The 3 Most Important Tests If You Are Exhausted

Have you ever walked away from a doctors appointment and felt like your lab values were not where they should be and your doctor is just waiting until they get worse in order to offer you medication?

Do you believe there is a gap between receiving lab work and preventing disease?

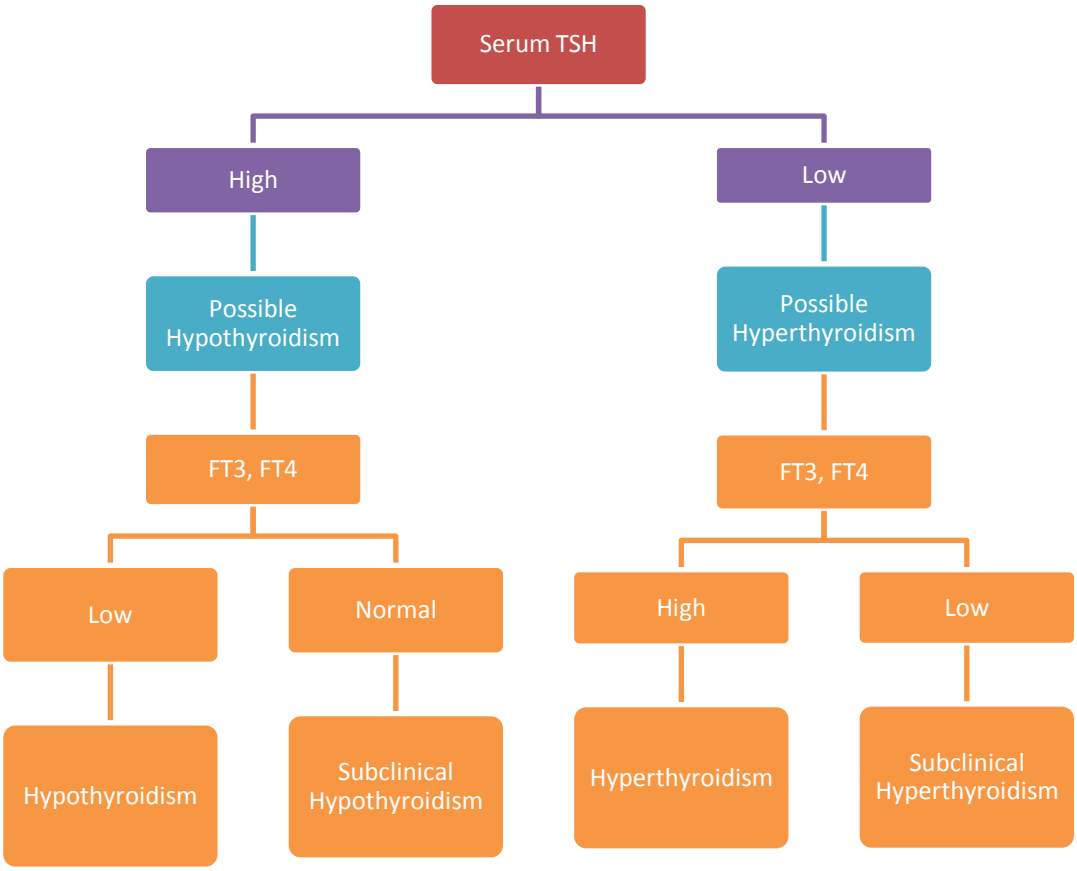
Have you noticed that every time you try to improve your health on your own, you come across conflicting information and don't really know what is right for you, specifically?

Traditional bloodwork gets flagged "out of range" at a point at which a disease process has already started. Medication is often offered at this point. As a doctor of preventive medicine, I watch for trends in an individuals bloodwork. By drawing a line down the middle of an "appropriate" range and paying attention to any values away from the median by 25% or more, I am able to help my patients adjust their lifestyles in a way that prevents most disease processes. I fill the gap between your lab results and your optimal health by providing targeted, individualized healthcare.

Come on in, pour yourself a cup of tea and pull up a comfy chair we are planning the future of your greatest health.

Fatigue, exhaustion, tiredness, sleepiness, foggy-headed feeling, no matter what you call it, it gets in the way. Have you ever been so exhausted that you had to pull your car over to the side of the road to close your eyes for a moment? Or worse, close your eyes at stop lights hoping you had the power to keep your foot firmly on the brake and to open your eyes before the car behind you honked their horn? Or maybe to a letter extent, you have experienced a need to put your head on your desk to rest a moment. These are some of the complaints I've heard in my clinic. Exhaustion is a far reaching symptom. The tests to determine the cause of exhaustion starts with a thorough medical history. The most common directions that will be taken are thyroid function and iron deficiency anemia. A routine blood test will often rule out anemia and further testing can sometimes find thyroid imbalances but not always.

The thyroid gland makes hormones that are vital in regulating metabolism. The traditional way of diagnosing thyroid conditions is by evaluating TSH. Too high and the diagnosis is hypothyroid or an under functioning thyroid. Too low and the diagnosis is hyperthyroid or an over functioning thyroid. Unfortunately, even with a slew of thyroid symptoms thyroid imbalances get overlooked.



