroid diagnosis, I experienced a feeling of dissociation from myself. I became numb and apathetic toward life, unable to feel any emotion, good or bad. I no longer had a desire for the things that made me human, such as being close to others, making friendships, following my passions, and loving the people in my life.

Although I like to focus primarily on solutions and steps for healing, these feelings can be a very real part of the experience of Hashimoto's, and I want you to feel that your emotions are validated. It's important to take some time to comfort yourself and show yourself kindness for what you are going through. I want you to understand that you're not going crazy, that many of your symptoms may be related to Hashimoto's, and that you can get better!

TESTING FOR HASHIMOTO'S

Because the symptoms shift and can sometimes be nonspecific, it can be tough to get a definitive diagnosis of Hashimoto's. As I mentioned, I personally experienced symptoms for almost a decade before being diagnosed. Sadly, ten years between the appearance of symptoms and the proper diagnosis seems to be the norm among the patients I've talked to. Even when they receive the proper diagnosis, they usually don't get the right treatment. Of course, my goal is to help shorten your path to healing by providing information that lets you become a proactive, empowered patient, one who doesn't need to wait for answers and instead knows what action steps to take. An essential part of this is having an understanding of the most important thyroid tests. Let's take a look at these.

Hashimoto's can be diagnosed through either blood tests, thyroid ultrasounds, or biopsies of the thyroid gland. Blood tests are typically the most accessible option, and the right ones can often uncover autoimmune thyroid disease.

Most of these tests will be covered by health insurance if ordered by a licensed physician. If your doctor will not order these tests for you, you can get them through direct-to-consumer lab services and pay out of pocket, and in some cases submit the claim for insurance reimbursement.

Blood Tests

TSH (Thyroid-Stimulating Hormone)

TSH is a pituitary hormone that responds to the level of circulating thyroid hormones. The TSH test is used as a screening test for thyroid function and is likely what your doctor would suggest if you reported thyroid symptoms.

THE MANY SYMPTOMS OF HASHIMOTO'S

Hashimoto's thyroiditis has a unique set of symptoms when compared to nonautoimmune hypothyroidism. If you have Hashimoto's, your symptoms may fluctuate between those of hypothyroidism and those of hyperthyroidism, or you may even experience symptoms of both conditions simultaneously. You may also have symptoms related to autoimmune inflammation. Here are some of the symptoms of each:

HYPOTHYROIDISM

- Cold intolerance
- Constipation
- Depression
- Dry skin
- Fatigue
- Forgetfulness
- Hair loss
- Joint pain
- Loss of ambition
- Menstrual irregularities
- Muscle cramps
- Stiffness

HYPERTHYROIDISM

- Anxiety
- Eye protrusion
- Fatigue
- Hair loss
- Heart palpitations
- Heat intolerance
- Increased appetite
- Irritability
- Menstrual disturbances
- Tremors
- Weight loss

Additional symptoms, which can be seen in other autoimmune conditions, include: acid reflux, adrenal fatigue, allergies, balance disorders, bloating, constipation, diarrhea, feelings of disconnection, gum disorders, irritability, irritable bowel syndrome, loss of ambition, mood swings, panic attacks, rashes, vertigo, weakness, and numerous other inflammatory symptoms.

A comprehensive approach is needed to resolve all of your symptoms and to get to the root cause of the condition!

In advanced cases of Hashimoto's and primary hypothyroidism, TSH will be elevated. In advanced cases of Graves' disease and hyperthyroidism, TSH will be low. Unfortunately, the TSH test does not always catch Hashimoto's in earlier stages. During these stages, you can have either high or low TSH or lab work that reveals "normal" readings even while you are experiencing unpleasant thyroid symptoms. I was told that my thyroid was "normal" when I was exhausted, forgetful, losing hair by the handfuls, and sleeping for twelve hours each night under two blankets in southern California.

At the time my TSH was 4.5 mIU/L, and this was considered normal based on the reference range of 0.2–8.0 mIU/L, which most labs still use. The problem is that when this original "normal" range of TSH was created, scientists included elderly patients and others with compromised thyroid function in the calculations, leading to an overly wide reference range. Based on

this skewed range, many doctors may miss identifying patients with an elevated TSH (this is one reason why you should always ask your physician for a copy of any lab results).

