HASHIMOTO’S THYROIDITIS:
HOW YOUR BRAIN FOG MAY BE CONNECTED TO YOUR GUT VIA YOUR THYROID

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The thyroid, one of the most under-appreciated endocrine glands in the body, can make or break your health. It is highly sensitive to the slightest alterations, and sets the body’s speed limit. If you’re cold, it steps on the gas to create more heat. Catch a virus, and it revs up the engine of the immune system. Overly stressed, it hits the brakes to keep from blowing a gasket.

HOW THE BODY MAKES THYROID HORMONES

Located in front of the neck, the thyroid gland controls metabolic function in every cell of the body via the thyroid hormones thyroxine (T4), which makes up the vast majority at 93%, and triiodothyronine (T3). To understand the full story, we’ll start with how thyroid hormones are made.

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From the Chair

Welcome to The Sharper Edge, our new publication that will bring you regular updates about exciting new research and the work we are doing to change the way patients, caregivers and the medical community think about brain health.

Each issue will feature one of the causes of memory loss, as well as answers to your questions, and yummy recipes that support proper functioning of mind and body. In this issue, you’ll learn about hypothyroidism, or low functioning of the thyroid gland. The thyroid is vital for our body’s processes to work effectively. One of our Medical and Dental Advisory Board members, Dr. Cory Lenherr, discusses how the thyroid works and why it is so important. We also provide answers to important questions through Q & A with health coach Jill Hoffman.

You’ll also read about updates on our activities and progress in bringing vital information to the world. Evidence is growing that the specific causes of dementia identified by Sharp Again Naturally (SAN) and our Medical and Dental Advisory Board (MDAB), if addressed early, can be prevented and reversed. A new study from Finland published in the April 2017 issue of Scientific American demonstrates that nutrition, exercise, and social and mental stimulation can prevent or delay memory loss.

SAN is continuing to fulfill our educational mission by offering full-day workshops on the 10 Reversible Causes of Memory Loss and how to prevent and treat them.

SAN’s work also involves actively meeting with other organizations who serve the eldercare community, and we are considering the best way to reach out to baby boomers and those just beginning to exhibit symptoms to help them understand that early intervention makes all the difference. There is no longer a need to hide symptoms as long as possible; in fact, doing so increases the risk of developing full-blown dementia. Start learning and making changes NOW, before symptoms appear. The only side effect to adopting the guidelines we promote is better health!

We encourage you to go to our website at sharpagain.org for more information. If you have questions or would like to see something featured in our newsletter, or would like to join our efforts, please write to us at info@sharpagain.org.

Lisa Feiner
Sharp Again Board Chair

Through a series of biochemical steps, tyrosine, an amino acid derived from protein, is eventually converted into T4 and T3. The active form of thyroid hormone, T3, turns on or slows down metabolic function, and is therefore responsible for much of our thyroid’s healthy functioning. However, most doctors focus attention almost exclusively on T4, the inactive form of thyroid hormone. The liver, gastrointestinal tract, heart, muscle and nerves all play a role in converting most of the T4 in our bodies into T3, and our body relies on certain vitamins, nutrients and other hormones to make this process work. The remaining T4 is converted into reverse T3 (RT3), which plays a role in suppressing T3 activity at the cellular level.

THYROID AND BRAIN FUNCTION

T3 is integral to hundreds of physiological functions including bone metabolism, gastrointestinal function and acid production, regulation of growth hormone, insulin and glucose metabolism, protein synthesis and regulation of brain chemistry. The brain is saturated with thyroid receptors, and healthy thyroid function is integral to healthy brain function. Conversely, a healthy brain and adequate production of neurotransmitters serotonin and dopamine are necessary for healthy thyroid function. The most common symptoms of hypothyroidism, or an underactive thyroid gland, are also very common in dementia and depression, and can be seen in the box below:

