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. I want to thank you all for tuning in.

I had an email from a practitioner asking me “Is stress really an issue for my patients?” And I responded back to her saying perhaps the real question is, “When is stress not an issue?”

We all know that everyone is exposed to potential stressors on a daily basis such as an injury or infection; emotional stressors such as loss, change or trauma; it can come from lack of sleep; skipping meals due to the body’s response that occurs from trying to maintain balance and so on....

Even the ‘perception’ of stress stimulates the body’s stress response which might be another good subject for our program. No matter the form, recent studies have shown that stress leads to disruptions in neurotransmitter balance, which in turn can cause anxiety, depression and other problems.

Now since a wide variety of nutrients are important to the effective production of neurotransmitters, we as practitioners can help our patients balance their moods using various nutritional approaches. So when our patients experience stress, anxiety or depression they don’t have to rely on conventional medication. By understanding the cause of anxiety and depression and knowing how the body’s response to stress occurs, we can recognize that simple nutrients are important to the effective production of neurotransmitters and with this knowledge we can easily assist our patients. The body’s response to stress comes in many different forms; increased heart rate and blood pressure; it leads to increased cholesterol levels; it suppresses the reproductive system; it hinders growth; it hinders the release of stomach acid; it will delay stomach emptying time; it stimulates the colon by increasing movement; it may lead to a change in appetite and weight gain; it decreases the ability to fight infections; it may actually lead to increased cancer diseases and autoimmunity; it effects all the balancers of neurotransmitters; it can result in the long term activation of the stress response; and it activates changes in the hypothalamic-pituitary-adrenal axis (HPA).

Other things to consider when it comes to stress, is the fact that it elevates cortisol (which will affect the neurotransmitters).
The by-products of cortisol act as *sedatives*. Cytokines can affect the HPA axis and cortisol and the neurotransmitters, like GABA can also affect the HPA axis. So let’s have a little introduction to stress....

The body’s stress response as we all know can be both helpful and harmful. It gives people the ability to avoid an impending threat, but when the threat (or perceived threat) persists, stress can put someone at risk from obesity, heart disease, cancer and a whole wide variety of diseases. The brain responds to stress by sending chemical signals and hormones into the blood that prepares the body to act appropriately; you know, the classic ‘fight or flight response’. When the stressful situation ends, cortisol turns off the stress response. However, since most of our lives include daily stress, the stress response doesn’t always stop. Persistent perception of stress, results in a continuous stress response that will eventually take its toll on the body. So what is the stress response?

It is also known as the *Hypothalamic-Pituitary-Adrenal Axis (HPA)*. Some people call this, the stress circuit. The stress response is a feedback loop between the nervous system and parts of the endocrine system that releases stress hormones. This is how it works. The hypothalamus releases *Corticotrophin Releasing Hormone or CRH* in response to stress factors which then trigger the pituitary gland to release *Adrenocorticotropic Hormone or ACTH*. ACTH stimulates the adrenal glands to produce *epinephrine* and also *adrenaline, norepinephrine* or *noradrenaline* and cortisol, which results in elevated blood pressure and heart rate, increased blood flow to the muscles and the release of glucose into the bloodstream, as a few examples.

Now, in some cases of *chronic* stress, the stimulus becomes so overwhelming that the HPA axis starts to shut down. It becomes underactive creating low CRH and cortisol levels. These types of patients are likely to experience fatigue, as in *Chronic Fatigue Syndrome* and depression symptoms similar to those seen in *Seasonal Affective Disorder (SAD)* or *Post Partum Depression*. Lack of cortisol can also lead to a hyperactive immune system creating autoimmune diseases in these cases. The HPA axis communicates with the limbic system, affecting motivation and mood. This also includes areas in the brain called the *amygdala* which relates to fear; the *hippocampus* which is the centre for memory formation; and the brain regions that control body temperature, appetite and pain. So, along with the HPA axis, the stress response certainly affects many other body systems.

Digestive issues are quite common among people who suffer from chronic stress. Corticotrophin releasing hormone and the autonomic nervous system hinder the release of stomach acid and the emptying of the stomach, while stimulating the colon.
Glandular systems aside from the adrenals are also suppressed by stress. Persistent stress inhibits Gonadotrophin Releasing Hormone and Luteinizing Hormone often resulting in reduced fertility. The release of thyroid hormones, growth hormone, insulin and growth factor 1 are also reduced with chronic stress.

This is one of the reasons why Dr. Cass emphasizes that thyroid problems are adrenal problems and adrenal problems are thyroid problems and thyroid and adrenal problems are anterior pituitary problems. I suggest you put this little informational gem to memory as it will put you in good standing for all hormonal related conditions. The new HPA (Axis) Life Force addresses this perfectly. Don’t forget the liver...HepataGest. Hormones are conjugated there... AND the silver bullet for adrenal insufficiency – ADRENAL LIFE FORCE. I use tons and tons of this wonderful remedy. My patients call it the miracle capsule! In fact, most doctors that I know (including me!) use the Adrenal Life Force on a daily basis.

As I was indicating, stress hormones also inhibit our immune system and this can lead to a decreased ability to fight infection. And it contributes to the development and progression of some types of cancer. Multiple studies and clinical evidence have shown that various cellular and molecular immunological parameters including cytotoxic T-cells and natural killer cells whose activities govern the surveillance of tumors, are compromised with chronic stress and depression. Evidence also indicates genetic variations exist in the control of the HPA axis which may explain why some people are more susceptible to stress responses than others. Environment further influences the HPA axis function. Extreme stress at any time (especially during childhood) permanently alters the HPA axis and decreases a person’s ability to mount a strong stress response for future stressors. At the recent Concordia event, Dr. Cass emphasized the use of HPA (Axis) Life Force in any situation of trauma. Abuse for example. Accidents, surgery, war veterans returning home and so on. That was a significant revelation!