Thankfully, the accepted TSH reference range is on the path toward change. In recent years, the National Academy of Clinical Biochemists indicated that 95 percent of individuals without thyroid disease have TSH concentrations below 2.5 mIU/L, and a new normal reference range was defined by the American College of Clinical Endocrinologists to be between 0.3 and 3.0 mIU/L. Functional-medicine practitioners have further defined normal reference ranges as being between 1 and 2 mIU/L for a healthy person not taking thyroid medications.

Thyroid Antibodies

The best blood tests for Hashimoto's are those that measure thyroid antibodies, because these will indicate an autoimmune response to the thyroid gland. The two antibodies that are usually elevated in those with Hashimoto's are:

- Thyroid peroxidase antibodies (TPO antibodies)
- Thyroglobulin antibodies (TG antibodies)

If you have Hashimoto's, you may have an elevated level of one or both of these antibodies. In general, the greater the number of antibodies, the more aggressive the attack on the thyroid gland.

Current medical reports state that 80 to 90 percent of people with Hashimoto's will have TPO antibodies. That said, researchers at the University of Wisconsin Thyroid Multidisciplinary Clinic found that only half of the patients who came up positive for Hashimoto's through cytology (when thyroid cells are withdrawn through a thin needle and then evaluated under a microscope; see more on this type of test below) had TPO antibodies. Even if your thyroid antibody test is negative, you could have a less aggressive variant of Hashimoto's known as seronegative, or antibody-negative, Hashimoto's, which does not present with elevated levels of either of the above mentioned antibodies, but may be seen on ultrasound.

Free T3 and Free T4

Blood tests can also measure levels of the two most active forms of thyroid hormone, triiodothyronine (T3) and thyroxine (T4). These levels will be low when Hashimoto's progresses to hypothyroidism. These hormone tests are sometimes helpful for diagnosis and can be useful too in determining a correct dosage of thyroid medications. I recommend utilizing the free T3 and free T4 tests instead of the total T3 and T4 tests, as they reveal the thyroid hormone that is unbound, or "free," to interact with thyroid hormone receptors.

Thyroid Ultrasound

Some individuals may have Hashimoto's despite no detectable alterations in their blood work. In these cases, a thyroid ultrasound may need to be used to help determine a diagnosis. Clinicians have found that the changes consistent with Hashimoto's may be visualized on thyroid ultrasounds even when a person does not test positive for antibodies.

Fine-Needle Aspiration Cytology

In a fine-needle aspiration cytology test, cells are extracted from the thyroid gland through a very thin needle and then studied under a microscope for signs of Hashimoto's. Due to its invasive nature, this type of test is usually reserved for determining whether thyroid nodules are benign or cancerous. In some cases, patients will learn they have Hashimoto's when they have suspicious nodules examined this way.

Although I don't recommend this test as the sole test for a diagnosis of Hashimoto's, I'm mentioning it here, because this test is more likely to pick up additional cases of Hashimoto's when other advanced tests may miss it. As my friend Dr. Alan Christianson, world-renowned thyroid doctor, always says, "Test results can be negative, and it's really important to listen to the patient. You can't completely rule out Hashimoto's unless you look at every cell inside of the thyroid gland under a

TESTING, TESTING, ONE-TWO-THREE

Most conventionally trained doctors will say that once you test positive for thyroid antibodies, you will never need to test for them again. "You will always test positive, so it doesn't matter," they say. I disagree! Testing thyroid antibodies is helpful to determine a baseline for the aggressiveness of your condition (the higher the number, the more aggressive the condition) as well as to track the progress of your interventions. I generally recommend testing antibodies every one to three months when doing active interventions to improve your thyroid health. You will see the full effect of your interventions within a time span of three months to two years; however, you may be able to see a trend within one month. Reduction in thyroid antibody levels by at least 10 percent should be considered a positive change, an indication that your interventions are helping.