SYMPTOMS OF HYPOTHYROIDISM

<table>
<thead>
<tr>
<th>COMMON SYMPTOMS</th>
<th>ADDITIONAL SYMPTOMS</th>
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<tbody>
<tr>
<td>Brain fog</td>
<td>Diminished libido</td>
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<tr>
<td>Cold body, hands and feet</td>
<td>Feeling nervous and emotional</td>
</tr>
<tr>
<td>Constipation</td>
<td>Heavy, irregular periods</td>
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<tr>
<td>Depression</td>
<td>Hoarseness</td>
</tr>
<tr>
<td>Dementia</td>
<td>Insomnia (or requiring excessive amounts of sleep)</td>
</tr>
<tr>
<td>Dry skin</td>
<td>Joint and muscle pain, stiffness, swelling</td>
</tr>
<tr>
<td>Hair loss</td>
<td>Muscle weakness</td>
</tr>
<tr>
<td>Low body temperature</td>
<td>Slow digestion</td>
</tr>
<tr>
<td>Low energy, fatigue</td>
<td>Slowed heart rate</td>
</tr>
<tr>
<td>Puffiness</td>
<td>Stubborn weight gain</td>
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If you are experiencing any of these symptoms, or a combination of them, think THYROID. As you can see, the brain can become impaired (sometimes severely so), if the body is not making enough of the active form of thyroid hormone (T3). Untreated hypothyroidism can lead to a host of other diagnoses including depression and dementia.

HOW HASHIMOTO’S THYROIDITIS DEVELOP

Twenty-seven million Americans are affected by thyroid malfunction, the most common form being Hashimoto’s thyroiditis. In Hashimoto’s, the body makes antibodies in response to inflammatory trigger-foods (sugar, wheat, dairy), infections, and/or toxins, which can permeate the lining of the intestines. Some antibodies mistake thyroid tissue for a foreign invader and attack it. Initially, Hashimoto’s remains silent and the thyroid functions normally. As thyroid damage continues, hormone release is inconsistent, and individuals may experience the effects of having too much or too little hormone in circulation. Eventually, thyroid function will stop completely and classic hypothyroidism occurs.

TESTS TO REQUEST FROM YOUR DOCTOR

If you have symptoms of hypothyroidism or an under active metabolism, ask your doctor to check for thyroid peroxidase and thyroglobulin antibodies, free and total T4 (thyroxine), free and total T3 (triiodothyronine), reverse T3 (rT3) and thyroid stimulating hormone (TSH).

HEALING YOUR THYROID

If your tests show evidence of autoimmune thyroiditis or your hormone levels are low, following the steps to the right (with the help of an integrative/functional medicine practitioner) can restore thyroid balance:

1. Improve your nutrition by getting amino acids from proteins, essential vitamins (including B Vitamins, C & D) and minerals (such as selenium, iron, iodine and zinc). Avoid inflammatory foods, especially gluten and dairy. Grains and legumes may also need to be eliminated.
2. Build a healthy gut: remove infections, parasites, food allergens, and acid-blocking medications.
3. Make sure the adrenals are functioning well. Your doctor will work to optimize cortisol levels by suggesting many of the steps mentioned here such as lowering stress and the amount of sugar in the diet.
4. Reduce your body’s toxic burden: avoid exposure to toxins and support your body’s detoxification mechanisms.
5. Heal any lingering infections. If you feel inflammation or pain in the body, and the cause has not been identified, seek help to find out the cause so it can be addressed. Common infections that may go undetected are in the mouth and other areas of the body which have experienced invasive procedures, insect and tick bites, mold exposure, etc.
6. Relieve stress through regular activities such as yoga, meditation, prayer, and paced breathing.
7. Make rest a priority by getting 7-8 hours of solid sleep nightly.
8. Move your body every day by doing some form of exercise.

In the next edition of The Sharper Edge: Nutrition Facts: We’ll explain how sugar consumption affects memory and brain health.

Cornelia Lenherr, MD, practices Functional Medicine in Chatham, NY where she specializes in Mood, Mind and Autoimmune disorders. She can be reached at drcory@healthymd.org or 585-880-5856.

