

Physica Radio Field Notes

Dr. Stephen H. Atkins

Well, Good afternoon everyone! It's Wednesday, it's lunchtime and that means it's time for 'Field Notes'. My name is Dr. Stephen Atkins and I am your host for this weekly reoccurring lunchtime segment. For all of you who are new to tuning in, welcome and for all of those who have been on board for a while, great to have you with us.

I am going to talk about a topic today that I come across virtually every day in my practice as I'm sure many of you do and I don't think that I have talked about it much. It would be the topic of *Hypothyroidism* or *low thyroid function*. I know I have talked about adrenal dysfunction in the past and Dr. Cass certainly mentions that a lot in the Academy, but I don't think we have actually talked in depth about the thyroid, particularly hypothyroidism or low thyroid function.

You know, the most common indicator of thyroid function used by most physicians is the *TSH* or *thyroid stimulating hormone* blood test. However there is so much more to this than that! Here's the chain of events. The hypothalamus talks to the pituitary via *TRH* which is *thyroid releasing hormone*; then the pituitary talks to the thyroid through TSH; the thyroid will then make *T4*

(which is an inactive hormone) and then the body converts T4 to the active form of thyroid hormone which is *T3*. Now the problem with just checking TSH is this....

Let's say someone has a high TSH. Well you don't know if that is high because the thyroid is producing **low** thyroid hormone or the signal between the pituitary and the thyroid is off, or if the signal between the hypothalamus and the pituitary is off. It really isn't an accurate measurement of what is going on in the body. An accurate measure is looking at '*decreased intracellular T3*' and '*increased intracellular reversed T3*'. Because basically when it comes to thyroid physiology with physical distress, dieting, depression or any type of illness, decreased intracellular T3 levels and increased intracellular reversed T3 results in *intracellular hypothyroidism*. The TSH and the T4 levels are no longer accurate measurements of tissue thyroid levels, like I said before you need to check *free T3 reversed* and the *T3 ratio*.

Now there are a lot of things that can throw this off and that is when becoming a medical detective is very, very helpful. So I know I have said this in the past and I have heard Dr. Cass say it countless times, whenever you have a thyroid problem you

have an adrenal problem and whenever you have an adrenal problem you have a thyroid problem; whenever you have a thyroid and an adrenal problem, you have a hypothalamic-pituitary axis problem. If we go through the physiology of what I stated before about the mechanism of how the body is stimulated through TRH all the way down through T3, you can really see how all this is true.

Now, many factors block thyroid hormones, so before you can rule out that someone has a thyroid problem you want to rule out what could interrupt the thyroid hormone.

So one of the first ones (I am actually going to be talking about this at Concordia), is thyroid action that is interrupted by *Bisphenol-A*. Endocrine disrupters have emerged as a major public health issue over years and years and bisphenol-a or BPA is a polymer of plastic materials that are widely used and we find them in our daily life all over the place. BPA is easily detectable in our environment, it is found in drinking water, canned foods and you can even find it in milk bottles. And recently it was shown that BPA contaminants were not only found in human plasma, but also in human fetal tissues! There are many reports that have shown BPA has a weak affinity to stimulate the estrogen receptors. BPA can disrupt thyroid hormone function by reducing T3 binding to the nuclear thyroid receptors and they are recruited as co-repressors to the thyroid receptors resulting in transcription inhibitions - so it **blocks** the T3 receptor.

We also know that *halides* block iodine and iodine is an essential nutrient to the thyroid. It also blocks through the absorption of fluorine, bromine, chlorine and perchlorite. There is a plethora of data on the power of these halides and as I have mentioned before these halides are at the 17th position in the periodic table of elements, all having a very similar molecular structure. If you have an over abundance of any of the other elements apart from iodine, they actually block the receptor receiving iodine causing iodine not to function. Thus it disturbs the most basic of relationships.