In general, antibody levels over 500 IU/mL are considered aggressive, while levels under 100 IU/mL are considered "in remission" for Hashimoto's. That said, there is no standard definition of remission, and I consider any reduction in antibodies (when correlated with improved symptoms) a positive step on the remission journey! Antibody levels under 35 IU/mL are considered "negative" for Hashimoto's according to some tests, while other tests consider levels under 9 IU/mL to be negative. However, as I already mentioned, a negative antibody test does not rule out Hashimoto's, so I encourage you not to get too hung up on having perfect numbers and focus on feeling better!

microscope." I share this because some people who have thyroid symptoms and will likely benefit from lifestyle interventions for Hashimoto's are often told that they don't have Hashimoto's based on blood tests and even ultrasounds and unfortunately delay taking part in strategies that could help.

Although these tests can reveal to us a diagnosis of Hashimoto's, they don't offer any insight into root causes of the disease, something that can be even more helpful when it comes to understanding solutions. For that, we need to look to the origins of autoimmunity, since all autoimmune disease requires the same factors to be present.

THE ORIGINS OF AUTOIMMUNITY

We know that Hashimoto's is an autoimmune condition. This means that understanding how autoimmunity works can give us important clues about how Hashimoto's happens—and how we might heal from it.

There are at least eighty known autoimmune diseases, including Hashimoto's, type 1 diabetes, rheumatoid arthritis, lupus, and celiac disease (an autoimmune reaction to gluten). Although these are all different conditions, research has shown that all autoimmunity requires the presence of the same factors. Dr. Alessio Fasano, Director of the Center for Celiac Research and Treatment at Massachusetts General Hospital, found that three things must be present for autoimmunity to develop:

- The genetic predisposition
- Triggers that turn on genes
- Intestinal permeability (gaps in the intestinal barrier that can let inflammatory pathogens pass into the bloodstream; otherwise known as "leaky gut")

There was a time when it was believed that once these factors had combined to activate the immune system, there was no going back; autoimmunity was thought to be irreversible. Thankfully, we are no longer living in that time.

Researchers have shown that autoimmunity expression is sort of like a "three-legged stool." All three factors need to be present in order for autoimmunity to find expression. Although we can't choose or change our genes, we can impact the expression of both our genes and autoimmunity. We have two potential options to address with autoimmune disease: the triggers—finding and eliminating autoimmune triggers, such as infections or toxins; and intestinal permeability—looking for the root causes of why the gut may be permeable.

The amazing thing is, when we address triggers and/or the health of our gut, we can see significant improvements in autoimmune disease and, in some cases, even get the condition into remission! I've spent the last several years researching Hashimoto's triggers and developing strategies to address and eliminate them. I'd like to take you into

THE FIVE STAGES OF HASHIMOTO'S

Hashimoto's is a progressive autoimmune condition that can lead to the development of other autoimmune conditions if not addressed properly. The five stages are:

In **Stage 1** a person discovers a genetic predisposition to develop Hashimoto's. The thyroid function is normal, and there's no attack on the thyroid. For all intents and purposes, the person does not have thyroid or autoimmune disease at this stage.

In **Stage 2** of Hashimoto's, the attack on the thyroid gland starts, but the thyroid can still make enough thyroid hormone. Although most thyroid tests may be normal at this stage, many people will test positive for thyroid antibodies and may have changes consistent with Hashimoto's on a thyroid ultrasound, but will have normal TSH levels according to the TSH screening test. This is the stage when symptoms begin, yet many people are misdiagnosed with another condition, such as depression, anxiety, or hypochondria, because most doctors don't do the right tests. This stage is also the optimal stage when lifestyle changes and a Root Cause Approach to the condition should be started, because it's much easier to prevent damage than try to fix it later.

In **Stage 3**, the thyroid gland starts to lose its ability to make enough thyroid hormone for the body, and a person will have a slightly elevated TSH with normal T4/T3. More symptoms will be seen at this stage, and there is a higher likelihood of a diagnosis, though some doctors may miss or dismiss the slight TSH elevation and many doctors will recommend and a "wait and watch approach." At this stage, in addition to lifestyle changes, a thyroid hormone–supporting medication may also be extremely helpful and in my opinion warranted, though many conventionally trained doctors will refuse to prescribe thyroid hormones until Stage 4.

In **Stage 4** of Hashimoto's the thyroid gland has fully lost its ability to compensate, and the person becomes hypothyroid. Hashimoto's is relatively easy to diagnose at this stage with the current "standard of care tests," which will reveal that the person has elevated TSH and lowered T3/T4. This is the stage in which a person will be even more symptomatic and will finally be offered a thyroid-hormone prescription by most traditionally trained doctors.