For more information about thyroid health, we recommend: Stop the Thyroid Madness by Janie A. Bowthorpe

“The Effects of Hashimoto’s and Hypothyroidism on Brain Health” – Datis Kharrazian, DHSc, DC. drknews.com/hashimotos-hypothyroidism-and-how-to-protect-your-brain/

Why Do I Still Have Thyroid Symptoms? When My Lab Tests Are Normal by Datis Kharrazian, DHSc, DC

The Thyroid Connection by Amy Myers, MD.

Hashimoto’s Thyroiditis: Lifestyle Interventions For Finding and Treating the Root Cause – Izabella Wentz, PharmD, FASCP
In 2003 the American Association of Clinical Endocrinologists released new guidelines which narrowed the “normal range” of the test called TSH—thyroid stimulating hormone—which is used by doctors to diagnose thyroid problems. It was their judgment that many Americans who could benefit from treatment were going undiagnosed. By narrowing the acceptable range that indicates normal thyroid function, possibly millions of Americans would receive thyroid medication benefiting them. The idea was not acted upon, and to this day, many physicians feel that people are not getting the necessary treatment that would improve their symptoms of hypothyroidism. Common symptoms are fatigue, weight gain and constipation. Also, since thyroid affects every cell and organ in the body, there may be many other associated problems such as high cholesterol, infertility, muscle weakness and osteoporosis.

The “normal” range for the TSH test is between 0.4 and 4.5; the higher the number, the more likely the condition of hypothyroidism exists. The American Association of Clinical Endocrinologists suggested that the upper limit of the normal range should be 3.04. A person who has been told by their doctor that their thyroid is normal, and yet finds that they have a TSH test above 3, with associated symptoms of hypothyroidism, should discuss with their physician whether thyroid treatment is appropriate. If the physician is unwilling to institute a trial of treatment, it may be wise to seek a second opinion.

Concerned about any of the following?
- Safe Removal of Mercury Fillings
- Resolving Headaches, Jaw Pain & Discomfort in Your Bite
- Natural Treatment for Gum Disease
- Ceramic Implants to Replace Missing Teeth & to Restore Comfort for Suffering Denture Wearers
- Treatment of Snoring & Sleep Apnea
- Creating a Naturally Beautiful Smile

If you’ve finally ready to have the healthy mouth and beautiful smile that you’ve always wanted, then our office is the right one for you.

Isn’t it time to finally fix your teeth once and for all? Have that great smile you’ve always wanted? Get answers to bodily aches and pains that others can’t seem to answer because it’s related to an unhealthy, out-of-sorts mouth?

We have found that our patients simply want to be able to chew more comfortably, to look better, to feel better, and, basically; have an overall better quality of life.

We have designed our practice around those patients who have spent years taking care of everyone and everything else – delaying much needed care of their teeth and mouth.

If this is you, then we are here to help.

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THYROID Q&A
Jill Ashley Hoffman
Thyroid Health Coach

➤ How would you define hypothyroidism?

Hypothyroidism is a condition that develops when not enough thyroid hormone is getting into the cells, causing metabolism and bodily processes to slow down.

➤ How common is hypothyroidism?

Hashimoto’s affects up to 10% of the US population, predominantly women, and is responsible for 90% of Hypothyroidism cases. Up to 27 million Americans, and about 200 million people worldwide, have some form of thyroid disease. However, close to 60% of these people are unaware of their condition.

➤ What causes Hashimoto’s Thyroiditis?

The most common cause is immune dysfunction triggered by your digestive tract (leaky gut), hormonal fluctuations often related to pregnancy (Postpartum Thyroiditis), and exposure to toxic substances such as environmental pollutants, household chemicals and pesticides, all of which can disrupt the endocrine system.

➤ How do I know if I have hypothyroidism?

