



## Nutritional Endocrinology Assessment and Balancing

### Transcript

Welcome to the Nutritional Endocrinology Assessment and Balancing Overview for the Institute of Nutritional Endocrinology. I am Dr. Ritamarie Loscalzo and I am excited to share with you a basic summary and overview of the kinds of tools that we have for assessing endocrinology imbalances that can be balanced nutritionally. Also we'll look at some of the basic strategies for balancing. As we go through the courses there will be a lot more detail about each individual hormone, and specific tools and techniques for balancing them; but for now this is a good starting point and overview for general techniques.

Before we begin let's make sure that you understand that all of the information that I am presenting in this talk is not intended to replace one-on-one relationships with a qualified healthcare professional. It is not medical advice. As you advise your clients it is really important that you make sure that they are really clear that it is a sharing of knowledge and information from my research, my experience, my clinical experience with lots of patients. It is not a substitute for bouncing this stuff off of their healthcare provider, particularly if they are on medication or under the care of a doctor for any particular diagnosed condition. So make sure that everything we talk about makes sense to them, and it is okay with the treatment that they are already getting.

As you are working with a client and looking to establish what the underlying root cause is of their health complaints, you need to have a focused eye and act like a detective and leave no stone unturned. Let's look at some of the ways that you can do that. When you are looking at your toolkit, the toolkit is a set of things that you have at your disposal to help to bring your client into balance. When we look at the toolkit in Western medicine, it is mainly related to drugs and surgery.

When we look at a toolkit of someone who is a fitness counselor, their tools might be specific exercises. When you look at the toolkit of somebody who is in energy worker, their tool kit is composed of specific energy techniques. As a holistic practitioner, a practitioner of functional nutrition, functional endocrinology and nutrition, we have a wide variety of tools in our kit. Those tools are related to how we go about assessing, and how we go about helping people to restore balance.



The important pieces in doing an endocrinology and nutrition assessment are to look at, of course, history. What is going on with their history? Are there some genetic components? How is their energy, and are there energy imbalances in their body? What about labs? There are lots of different kinds of labs and we will be exploring a variety of these as we go through our courses together. It is important that you have techniques to identify when emotional imbalances are creating the problems that a person is experiencing, and also have either ways on your own, or resources, that you can use to bring people into emotional peace and balance.

Of course nutrition is a huge part of it, and it is the part of it that drew most of us together here. Looking at their nutrition, looking at the foods they are eating, what supplements they are taking, what things are in their life that are interfering with their nutrition. Other things that are important are in the environment. Are there toxins in the environment? Are they using sprays? Are they cleaning their house with various kinds of toxic elements? What are their relationships like? Are they having limiting beliefs? Their thoughts can have a huge effect on it. Touch, which we don't really think about a lot, but touch has a huge effect on hormones, particularly the hormone oxytocin.

What are some of the tools? We need to have sleuth history taking. What does that mean? For each of the hormone families we need to be able to ask questions that would identify some underlying imbalances in that particular hormone family. Sleuth history taking: we have a whole module on sleuth history taking. It is a very, very important piece. We also need to look at exam findings. Exam findings include conventional, medical type testing, but also looking at the skin, the hair, the nails, and signs of functional imbalance.

Home testing: we will go through a variety of different tests that you can teach your clients to do at home to monitor their nutritional status and their hormone status, including blood sugar testing, blood testing, and there are a variety of labs available. One in particular is Direct Labs, but there are others where you can actually invite and teach your clients how to order their own blood testing based on what you would like to take a look at. That is if they do not have a family doctor who is willing to support them in their journey here.

Specialty labs, there are a variety of specialty labs: Meta-metrics, Genova, Meridian Valley, Doctor's Data, that we'll dig into to see what kind of imbalances are going on, and finally genetic testing. We will have sections and modules for each and every one of these.



Your assessment tools, including asking the right questions, very detailed questions, about their history, their early illnesses, whether they were breast-fed or not, how often or when they started taking antibiotics, what kind of medications they are on, what kind of supplements they are on, what kind of reactions do they have to certain environments, when was their home last carpeted, do they have new pets? There are so many questions that most conventional doctors don't ask, that are really important for you to be able to be the sleuth detective who figures out what is going on and what the root cause of the person's symptoms are.

