## The Tuesday Minute

Nutritional information.... one byte at a time

This Week's Topic

## **Reduce Premature Brain Aging**

Upon listening to an awesome conference on brain injuries, I was surprised to hear that I may be suffering from some of the symptoms; and I am pretty sure many of you are as well. The condition is brain fatigue.

Let's look at the clinical picture and see if it fits. When people talk about brain health they are often referring to neuron health. We normally lose about 3,600 an hour but some lose 30,000 an hour and some people can be losing 3 million neurons per hour. Fortunately, we have over 100 billion within the fully developed brain; but if we can reduce some of the neuron loses, I'm all about it.

Here are some of the signs of brain neuron loss: inability to read your own writing, inability to understand your own notes, difficulty finding the right words, difficulty understanding simple directions, feelings of unusual fatigue at the end of a day, poor balance, feeling of extreme burnout after a weekend conference of learning new academic material, and inability to perform tasks that were once easy or seemed like second nature or the same tasks take longer.

With your patients note: How many times do you have to repeat yourself in your report of findings and treatment protocols?

Another symptom of a tired brain is the inability to handle excess stimulation. If it's difficult to read a chapter in a book without being fatigued, that's a tired brain. The ability to enjoy life is related to brain function. The joy of learning, the desire to see friends and family, and the ability to taste is all related to brain function.

We see some of these factors when people have a stroke; but if we notice our patient's, family members, or even ourselves experiencing more of these events understand that they are signs of a tired brain. The biggest risk factor for a stroke is age. We want to do whatever we can to "reduce premature brain aging."

As we age, we lose neurons similar to a stroke. Neurons like stimulation. That's why strokes are so severe. It's the lack of stimulation to the surrounding tissue. But too much stimulation can be a problem as well. Is it possible that our double latte, cell phone, computerized lifestyle is causing over stimulation.

We know with stroke victims to avoid the things that cause fatigue or excess stress is important. So in treating patients that you suspect have a tired brain, encourage them to avoid that intense push that causes physical or emotional fatigue. Everyone has to push once in a while but discourage ongoing stress factors. You know those projects that you keep going over and over and still can't make sense of them? When you get into those patterns do something else.

I want to remind you we are not just talking about strokes and trauma patients. Most likely



you are seeing patients right now that can benefit from this information. Businessmen and women who would like to find more creative, efficient ways to market and distribute a product. Doctors and lawyers who would like to make better, quicker decisions. Moms and dads who want to appreciate their families more. Athletes, one of the best things you can do for athletes is to support their brains. What athlete wouldn't like an increase in what I call the "quickness factor?"

Remember, the brain is responsible for balance, coordination, and reaction time. So how do we keep our brains healthy? Neurons need 3 major things to function well: glucose, oxygen, and stimulation but not over stimulation.

For glucose: we all know how to monitor blood sugar and insulin levels. If blood sugar is out of control whether high or low, it will cause brain function to be compromised. The brain uses 25 % of the body's available glucose.

In terms of oxygen: look for B12, iron, and folic acid deficiencies. To evaluate B12: look at serum or urine methylmalonic acid. Evaluate iron by looking at ferritin levels. Levels that are too high (over 150) or too low (under 20) may be a problem. To assess folic acid: look at homecysteine levels that are elevated and use them as a marker with your CBC. Your older clients will have gross B12 and folic acid deficiencies if you look for them.

The brain is pretty sensitive and has some extreme safeguards built in to maintain homeostasis or balance; but the brain needs energy to make all these vital systems work properly. If we are low in cellular energy, we can't pump out the excess calcium or glutamate. Whenever we talk about increasing mitochondrial energetics, we need to make sure we have adequate amounts of coenzyme Q, B vitamins, and alpha-lipoic acid.

One of the things I found interesting is that many of the nutrients that these researchers were quoting as beneficial to the brain were found in VasculoSirt, nutrients like R-lipoic acid, acetyl-L-carnitine, coenzyme Q, magnesium glycinate, gamma tocopherol, and B vitamins to increase cellular energetics. When I asked the developer of VasculoSirt, Dr. Mark Houston, he concurred that the nutrients in VasculoSirt were designed to increase blood flow and protect vascular tissue through-out the body including the brain.

Dr. Houston was also quick to point out something many of the researchers miss, the "anti-aging" effects with learning what Trans-Resveratrol offers. VasculoSirt supplies nutrient support to enhance cellular mitochondrial function; provides antioxidants to protect the brain and vascular system; as well as the anti-aging, anti-viral, DNA protecting effects, and regenerating effects of Trans-Resveratrol.

You can click the link on the web page to get a copy of an interview I did with Dr. Houston on VasculoSirt and vascular support; but keep in mind, VasculoSirt can affect brain health as well. Brain fatigue is not uncommon, I know firsthand; but if we address the problem and give our body the support it needs, we will notice the difference every day as we live longer and live better.

Thanks for reading. I'll see you next Tuesday.