1. Check your temperature. Below 98 during the day may signify a problem.
2. If you have several of the symptoms (see list below), you’ll want to get your thyroid checked. People with Hashimoto’s can display symptoms of both overactive and underactive thyroid in the early stages, from jittery to exhausted and everything in between.
3. Ask a trained doctor for tests recommended tests by Dr. Lenherr: thyroid peroxidase and thyroglobulin antibodies, free and total T4 (thyroxine), free and total T3 (triiodothyronine), reverse T3 (rT3) and thyroid stimulating hormone (TSH).
4. An ultrasound of the thyroid can show texture changes that may occur from destruction of the thyroid gland.

➤ How does Hypothyroidism affect the brain?

Lack of adequate thyroid hormone over a period of time causes symptoms such as depression, fatigue, and brain fog and will ultimately lead to brain degeneration. The brain has its own immune system, made up of microglial cells. When these cells are activated, due to a foreign invader, it becomes non-stop warfare in the brain causing inflammation and degeneration of the brain tissue.

➤ I’m taking Synthroid, so my thyroid problem is under control, right?

Synthroid is a synthetic form of T4, which is the storage form of thyroid. When the body needs thyroid hormone, T4 is converted to T3, the active form. Many people have trouble converting T4 to T3 due to issues in the gut and liver, which often increase as we age. Raising your Synthroid dosage usually does not work. The best approach would be to work on improving your gut and liver health along with speaking with your doctor about natural, desiccated thyroid, which provides a full spectrum of thyroid hormones.

Don’t forget that thyroid medication DOES NOT heal the thyroid. It just replaces the hormone that the thyroid is not making for whatever reason. Taking a holistic approach to health (addressing diet, lifestyle, stress, etc.) will help you heal from the inside out so you can be on the lowest dose of medication possible for the shortest duration.”

Jill specializes in working with clients with thyroid issues. Find her at cravehealthwithjill.com

YOUR MOUTH & THE HEALTH OF YOUR BRAIN

Your mouth is the center of vital functions: including Eating, Breathing, Swallowing and Speaking.

Periodontal disease, sleep disordered breathing, chronic disease and exposure to toxic metals are among the SAN 10 Reversible Causes that have been linked to loss of cognitive function and dementia.

Have you been screened for the presence of these factors?

We collaborate with medical doctors who recognize the mouth’s relationship to overall health and frequently co-treat patients who have a wide variety of medical conditions.

Find out more:

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2 Executive Blvd. Suite 206 Suffern, NY 10901
ph 845.357.1595 email info@hindincenter.com
website: www.HindinCenter.com
Green Superfood Salad
Serves 4

INGREDIENTS

- 1 large head of curly kale or 2 smaller ones (about 4 cups)
- 1/2 avocado, pitted and cubed
- 1 medium sized English cucumber, cubed
- 4 tablespoons wakame seaweed
- 2 tablespoons of sesame seeds

AVOCADO DRESSING INGREDIENTS

- 1-1/2 avocados, pitted with skins removed
- 2 garlic cloves
- Juice from 1 lemon
- 1/4 cup cilantro
- 1/2 jalapeno – cored and seeded
- 3 tablespoons olive oil
- 1 teaspoon Apple Cider vinegar
- 1/2 teaspoon ground chipotle pepper
- Salt to taste

INSTRUCTIONS

1. Place all dressing ingredients in a blender and process until smooth. Adjust seasoning as necessary.
2. Cover the dried seaweed with water and let sit for 5 minutes until soft. Rinse.
3. Remove the tough ribs from behind the kale with a knife or hold the end of the kale and rip the leaves away from the spine. Break up the leaves with your hands so they’re in bite-size pieces. Pour a few tablespoons of the dressing over the kale leaves and massage with your hands until the leaves begin to break down.
4. Add the cucumber, avocado and seaweed to the salad and add more dressing if necessary. You may have dressing leftover, but save to add to the salad on the next day, if saving. Be sure not to overdress if you’re eating multiple days. Top with sesame seeds.