Stage 5 is when other types of autoimmune disease develop. We know that autoimmune disease can be progressive, and taking thyroid hormones or surgical removal of the thyroid gland will not stop the progression of autoimmunity. People with one autoimmune condition may find themselves diagnosed with other types of conditions such as lupus, rheumatoid arthritis, or Sjogren's syndrome. The good news is that addressing lifestyle, nutrition, and the root causes of autoimmune disease can help not just autoimmune thyroid disease, but also the symptoms and progression of other types of autoimmune issues.

what's going on in Hashimoto's to deepen your understanding of my approach.

WHAT'S GOING ON IN HASHIMOTO'S?

In Hashimoto's, in addition to the issue of intestinal permeability there are six potential types of triggers: food sensitivities, nutrient depletions, an impaired ability to handle stress, an impaired ability to handle toxins, digestive issues, and chronic infections. Each person with Hashimoto's will have his or her own combination of triggers, which means that creating a universal approach to healing can be challenging. However, I've found that nearly every person with autoimmune thyroid disease has underlying root-cause commonalities—the same factors and imbalances are present—and many of these imbalances *can* be reliably addressed with proper nutrition.

Although triggers and stressors for the condition can vary from person to person, the body usually responds to them in a very predictable fashion by moving us away from a "thriving state" toward a "surviving state." In just about every person with Hashimoto's, I see the same recurring patterns.

I've called these patterns the "Vicious Cycle of Hashimoto's." This cycle is interrelated and simply adding thyroid supplement to the mix will not result in full recovery for most thyroid patients. But although the triggers of Hashimoto's can break the body down, nutrition can build it back up.

HEALING HASHIMOTO'S PATTERNS WITH NUTRITION

The recognizable patterns in Hashimoto's that lend themselves to nutritional healing include the following.

1. Micronutrient deficiencies. Most people with Hashimoto's have numerous micronutrient deficiencies. These micronutrient deficiencies can occur as a result of eating the Western diet, eating nutrient-poor foods, following a calorie-restricted diet, digestive enzyme deficiencies, inflammation from infections or food sensitivities, medications, or an imbalance of gut bacteria. Lack of sufficient thyroid hormones can also lead to nutrient deficiencies, as it makes nutrient extraction from food more difficult and less efficient.

These nutrient deficiencies contribute to the development of Hashimoto's as well as many of its symptoms. Restoring the nutrients through nutrient-dense foods, supplementation, and optimizing digestion are some of the fastest ways to feel better with Hashimoto's and begin to build the body back up!

2. Macronutrient deficiencies. Oftentimes people with Hashimoto's have diets that are deficient in protein and fat, two essential macronutrients that support the body's growth and repair processes. These deficiencies can develop as a result of our carb-heavy Western diet, fat phobia, and vegetarian/

vegan diets as well as impaired protein or fat digestion.

Impaired protein digestion can also lead to deficiencies in the amino acids L-tyrosine and L-glutamine, both of which may play an important role in healing from Hashimoto's. L-tyrosine is necessary for production of thyroid hormones, while L-glutamine is essential to proper gut lining and immune function. Both amino acids are often depleted in people with Hashimoto's. Improving protein digestion can help restore levels of these important amino acids and promote an anabolic (building up), instead of a catabolic (breaking down) state within the body.

3. Deficiencies in digestive enzymes. Studies have found that people with Hashimoto's and hypothyroidism often have a deficiency in the digestive enzyme hydrochloric acid, resulting in low levels of stomach acid (hypochlorhydria) or a complete absence of it (achlorhydria). Low stomach acid can make it more difficult to digest proteins, which in turn can lead to deficiencies in the amino acids mentioned above.

Additionally, around a third of people with Hashimoto's may also have deficiencies in bile and/or pancreatic enzymes, which can lead to issues with fat absorption. Lastly, up to 80 percent of people with Hashimoto's may have difficulty digesting plant fibers. The digestive process demands a lot of energy, so when it requires more metabolic work than normal, you may notice yourself feeling tired more often. Utilizing easy-to-digest foods and targeted digestive enzyme supplementation can restore proper digestion and eliminate symptoms like fatigue, virtually overnight.