Now I mentioned that stress relates to the disruption of neurotransmitters. For those of you who don’t know a whole lot about neurotransmitters, they are little chemical messengers in the nervous system. They communicate between neurons throughout the body not just the brain. The study of neurotransmitters and neurobiology began about 50 years ago, or actually more than 50 years ago, and that included research on 5-hydroxytryptophane (5-HTP) to increase serotonin levels. The effect of neurotransmitters has much to do with determining mood, energy level, focus, concentration, food cravings, digestion, sleep patterns and metabolism. There are more than 100 chemicals in the body that are currently known to act as neurotransmitters or neuro-modulators.
Neurotransmitters can either be excitatory or inhibitory. Inhibitory neurotransmitters decrease the likelihood that a signal would be relayed across the synaptic cleft, while excitatory neurotransmitters increase the likelihood of transmission. More specifically, glutamate neurons are excitatory and gaba amino butyric acid or GABA neurons are inhibitory. All the other neurons and neurotransmitters modulate glutamate and GABA neurons enhancing or inhibiting their effects. The balance between excitatory and inhibitory neurotransmitters really contributes to optimal health.

So what can we do about all this? Well we are very fortunate Dr. Cass has created the Physica Energetics line which has a variety of nutritionals that can help balance these systems. You know the first ‘go to’ remedy I reach for, of course is.....? Right, the Hypothal Code! The Hypothal Code gives hypothalamic support. It is traditionally used to for hypothalamic support, pituitary disorders, any kind of endocrine imbalance and can be used for people with ADD, ADHD, pineal disorders and appetite suppressants. Remember: you can use this to ‘amplify’ your testing and it is interesting that the apiol phenolic is specific to the hypothalamus. Apiol, as found in parsley for instance, has a tendency to suppress the hypothalamus. Homeopathically as a sarscode, it helps to re-establish the hypothalamus. Now I just love Hypothal Code. I give it to many of my patients who come into my practice. Those of you who take advantage of pre-screening techniques will remember that Triple Warmer 20, found on either side of the skull just above the ears, gives us a good indication of right and left brain function and may illuminate closed head injuries. Hypothal Code gives us this information and helps to balance this pattern.

We all know that Hypothal Code is in part, made up from a sarscode produced from a healthy gland. Sarcodes can be secretions or a tissue which provides the blueprint of the stabilizing oscillatory signature of that particular substance. Being that stress affects the HPA axis, Hypothal Code can give the proper blueprint back to the body, it is my number one ‘go to’ remedy for stress.

My next ‘go to’ remedy is the GB-40 Yuan Source. The gall bladder plays a huge role in helping to make the neurotransmitters in the body and it helps considerably when it comes to decreasing cholesterol levels and fighting immune system problems. Now we all know that gall stones (or the inhibition of bile flow) initiates much less cholesterol leaving the body because bile flow in the small intestines is needed to precipitate excess cholesterol from the blood. As a consequence of reduced bile flow cholesterol levels may rise, and this can actually happen with stress response even if a person’s diet is good. Bile is a key factor that naturally kills many pathogens such as parasites, which enter the digestive tract via food. So bile flow weakens, becomes less efficient and paves the way for more...
infection. GB-40 Yuan Source controls this beautifully. If stones are an issue add, MetPhos. Works great. AND make sure you’ve got the drainage pathways open and additional liver support such as HepataGest.

Since the stress response inhibits the release of stomach acid my next ‘go to’ remedy is the Hypo Zymase. This is one of Dr. Cass’s digestive enzyme formulas. He has just the right amount of hydrochloric acid added to help people who have low stomach acid problems. Remember: it is more than just an HCl based product. It is a dual phasic remedy supporting not only the gastric patterns but also the small intestine! If your practice is like mine, 90% of the people who walk through your door have low stomach acid problems. Hypo Zymase is my hands-down, digestive enzyme of choice.

I talked earlier about how neurotransmitters are greatly effected by stress and anxiety and how 5-HTP helps to increase serotonin levels in the body. When serotonin is low it means people have susceptibility towards depression. Dr. Cass enlightened us at Concordia 2013 with the 5-HTP Liposome Spray. This should be available early December. Do note that most oral 5-HTP products can cause digestive disturbances. But because the Physica Energetics’ remedy is in a liposomal base it is fast acting and calming and doesn’t create digestive distress. Plus it will give you greater absorption and assimilation rates because of the liposome....remember 3.5 times stronger.

We don’t have the time right now to consider some of the other remedies that relate to this pattern. Think in terms of Gynostemma BioForce (GBF), L-Arginine SR, Licro Intrinsic, Bio-Omega 3 and the wonderful GREEN LIGHT. There is so much more to say about this but hopefully this will provide you with some helpful starting points.

We had an amazing time at Concordia 2013 in the beautiful American Riviera in Santa Barbara. There were just under 200 participants. I highly suggest you ask Physica Energetics for a set of recordings when they become available. Next year you absolutely MUST attend! These Concordia events are without question, the gold standard in Bioenergetic Medical conferences....ask any of your colleagues who attended and they’ll tell you that without hesitation. So much wonderful and immediately applicable, clinical information presented in an atmosphere of enthusiastic collaboration. Outstanding!

AND that is about all the time we have right now.

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.