Symptoms of Thyroid Imbalance

Exhaustion	Diarrhea/Constipation	Reduced/Increased Heart Rate	Headaches
Weight Gain/Loss	Cold Hands/Feet	Difficulty Concentrating	Goiter
Anxiety	Dry Skin/Hair	Tingling/Numbness in the Hands	Thyroid Tenderness

In your brain reside two glands, the hypothalamus and pituitary glands. These glands get signals from the body whether or not to release Thyroid Releasing Hormone from the hypothalamus to the pituitary and Thyroid Stimulating Hormone from the pituitary to the Thyroid Gland itself. Once the Thyroid gland is "stimulated" by this hormone the gland releases T4. T4 is not a very active hormone and although it is important it won't keep your hands and feet warm, prevent headaches, give you energy and help maintain your blood pressure. This is a job for the active hormone, T3. T4 converts to T3 and reverse T3

in the cells. A mirror image of T3, Reverse T3 (or rT3) is an important level to know. It isn't an active hormone but it is a way for your body to throw off excess T4. Because it looks like T3 to the receptor sites, it's able to bind but won't activate the sites so you won't get the good effects of T3. rT3 kind of gums up the process. In order to prevent overproduction of these hormones the T4 will also convert and send T3 and T4 back to the pituitary and hypothalamus to tell them, we are good down here, slow down production.

Here is where it gets interesting. If your doctor takes your TSH level and it's normal, and he even takes your T4 and it's normal. All your thyroid symptoms will be ignored unless he looks further down the pathway. If the next step is to only look at total T3 which is T3+rT3 and that is normal, he still may not have looked far enough. There is a condition called a conversion problem where you might be converting T4 into rT3 but not into the active T3 hormone. You have all the symptoms of hypothyroid imbalance but it's just not found and therefore not treated. Stress is the main reason you would convert more into rT3 than T3. Stress from illness, toxicity or emotional stress. One way to correct this is by a detox program.

Taking it one step further, you can have an immune attack on your own thyroid gland. This is a condition called Hashimoto's Thyroiditis. Antibodies to your thyroid gland can also be detected in a blood test and what is really interesting, but truly not much fun, is that the molecular make up of your thyroid gland is very similar to the molecular make up of gluten protein. If you have sensitivity to gluten then the same antibodies gunning for gluten in your diet will target your thyroid gland as well. This is why, in our office, we test antibodies to both thyroid and gluten.

References:

http://www.eje-online.org/content/130/2/137.abstract

http://www.ncbi.nlm.nih.gov/pubmed/15244201

In order to have a complete picture of your thyroid function, the first most important test to have is a complete thyroid panel and gluten antibody test.

Complete Thyroid Panel with Related Add-Ons

Thyroid Stimulating Hormone

T4 (Thyroxine)

T3 (Triiodothyronine)

rT3 (reverse Triiodothyronine)

TPOAb (Thyroid Peroxidase Antibody)

tTG (Tissue Transglutaminase) IgA, IgG When doing this test make sure gluten has been consumed, unless you know you have Celiac Disease, or there may not be antibodies to find.

When I was a teenager and was suddenly tired all the time my grandmother would tell my mom to make me chopped liver. Growing up in a Jewish home, chopped liver was saved for special occasions but my grandmother was on to something. Liver is a great source of iron and iron deficiency anemia is at the top of the list when looking at what is causing exhaustion. Although iron levels are typically checked in a routine blood panel, ferritin levels are not. When looking at iron you don't want to skip over ferritin which is the level of stored iron.

Vitamin B12 deficiency is another anemia that can cause exhaustion. Make sure that vitamin B12 is tested and that the low end of the range is adequate. If the range is 200-600 pmol/L, it's too low. B12 level should be at least 450, if it isn't, than a supplement of B12 needs to be taken and an investigation as to why the deficiency is present is also important. The body's useable form of B12 can only be found in animal products, which means some vegetarians and all vegans need to supplement and get their levels checked regularly.

Symptoms of B12 deficiency (pernicious anemia):

Tiredness	Rapid heartbeat	Pale skin	Sore tongue	Easy bruising or bleeding	Stomach pain
Diarrhea or Constipation	Tingling or numbness	Difficulty walking	Mood changes or depression	Memory loss	Disorientation

Anemia panel

Iron

Ferritin

B12

Urinary Methylmalonic Acid- High levels can indicate B12 deficiency with a "low-end-of-normal" B12 test.

One of the first things I ask patients when they come into my office with fatigue is what they are eating and how often they are eating. We can't talk about loss of energy without talking about low blood sugar. It is the skipping of meals and then the reaching for high carbohydrate foods that cause the metabolic stress resulting in the loss of energy. Low blood sugar or hypoglycemia is nothing to sneeze at since it's a typical precursor to high blood sugar and diabetes. Although official lab work would include a fasting

insulin level, c-peptide, and a fasting glucose, a trial run of eating a high protein, low carb meal every 2 ½ to every 3 hours may not only relieve the fatigue but also improve mood and focus.

Food sensitivities are also a consideration with exhaustion. In our clinic, a detox also includes an elimination diet where many people discover how they react to specific foods. Egg, dairy (milk, cheese, yogurt and whey), sugar, gluten, grains, soy and citrus are common food allergies. Blood work can be done to identify food sensitivities, but only if there are antibodies to the foods circulating about. In our office we offer a unique allergy testing and elimination technique called N.A.E.T. You can find more information about it at www.NAET.com A great way to start is by eliminating these foods for one to three months and slowly add them back one at a time to evaluate what foods cause symptoms to resolved and which foods cause them to return.

Blood Sugar and Food Sensitivity Testing

A detailed history

A food log with times of consumption

Fasting Glucose

Fasting Insulin

C-peptide

IgG food allergy testing

In this “information age” self-diagnosis is something I encounter every day. Unlike our grandparents time, information about our bodies, our symptoms and our treatments are just a click away. I encourage all my patients to learn as much as they can about their bodies and how they work. I give workshops and seminars so knowledge and responsibility is in the hands of the patient. This information is given for you to make the best decisions in how to care for your body and team with a healthcare practitioner who has the knowledge and expertise that you deserve and can communicate with freely.