

Brain Building Strategies

"Once the diet and synaptoclastic over activity has been addressed, botanicals can be employed to accelerate cognitive health."

In an earlier segment we highlighted the work of a neurologist Dr. Dale Bredesen and his book *The End of Alzheimer's* where he made the bold statement that "Alzheimer's can be prevented and in many cases, its associated cognitive decline can be reversed". We talked about testing to assure that raw materials are present to allow or stimulate anabolic synaptoblastic signaling and stop the catabolic synaptoclastic over activity. An important concept we discussed last time, bears repeating "the process of cognitive decline is occurring 10 years before Alzheimer's is diagnosed". We don't just wake up and are diagnosed with Alzheimer's. The brain is slowly deteriorating.

We can use the tests in what Dr. Bredesen calls a cognoscopy to determine what is stimulating the synaptoclastic activity. Next is eating to stay in a mild state of ketosis which provides ketones as an energy source for the brain. He calls his diet: Ketoflex 2/3. Other lifestyle



Part 2: Nutrients

The End Of Alzheimer's ?

factors include exercise to keep the fluids moving, healing the gut, getting the right kind of sleep, healing the blood brain barrier, reducing stress and living a lifestyle that encourages brain development. Once the diet and synaptoclastic over activity has been addressed, botanicals can be employed to accelerate cognitive health.

I want to continue this segment and talk about some of the other support nutrients shown to maximize synaptoblastic signaling. Keep in mind this is a guide based on research when his

book was written in 2016. Dosages should be adjusted based on severity of condition, rate of recovery, and commitment to diet and the other lifestyle strategies outlined. You can see a more complete list to the right.

One of the hardest things to decide is what "not" to give. With so many compounds showing benefits as cognitive enhancers it's tough to put together a program that is doable and affordable. That's why I like to use a multivitamin/mineral that enhances mitochondrial function. The brain needs energy.

Developed by Dr. Mark Houston, VasculoSirt from Biotics is the best mitochondrial supplement on the market. One of Dr. Houston's goals was to increase patient compliance by putting therapeutic doses of five key supplements in one formula. Another goal was to provide nutrients that would enhance the mitochondrial function of the cell. The number of mitochondria per cell varies from a few hundred in skin cells to over 2,000 per cell in the key energy centers of the body such as the brain and skeletal muscles.

VasculoSirt contains therapeutic doses of trans-resveratrol, Acetyl-L-Carnitine, emulsified Coenzyme Q10, the concentrated green tea extract EGCG, R-Alpha-Lipoic Acid, vitamin K as menaquinone -7, vitamin D3 plus a phytochemical blend of antioxidant plants and immune modulators like olive leaf extract, quercetin, ginkgo biloba, phytolens, lutein, lycopene. And of course some basic co-factor B vitamins and the necessary minerals to support the Krebs cycle for energy production. Dr. Houston suggests 5 bid.

Also, consider CurcumRx 2 bid. Amyloid plaque has been associated with Alzheimer's and Parkinson's disease. Studies have shown that curcumin reduces amyloid plaque by at least eight different mechanisms. Curcumin easily enters the brain and acts as a heavy metal chelator to neutralize toxic metals and naturally raises glutathione levels. In addition it has antimalarial, antibacterial, antiviral, anti-inflammatory, antioxidant, anti-proliferate, antiseptic, and antiangiogenic properties in humans. That's a lot of anti. Some authors have called curcumin the king of anti-inflammatory substances. Curcumin also modulates or inhibits two inflammatory cell signaling pathways, mTOR and NF-kB.

All turmeric products must be emulsified to increase absorption. Biotics found a supplier

using "turmeric root nutrients" as emulsifying agents. The research shows with CurcumRx absorption is 5-6 times greater than the other leading emulsifiers. CurcumRx contains only natural turmeric compounds and delivers a range of over 200 beneficial turmeric nutrients in addition to the more commonly studied curcumin compounds.

Next, Bio-Ashwagandha 1 bid. For over 4000 years ashwagandha has been studied as an adaptogenic, antioxidant, anticancer, antianxiety, antidepressant, cardio-protective, thyroid modulating, immune-modulating, antibacterial, antifungal, anti-inflammatory, neuroprotective, cognitive enhancing substance. A recent double-blind, randomized, placebo controlled study of the effects of ashwagandha on stress found that it reduced symptoms of stress and the inability to concentrate and reversed forgetfulness in a dose-dependent manner at 500 mg/day.

I like Bio-Ashwagandha because it has been used for thousands of years, it is reasonably priced and increases energy while reducing stress.

If memory is the main issue and no results are seen in three months, consider Huperzine A 200 mcg as in Cognitive Enhancer 1-2 bid.

The End of Alzheimer's, by Dr. Dale Bredesen is a treasure chest of therapies to stop degeneration and begin the rebuilding process in the brain. It is written in a way patients can read it, study it and stay motivated to participate in their own healing. Obviously, they will need your guidance and encouragement. This is not a journey one embarks on alone. I hope you enjoy it as much as I did.

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