Mercury is also linked into increased thyroid antibodies. I had a patient in yesterday who had dental amalgams and came to me because no one could figure out why she had thyroid antibodies on her blood work. Women with high mercury exposure are more than twice as likely to have higher levels of antibodies that are associated with autoimmune disorders. Now scientists have analyzed data from 4,000 women between 2007 – 2008 (this was a large study in the US by the National Health and Nutrition Examination Survey) and they compared total mercury levels in blood and auto-antibodies with immune system factors that fight the body's own cells, to indicate autoimmune disease. Patients with autoimmune diseases such as lupus, rheumatoid arthritis and fibromyalgia often have elevated concentrations of these antibodies. They found women with the

highest blood mercury levels were more than twice as likely to have elevated levels of *thyro-globulin antibodies*, compared to women with the lowest levels of mercury. Overall the study provides new evidence in the emerging role that mercury has to do with auto-immune disease.

Other factors that are thought to cause low thyroid function are *goitrogens* that are found in food and there are basically two categories of foods that have been associated with disrupted hormone production in humans. Those have been soy related foods and cruciferous vegetables. In addition there are a few other foods in this category such as peaches, strawberries, peanuts, radishes, spinach and I also think millet contained goitrogens.

Isoflavones are naturally occurring substances that belong to the flavonoid family of nutrients. The link between isoflavones and decreased thyroid function is one of the few areas in which flavonoid intake was called into question as 'problematic', because isoflavones such as *genisteine* appear to reduce thyroid hormone output by blocking the activity of thyroid *peroxidase*. Now this enzyme is responsible for adding iodine onto other thyroid hormones.

A secondary category of foods that is associated with disrupted thyroid hormone levels is the cruciferous family, broccoli, cauliflower, brussel sprouts, cabbage,

rutabaga, kale, turnips, etc. They contain something called *iso-thio-cyanates* which also reduce thyroid peroxidase and thyroid hormone function. Heating and cooking of these vegetables will help to inactivate the goitrogenic iso-thio-cyanates.... just one thought about lightly cooking versus eating raw.

Dr. Cass has talked in the past about *postpartum thyroiditis* or *postpartum hypoadrenalism* and how when a woman is pregnant that she is living off the fetus' adrenal glands and its secretions. When there is a sudden drop in her adrenal "drip" hormone that she has been getting from the baby since the third month of pregnancy, this can add to hypothyroidism and hypoadrenalism also.

Gluten and gluten sensitivity has been linked to Hashimoto, thyroiditis, and auto-immune disease. The molecular structures in gluten or gluten are similar to thyroid tissue. It can cause cross reactive destruction of the thyroid, especially when you have genetically engineered wheat in the US, because it contains up to 5 times the gluten than the European wheat. So the increased protein content causes more difficulty in digestion and a greater tendency towards intestinal permeability. We all know intestinal permeability is associated to food allergies. So when the auto-immune attack has begun on the thyroid it is difficult to turn off. I have actually heard some authors suggesting gluten can affect the body 6 months after

ingestion. A gluten free diet is of utmost importance when a person has auto-immune thyroid disease.

Pesticide exposure also increases the risk of thyroid problems. There is a study of 16,000 women in Iowa and North Carolina that were married to pesticide applicators and it was reported that 12% had some sort of thyroid problem and out of that half of them were hypothyroid. Exposure to organo-chlorine pesticide such as DDT, fungicides, etc, are highly associated with thyroid problems.

Hypothyroidism is also associated with mineral deficiency, for example being depleted in iodine or iron. I understand that thyroid biochemistry is extremely complex as there are a lot of different factors that play into the interpretation of it, but the thyroid as you all know is like the gas pedal if it is not working properly you just aren't going to feel well. So the interplay of the thyroid to all the other hormones and the autonomic nervous system, leads to a quite dizzying array of potential breakdown points for your health!

