It's estimated that 36 million men, women and children in the United States suffer from migraine headaches. Yet, less than half of the patients are being treated effectively with current treatment options. Let's review some strategies to reduce their occurrence or intensity because this is one area that can really change someone's life.

In a previous Tuesday Minute we discussed brain injuries in general and their long term effects. Keeping these same underlying mechanisms in mind, we can develop therapeuetic strategies for headaches of any kind. As a reminder, oxidative stress, excitotoxicity, inflammation and mitochondrial dysfunction individually and collectively have a profound effect upon brain tissue and function.

Dr. Court Vreeland provided an awesome overview and treatment plan for migraines as well as eight cases studies in a webinar listed below. He summarized those four mechanisms by using a word picture to communicate what’s happening with our patients “over excitability of the brain” because if you have oxidative stress, excitotoxicity, inflammation or poor energetics due to mitochondrial dysfunction the result will be "over-excitability of the brain".

Here are some of the migraine triggers identified in the literature; however, think beyond the words and consider the imbalances and how they can cause "over-excitation of the brain". Migraine triggers include: hormonal changes (menstruation, ovulation, contraception or HRT), head trauma, lack of exercise, medication, stress, food additives like MSG and aspartame, sensory stimuli like bright lights or strong odors, changes to one's sleeping pattern, barometric pressure change, certain foods like aged cheese, red wine, and chocolate.

Speaking of food, Dr. Vreeland also emphasizes diet is one of the core issues with chronic pain. Here's how he deals with inflammatory foods. Using data from the Journal of Pain Research 2010, he puts the potentially offending foods on his letterhead. He
tells patients to avoid them for 90 days. He tells them after 90 days add them one food at time to see which foods precipitate pain. You can see a link below for that article as well.

Yes, IgG food allergy testing can give the patient greater clarity on immune related inflammation but there are other mechanisms involved with these foods. The result of this diet is "more plants." More plants provide food to support the microbiome. As we have discussed, the microbiome, exert powerful inflammatory and anti-inflammatory forces from a systemic level depending on which (bugs) are in control.

Beyond diet and eliminating migraine triggers, there is solid evidence supporting the use of supplementation in the prophylactic treatment of migraine. The Journal of Neurology did a meta-analysis to review pharmacologic treatment for migraine prevention. What was interesting was some botanical and nutrient agents were more effective than the drugs. You can see the article below.

The group looked at 284 abstracts which ultimately yielded 29 solid articles. They ranked the effectiveness of a therapy as follows: Level A - Medications with established efficacy, Level B - Medications are probably effective, Level C - Medications are possibly effective, Level U - Inadequate or conflicting data to support or refute medications use.

Authors are quick to note that the length of the study, the design, its ingredient dosing may allow some of the compound medications to shift from one category to another. But for our purposes if something is in the A or B category, we have good science to support its use. In Level A the first and only suggested agent is Petasites (butterbur). In Level B there are several NSAIDS but here we find magnesium, feverfew, and high dose riboflavin. Level C reveals Co-Q10. Based on this study and his clinical experience as a chiropractor and as a diplomat in neurology, Dr. Vreeland worked with Biotics to develop Mygran-X, a product that is designed to combat the forces that create an "over excited brain" namely: oxidative stress, excitotoxicity, inflammation and mitochondrial dysfunction.

MygranX contains petasites or butterbur and feverfew as botanical agents to reduce inflammation, riboflavin and emulsified Coenzyme Q10 to support energy production and mitochondrial repair, also a powerful botanically based proprietary antioxidant, phytolens. The doses used in this formula are consistent with the literature at one capsule, twice a day. Use for 3-4 months before you abandon its effectiveness. You can see a link below to a more thorough discussion of the ingredients.

Dr. Vreeland suggests that in addition to MygranX take 300 mg of magnesium (3 Mg-Zyme at bedtime) and 3000 mg of omega-3 oils. I like to use 1 tablespoon of Biomega-3 Liquid.

By the way you don't have to fix every migraine, every time, to have a happy client. Dr. Court Vreeland shared in his webinar below that he helped reduce the frequency and intensity of a patient's headaches by 50%. But this reduction saved her over $800.00 a month in medication costs. So by applying foundational principles: reducing oxidative stress, excitotoxins, inflammation and supporting mitochondrial repair, her life has changed dramatically; and isn't that why we are in this field.

Thanks for reading this week's edition. I'll see you next Tuesday.