There are symptom surveys that you can use. We provide these. Within the course of the Institute of Nutritional Endocrinology we have some online symptom surveys that can also be made into PDF files that you can send your client home with to fill out or they could print off or fill out online. These would be very specific targeted questions that help to address and look at each and every one of the normal families.

Physical exam, and if you are not licensed to do physical exams, you can give your client forms that they can look at themselves, or have a family member look at, to assess functional signs of imbalance. Blood chemistry you can do through Direct Labs, and we have a whole section on that. Functional assessments, there are tests for the adrenals: the adrenal stress index. There are tests for the fatty acid balance, which is related to inflammatory processes. There are tests for amino acids, which can help you assess the status of their building and repair processes, collagen amino acids; there are also amino acids related to neurotransmitters. We'll go through all of these varieties of tests.

Organic acid is a very useful functional test that helps to look at all of the different byproducts of metabolic reactions and helps you to assess where some of the clogs in the wheel might be. Mineral testing is very important: both essential minerals and toxic minerals. Finally, steroid hormone panels, looking at a variety of their steroid hormones like estrogen, progesterone, testosterone, DHEA; but also looking at the intermediates so that you can see where some of the plugs are, where some of the nutrient imbalances might be, and how you go about functionally repairing and balancing those areas.

As we are going through protocols to help to restore balance, I find that it is helpful to use hormonal balancing hierarchies. If you start out looking at the presenting symptoms, you are not doing any better than standard allopathic medicine, because the presenting symptoms might be a sign of something underlying.

I find that no matter what their big item is (whichever the one that has the highest score of imbalance), if their digestion is out of balance, even if it is just slightly out of balance, not addressing the digestion can impact the way that the other parts repair.



For example if they are presenting with a thyroid issue and they also show signs on the symptom surveys, or on the symptoms that you are looking at, or physical signs on their body, you are saying I think there is something going on with their digestion. If you don't address that because it seems to be a lesser problem than thyroid, you could be impacting the effect of the thyroid interventions that you suggest. So it is really important.

The order that I find is digestion first. If they are not digesting well, they are not getting the appropriate nutrients to supply the other hormones. In addition there is some inflammation in their gut causing stress that is really going to stress the adrenals, that is going to have an effect on the thyroid, which is going to affect sleep, which definitely would have an effect on sex hormones. So digestion has to be addressed.

The actual digestion itself, and making sure there is efficiency at taking the nutrients out of the food, so you can supply the rest of the organs and glands. Then there is the importance of calming down the fires of digestion imbalance. For example leaky gut, we don't want toxins to leak from the gut into the bloodstream and then have a widespread effect on the body.

While I do not think it is critical that you address the digestion and get it completely balanced before starting to work on other things like blood sugar, and adrenals, and thyroid, I think it is really critical that you work on it concurrently. If you skip it because it is not as impaired as the other organs and glands, then you are making a mistake because the rest is not going to get into balance without the digestion being in balance.

Once you have looked at, or are working on, balancing digestion, it does not mean you have to go through a whole protocol so they have perfect digestion before you can work on anything else. The important thing is, that in order for the other protocols to work, in order for balancing, nutrition, herbs, and things for the other systems to work, the digestion has to be working as well. So work on digestion, then work on blood sugar, because blood sugar is so connected with everything. If you have blood sugar swings, up-and-down, it will cause inflammation and will affect everything else.

Next, I like to look at stress response because adrenal stress can affect everything. Digestion affects the adrenals, because if the digestion is poor and there are some issues with inflammation, or if there are issues with organisms that don't belong there, you will have some issues with digestion that will impede the response of working on the adrenals. After that I work on the thyroid because it is metabolic rate, and if every system in the body is not working properly, you have to address the thyroid.

Sleep, you know it is listed as five on my hierarchy but it depends on what is going on. If someone is not sleeping then it is hard to do repair and get everything else to work.



Sleep is almost like an overarching piece, but you can optimize sleep and look at that. It was a hard one to place. Sex hormones: what I find is, if we get the digestion working, and their blood sugar balanced, we get the stress under control, we get the thyroid under control, and by that point a lot of the issues that they were having with sex hormones have disappeared. Finally the organ specifics.