“Tuna” Salad
Serves 4

INGREDIENTS

- 1 cup raw sunflower seeds
- 3 Tbsp. hemp seeds
- 1/2 cup celery, chopped
- 1/3 cup onion, chopped
- 1/3 cup red bell pepper, chopped
- 1/4 cup tomatoes, diced
- 1 tsp. apple cider vinegar
- 1 tsp. lemon juice
- 1.5 tsp. kelp powder OR pulse granules (Maine Coast sells both)
- 1/2 tsp. salt or miso

INSTRUCTIONS

1. Process sunflower seeds in food processor until you get a texture that resembles very coarse flour.
2. Add remaining ingredients and pulse several times until all ingredients are well combined.
3. Scoop “tuna salad” mixture onto salad greens or serve on toasted whole grain bread with a generous layer of Dijon or honey mustard.

Arugula Salad with Chicken & Avocado
Prep time: 15 mins
Cook time: 25 mins
Total time: 40 mins
Serves: 4

INGREDIENTS

- 6 c. Earthbound Farm Baby Arugula
- 2 -8oz. organic chicken breasts
- 2 Tbsp. organic extra virgin olive oil
- 2 Tbsp. fresh lime juice
- 1 tsp. honey
- 1 medium organic avocado, sliced
- 4 medium small organic radishes, thinly sliced
- ½ tsp. Celtic sea salt
- ¼ tsp. freshly ground black pepper

INSTRUCTIONS

1. First, poach chicken. Fill a medium saucepan halfway with filtered or spring water. Bring to a boil. Add the chicken, reduce heat to medium, and gently simmer until cooked through, 12 to 14 minutes. Transfer the chicken to a cutting board and let rest at least 5 minutes before slicing.
2. Meanwhile, in a small bowl, whisk together the oil, lime juice, honey, salt, and pepper.
3. Divide the arugula among bowls and top with the chicken, avocado, and radishes.
4. Drizzle with dressing and serve.

Turmeric + Wild Blueberry Gummies

INGREDIENTS

- 2 cups filtered water
- 1 tbsp. ground turmeric
- 1 tbsp. coconut oil
- 1 tbsp. raw honey (or to taste)
- 4 tbsp. unflavored gelatin
- Pinch of black pepper
- Use at least a 9” x 6” pyrex glass dish

INSTRUCTIONS

1. Combine water, turmeric, coconut oil, honey and black pepper in a saucepan over medium-high heat. Stir for 5 minutes.
2. Taste and add more honey, if necessary.
3. Remove from heat and sprinkle unflavored gelatin over liquid, 1 tablespoon at a time while whisking constantly to prevent clumps.
4. Add pinch of black pepper and continue whisking. Pour warm liquid into pyrex dish.
5. Break up frozen blueberries and add to mixture, without stirring too much, but make sure even distributed.
6. Refrigerate for 2 hours and cut up into small portions with knife.
7. Store in an airtight container. Will keep up to 7 days in the refrigerator.
www.cravehealthwithjill.com
On April 2, SAN facilitated a full-day workshop: “10 Reversible Causes of Memory Loss” in White Plains, NY. We periodically host workshops geared toward educating medical professionals, health coaches, and members of the lay community who care for family members with memory issues and/or are concerned about their own cognition. We drew attendees from as far away as Boston, Atlanta and Denver to learn from Dr. Cory Lenherr, a family doctor trained in functional medicine, and health coaches Debbie Drelich, Myra Oney and Lisa Feiner. If you are interested in requesting or attending a future workshop, please email us at education@sharpagain.org.

10 REVERSIBLE CAUSES OF DEMENTIA

1. Nutritional imbalances and deficiencies
2. Toxins in food, water, air, work/home environment
3. Effects of prescription medications
4. Mercury and other heavy metal toxicity
5. Hormonal imbalances (T3 thyroid, estrogen, testosterone, and others)
6. Inflammation from low-level infections (Lyme Disease, oral infections, food sensitivities, mold, etc.)
7. Inadequate physical activity, mental stimulation, and social interaction
8. Stress, especially from life changes and how we process information
9. Sleep and breathing problems related to oxygen deficiency
10. Traumatic Brain Injury

Before concluding a person’s dementia is incurable, it is necessary to test and treat all of these reversible causes.