4. Blood-sugar swings. Many people with Hashimoto's have an impaired tolerance for carbohydrates. If you are one of these people, you are likely to experience blood-sugar swings characterized by a rapid spike in blood sugar after eating carbs followed by an excessive release of insulin. As insulin surges, your blood sugar will crash in a response known as reactive hypoglycemia. Reactive hypoglycemia can lead to unpleasant symptoms such as nervousness, lightheadedness, anxiety, and fatigue, and it can place stress on the adrenals.

When the adrenals become stressed, they are likely to release an excess of cortisol, which can also lead to an increased production of inflammatory proteins that are associated with a heightened immune response. This pattern eventually leads to altered cortisol release, which can in turn lead to numerous symptoms, including chronic fatigue, mood swings, and muscle wasting. Learning how to eat to promote stable blood sugar is an important part of protecting your adrenals from excess stress and in healing from hypothyroidism. Improvements in mood, energy, brain function, and weight are positive side effects of proper blood-sugar balance!

5. A toxic backlog. We are bombarded with toxins every day—they are on and in our foods, in the water we drink, in the personal-care products we put on our bodies, the cleaning products we use in our homes, and so on. Many of these toxins can interfere with hormone production, affect thyroid activity, and perpetuate autoimmunity. For example, fluoride, found in drinking water, bottled beverages, certain teas, and some supplements and medications, may act as a trigger in inducing thyroid cell death and inflammation, leading to the development of thyroiditis or autoimmune thyroiditis. The toxic backlog can lead to numerous symptoms as well! We can take proactive steps to minimize our toxic exposure, freeing ourselves from symptoms in our very own kitchens, by choosing low-toxin tools and foods (see Chapter 4 for more information) and utilizing foods and nutrients that support our detoxification pathways.

6. Food Sensitivities. Food sensitivities represent one of the most common patterns I see in those with Hashimoto's. *Food sensitivities* are not the same as *food allergies*. *Food allergies* are reactions to food that are immediate and often life-threatening (think the child who stops breathing after eating nuts), and are readily acknowledged and tested for by conventional medical doctors, especially allergists. These reactions are known as type I hypersensitivity reactions and are governed by the IgE branch of the immune system.

Food sensitivities are type IV delayed hypersensitivity reactions governed by the IgG branch of the immune system. As the name implies, they do not occur right away. In fact, it can take up to four days for them to manifest, and this is one of the reasons why it's so hard for most people to correlate food sensitivities with symptoms. For example, you may eat corn on Monday and have a panic attack on Wednesday!

Here's the connection I've made. Hashimoto's is also considered a type IV delayed hypersensitivity reaction and often presents with IgG antibodies to the thyroid gland. In my experience, whenever we eat foods that cause our IgG system to flare up, this also seems to result in a flare-up of thyroid antibodies and thyroid symptoms. More research is needed to reveal exactly why this is the case, but it could be a result of an opening of the flood gates or perhaps inflammatory food proteins cross-reacting with the thyroid gland. What I have seen is that this overlap gives us an incredible opportunity for healing—most people with Hashimoto's (88 percent of my clients and readers) will have a reduction in thyroid symptoms and antibodies after removing the most common reactive foods.

7. Intestinal permeability. According to researchers, every person with an autoimmune disorder has some degree of intestinal permeability, or "leaky gut." A leaky gut has gaps in the gut lining that allow irritating molecules and substances to escape from

the digestive system into the bloodstream. This irritation can interrupt the immune system's ability to regulate itself and put the body into a perpetual attack mode that will be counterproductive to healing.

Intestinal permeability can cause such symptoms as bloating, stomach pains, irritable bowel syndrome, and acid reflux. These same symptoms are commonly experienced by people with Hashimoto's, although not everyone with intestinal permeability and/or Hashimoto's will have these symptoms. Both asymptomatic and symptomatic intestinal permeability can lead to a reduced absorption of nutrients required for detoxification and other important functions as well as a reduced output of toxins, which, if not addressed, can interfere with recovery.