This is not a 100%, you don't have to do it in this exact order every time, but I would say at least do the top four: digestion, blood sugar, stress response and thyroid; you really need to get under control. We also have the immune system, which has some endocrine components to it, but the immune system needs to be addressed throughout. We address the immune system when we look at digestion because we might be looking at repairing leaky gut, food allergies. We might be looking at the immune system in response to thyroid, especially if there is an autoimmune condition. Blood sugar can have an autoimmune response. This is a general guideline, it does not have to be cast in concrete because we are dealing with individuals and we need to make sure we are personalizing.

Let's look a little bit at foods that disrupt hormones, and then we will look at foods that enhance the functioning of hormones. Hydrogenated and oxidized fats, you have heard this over and over again, they damage the cell receptors, they damage the insulin receptors, they cause inflammation, and they contribute to inflammatory diseases and autoimmune diseases and that is a big hormone disruptor. They wreak havoc. They are a stress in the system, the adrenals perceive them as a stress in the system, and they add to the burden of an already stressed out person.

The other thing is processed high glycemic foods like flours, sugars, and grains. They disrupt hormones. Of course it disrupts insulin-glucagon balance and that has an effect on thyroid, adrenals, and sex hormones. Charred meats: they have something called heterocyclic amines and these promote ER alpha estrogen receptors, which are the ones that contribute to breast cancer. So charred meat in general is very damaging to the system, but in particular it can be hormone disruptive. Chemical laden foods, there are certain chemicals that are actually hormone disrupting; they bind to receptors and then they trick them because they are not really having the function. Then the real hormones cannot bind to those receptors because they have been displaced.

Foods bought/stored in plastic and cans: you need to be careful because the linings in both plastic and cans can leach into the food and disrupt hormones. Of course good old gluten and dairy: gluten is very inflammatory and very acid forming. Most people don't tolerate gluten well and it disrupts all of the hormones.



Dairy: very dangerous for people with blood sugar imbalances because it has an effect on the pancreas and its ability to make insulin, as well as effects on the insulin-producing cells. Dairy, especially the whey component, will increase insulin secretion without increasing blood sugar, so it's like this hidden problem. Caffeine and alcohol have damaging effects on hormones. Really what this boils down to is getting back to the basics, and helping people to clean up their diet in order to achieve hormone balance.

Foods that support hormones are green, leafy vegetables, brassicas in particular for the sex hormones, because they have particular components that support the conversion between the estrogens and the testosterone, and the ones that are damaging versus the ones that are helpful. Sea vegetables, loaded with minerals, iodine in particular but a lot of other minerals, so they are supportive of the hormones, especially thyroid. Omega-3 fats: very important especially the omega 3-6 balance, which we go into in more detail, as we get further along. Coconut oil can be very supportive. It is loaded with medium chain triglycerides, which get into the system quickly and provide energy to the system even when there are digestive impairment and gall bladder problems.

Cumin and pomegranate have hormone-supporting effects. Cumin is an Indian spice and goes really well with other things that are anti-inflammatory like ginger and turmeric. Lignans are a specific type of biochemical that helps to support and nourish hormones. We will go into more detail on that in our reproductive hormone module. Flax, sesame, pumpkin seeds, soybeans, broccoli, beans, and some berries have these lignans. Finally isoflavones as found in soybeans, clover, kudzu, mung beans, alfalfa sprouts, black cohosh, and chickpeas; and these are all really valuable for balancing hormones. These are just some of them.

Finally we will end with a slide that has some links for advanced topics and resources regarding hormones and general hormone introduction. There is a neuroscience website with information about the hypothalamus that is really cool, and the pituitary. There are some flashcards that really help you understand the hormones related to the hypothalamus at quizlet.com. The endocrine system overview video that is really quite interesting at YouTube.com and there is a link for it. At our SHINE Conference that we held in January 2014, the Day One videos: one, two, and four, have a lot more information about what we're covering in this introduction.

Thank you for listening. This is Dr. Ritamarie Loscalzo at the Institute of Nutritional Endocrinology.