What do we do about it? Luckily we have all decided to pick up and use the Physica Energetics line and I just love this line and really, really can't say enough about it. So let's start at the beginning.... The first remedy I test people on is the *Hypothal Code*, because a thyroid or an adrenal problem is always a hypothalamic-pituitary problem, let's go right to the *Hypothal Code*. This is a sarcodes remedy of the hypothalamus. Just as a reminder, sarcodes are obtained from healthy glands and their

secretions and they give a healthy blueprint which the body can work off of. One of the important functions of the hypothalamus is to link the nervous system with the pituitary gland and it does this through *hypophysis* assisting in the whole complexity of the hormonal system and hormonal messengers. This is a great remedy to get someone out of 'left spin' (you always want the body to be in right spin, so you need the right energetic charge, the right energetic potential so the cells can take in the proper nutrition and get rid of waste properly). If the hypothalamus is not functioning properly and the pituitary isn't functioning properly you might not get the correct information to the thyroid itself.

Then we have *Thyro Code*, this is also a sarcodes remedy from the thyroid gland/secretions and Dr. Cass has also put in low potentized botanicals and tissue salts that help to detoxify and for drainage purposes. You know it is actually estimated in the US that two out of three people with hypothyroidism don't even know that they have it! And it affects about 11 million people in this country it is a big problem in the US and around the world.

You can't balance the thyroid without balancing the adrenals so for that we use *Adreno Code* and *Adrenal Life Force*. With the *Adreno Code* sarcodes formula it let's us get the blueprint of healthy tissue right to the adrenal glands. It is well understood that the adrenals are central to the body's ability to heal and recover. The *Adrenal Life Force* works with the adrenal and thyroid axis offering the right ratio and proportion of adrenal glandular and tyrosine to accomplish this. Often times, people get too high a dose of adrenal glandulars and

while they may feel better for the moment it clearly has a damaging effect to both the adrenal glands AND the thyroid! *Rhodiola rosea* and complementary minerals insure a balanced formula stemming from a highly charged solid recipe. At the core of this understanding is the fact that the anterior pituitary and adrenals, as I say, work synergistically in sequence under the guidance of the hypothalamus and the HPA axis. That is why *Adreno Code* and *Adrenal Life Force* is essential too.

Physica Energetics will be helping us again very soon regarding this challenge through a new remedy called, *HPA (Axis) Life Force*. Can't wait for that to come out!

I also like to use *Adapto Code* because whenever the body is under stress or it needs to recover *Adapto Code* is a wonderful adaptogenic sarcode. Now I have not been using this a long time, I actually started using this over the last 6 months and I am going through a ton of this stuff, it is really fantastic. It balances like nothing I have ever seen before! It really helps to aid in the normalization of the body chemistry and I really see this when I do my 'Functional Terrain Analysis Tests' because after using the *Adapto Code* after a couple of months with the other remedies, everything just seems to be balancing a whole lot better. I'm not against it but I don't like to keep people on a lot of remedies and this truly helps them get off a little quicker.

With every hormonal challenge you always, always have to keep the liver clear and functioning. This is sacrosanct! Dr. Cass always says, "There are fifty ways to love you liver!" and I would whole heartedly

agree with that. *HepataGest Powder* is an absolute mean stay and staple in every regime I give out. You have to open the detoxification pathways of Phase, 1, Phase 2 and as Dr. Cass reminds us phase 3, that biliary tree. Any liver detoxification precedes two pathways right? The P-450 enzymes help to convert toxins into water solubility (*Liver Milieu* is the silver bullet here!) is assisted by *HepataGest* (specific to Phase 1 and 2 – read the monograph and you will see the power inherent in this formula AND it's economical, not like those big tubs of arguable medical foods that are everywhere these days).

Don't forget to add high quality fish oils! *Bio-Omega 3* is a 6.5:1 EPA to DHA ratio which is perfect.

And one more tip: always check for EMF toxicity and viral activity. This is crucial. *Metabolic-Tox* is central to all EMF toxic challenges. This is the **quintessential geopathic stress remedy!** If you're not using it you're missing a huge piece of the puzzle regarding any and all conditions.

Thyro-Tox addresses toxic thyroid pathogens including the coxsackie virus. Note that please, as you will often find that viral pattern lurking!

Obviously there is so much more to consider here, and we will. But for now, that's all the time we have today.

REMEMBER:

In a New York minute - everything can change!

Hopefully this will get you started or at least remind you of what you may have already known, but forgotten.

I'm Dr. Stephen Atkins and this has been Field Notes and I'll see you next week.