There are numerous factors that can initiate or perpetuate damage to the gut lining such as stress, strenuous exercise, surgery/trauma, adrenal hormone imbalances, intestinal infections, toxins, enzyme deficiencies, the use of nonsteroidal anti-inflammatory drugs (NSAIDs), alcohol, nutrient deficiencies, infections (of the gut, sinus, or mouth), and food reactions. We can support the health of the intestines by addressing nutritional factors, such as eliminating reactive foods; addressing nutrient deficiencies; and replenishing enzymes and beneficial bacteria. These three key steps can be life-changing for most people with Hashimoto's.

The Hashimoto's and hypothyroidism lifestyle interventions I have researched and tested aim to dismantle the vicious cycle piece by piece. We repair the broken systems to restore equilibrium, allowing the body to rebuild itself. Nourishing your body will help you shift these patterns and will make you feel so much better! The body breaks itself down in those with Hashimoto's. Through nutrition, we can build it back up.

HOW NUTRITION CAN HELP YOU REACH YOUR HEALTH GOALS

Through my work with my clients, I have seen hundreds of people recover their health with my Root Cause Approach, and I have now received hundreds of success stories from people who discovered and implemented the approach in my books *Hashimoto's: The Root Cause* and *Hashimoto's Protocol*.

Scientists have said that there is no cure for Hashimoto's, but I believe we have the capacity and knowledge to put the condition into remission for most people. Each autoimmune condition has a different definition of what remission may mean. I like to think of remission as a journey, not necessarily a destination. Remission to me is progress, not perfection. Where you are is an improvement over where you've been. Here are the scenic stopping points on the remission journey: feeling better, eliminating most or all of your symptoms, reducing your thyroid antibodies, regenerating thyroid tissue, and experiencing a functional cure (which here means no

symptoms, no antibodies, and no evidence of autoimmune thyroid disease in your body or on your thyroid).

Many people will be able to see a reduction in their thyroid antibodies, and some may no longer test positive for Hashimoto's. A small subset may even be able to regenerate thyroid tissue and discontinue thyroid medications (under a doctor's supervision).

I'll share the full nutritional plans and some success stories from readers just like you who were able to take back their health using the nutrition guidance in Chapter 3 of this book!

WHAT DIET CAN AND CAN'T DO

Optimizing your nutrition can do wonders for your health. This is why following a nutrient-dense diet that is free of reactive foods is one of the first steps I recommend in an approach to healing. A lot of people have had great success by taking this step alone, even going into complete remission from Hashimoto's. But this isn't always the case. Although dietary modifications are powerful, there are limitations to what they can accomplish, and although most will see improvement with nutrition, many may need to dig deeper into the other root causes and interventions to continue improving.

I mentioned that Hashimoto's can be caused by food sensitivities, nutrient depletions, an impaired ability to handle stress, an impaired ability to get rid of toxins, and intestinal health issues as well as chronic infections. A person may have anywhere from one to all of these root causes! In my work with thousands of Hashimoto's patients, I've found that diet modifications can usually help address and/or heal food sensitivities, nutrient deficiencies, adrenal issues, some gut imbalances, and certain toxic imbalances. In other cases, diet can *sometimes* help with profound nutrient deficiencies, although supportive supplements and/or digestive enzymes may also be needed to fully address deficiencies. In more complicated cases, nutrient deficiencies can result from infections or toxins that require additional treatment.

In certain cases, food sensitivities may be improved by nutrition and elimination of foods; in other cases, food sensitivities can be caused by infections, and the infections can result in the loss of more and more foods and the need for a progressively more restricted diet. Please note, diet can sometimes help manage the symptoms of a gut infection, but no amount of food restriction will heal most gut infections, and many gut infections can produce ongoing food sensitivities and reactions to whatever foods we're eating. Most infections require treatments such as antimicrobial, antiparasitic, antifungal, and/or antiviral herbs or medications.

Severe toxicity may require supplements, medications, and other advanced treatments to clear. Current stress or past traumatic stress can leave our bodies in the

THE STANDARD OF CARE VS. THE ROOT CAUSE APPROACH TO HASHIMOTO'S

If this is the first time you are hearing about any proactive strategies (or any strategy other than medication) that may help address your Hashimoto's, you might feel overwhelmed, frustrated, and even angry. But I encourage you to feel empowered instead. My Root Cause Approach is different from the current standard of care offered through conventional medicine, which generally overlooks opportunities for healing. Let's review the key differences.

The standard of care approach to Hashimoto's is what I consider to be a lab-number, T4-centric, and reactive model that consists of primary reliance of the TSH test for diagnosis of Hashimoto's and determining the need for more or less thyroid hormone:

Levothyroxine is the thyroid hormone of choice prescribed to most people with Hashimoto's, although it's not the only thyroid hormone that's missing with Hashimoto's.

Often patients are not given appropriate doses of medication, because outdated and cookie-cutter lab reference ranges are used that measure the levels of one thyroid hormone in the pituitary, but not in the rest of the body.

Patients who continue to be symptomatic are referred to other specialists for additional medications, such as dermatologists for hair loss, psychiatrists for depression, and so on.

There are no lifestyle recommendations and no attempt to find triggers for the autoimmune response against the thyroid, and thyroid antibodies are rarely tracked, though patients are offered testing for additional autoimmune conditions.

In contrast, my Root Cause Approach to Hashimoto's is a patient-centered approach that looks at the underlying issues and the person's individuality. The Root Cause Approach to Hashimoto's includes:

Utilizing comprehensive thyroid tests to determine diagnosis and the need for thyroid-hormone therapy.

Using optimal and functional ranges of thyroid hormones instead of outdated reference ranges.

Optimizing thyroid hormones utilizing the T1, T2, T3, and T4 hormones when necessary (all are produced by the thyroid gland, but only T4 is present in levothyroxine, the most commonly prescribed thyroid drug).

Optimizing nutrition through eliminating reactive foods and addressing deficiencies and digestion.

Addressing the stress response.

Addressing the health of the detoxification system.

Addressing the state of the gut.

Identifying the person's unique triggers such as chronic infections, toxins, or traumas.

Tracking thyroid antibodies every three months to see if the interventions are making the condition less aggressive.

Appreciation of the person's experience and always utilizing the person's symptoms as a guide for adjusting treatment.

For a detailed overview of my full approach, check out *Hashimoto's Protocol* and *Hashimoto's: The Root Cause*.

"break it down" mode that no amount of good nutrition can solve, but stress reduction or working with a therapist can help here.

Additionally, when damage to the thyroid gland has occurred and the person can no longer produce adequate amounts of thyroid hormone, supplemental thyroid hormone will be needed. Proper nutrition can prevent damage to the thyroid gland and in some cases thyroid tissue can regenerate, but this is not a quick or even certain process—it's much easier to prevent tissue damage than to grow a thyroid back. No amount of food or special diet will provide thyroid hormone to a damaged thyroid.

I share this information with you about the limitations of diet because I have met plenty of people with Hashimoto's who have locked on to the idea that diet can heal everything. With this belief in place, they continue removing more and more foods from their diet with the expectation that this will lead to healing. My recommendation is that if you've been on a clean diet for three months and you're not seeing results or you are getting stuck, you likely have an undetected infection or other underlying issue that is causing inflammation within your body. I recommend utilizing the full Root Cause Approach shared in my books *Hashimoto's Protocol* and *Hashimoto's: The Root Cause* and working with a functional-medicine practitioner to get on the right path.

THE NOURISHING NEXT STEPS

My goal in writing this book was to create a one-stop, nutrition-centered resource for cooking and nourishing your way to recovery from Hashimoto's. When we begin to see foods for their healing or harmful potential for our bodies, we acknowledge the power of our diet to change our lives. This is food as medicine. To take the reins of this power, we have to dig a little deeper and see the foods that make up our diet for their chemical properties, for it's not just the whole, but the parts of the whole that interact with our internal systems. This more granular understanding of food is what I call food pharmacology.

The only way to see how you will respond to optimizing your nutrition is to take the leap into strategic dietary modifications, which you'll learn more about in the next chapter and will easily be able to implement when you follow the recipes in the Cookbook section.

Now that you have a greater understanding of Hashimoto's, including the tests that can help with diagnosis, the stages of the disease, common triggers and patterns, and how you can use nutrition to promote healing, it's time to take a deeper dive into diet specifics. In the next chapter, you'll discover the factors that create an optimal diet for autoimmune thyroid disease!