

Ketones For Anti-Aging

"This ketones anti-aging lecture blew my mind!"

For some patients learning how to increase ketones will change their life. Why, because ketones have some unique properties that no other substrate contains and we can train our bodies to make them naturally.

I was listening to a lecture by Dr. Richard Veech, who has studied ketones for 47 years and he blew my mind on the importance of ketones as a type of anti-aging substrate. For years, Dr. Vasquez has talked about intermittent fasting and calorie restriction which increases ketones as one strategy to increase mitochondrial repair. And, I was also aware that neurons can use either glucose or ketones for energy. They prefer glucose; however, ketones can be used as an alternative fuel if glucose is not available. But I didn't know "ketones reduce inflammation, act as antioxidants and reduce oxidation especially in the brain."

Dr. Veech even went on to say that increasing ketones would be a great strategy if



we were exposed to nuclear radiation. Obviously, a direct hit would vaporize us but that ionizing radiation would be negated with the anti-oxidant protection offered by ketones. I find this aspect of ketones particularly interesting because we are exposed to many forms of low level radiation, not to mention the long term effects of Fukushima.

Ketones are used as fuel instead of glucose when patients are fasting or exposed to a low carb diet. But another way to increase ketones is to use medium

chain triglycerides or MCTs. If you consume MCT oils, your liver will convert them to ketones which are taken up very quickly by the brain and can be used by the brain for fuel.

In terms of size, medium chain triglycerides in MCT oil are a 6-12 carbon saturated fat. Fish oil is a longer chain and is a 20-22 carbon poly-unsaturated fat. Because of their size ketones can cross the blood brain barrier easily and are used as a source of fuel.

Many researchers call Alzheimer's, "Type 3 Diabetes". Remember, if there is a sugar utilization problem in the brain and if the brain doesn't have enough energy, neurons can't repair, inflammation sets in, oxidation increases and neurons start dying. Less energy means new brain cell growth is retarded.

I'm not sure what is worse, neurons dying or not enough energy to foster repair and growth for new neurons. If the brain doesn't have the energy it needs, protein and fats that are needed for structure and function are broken down for energy. Alzheimer's patients have brain shrinkage probably due to the lack of fuel and subsequent tissue breakdown.

Many of us have heard how Dr. Mary Andrews used coconut oil and MCT oil with her husband who had severe Alzheimer's and had some very profound reversals of cognitive loss. You can see a link to the right to her website to get scientific articles, hear her story, and have access to her books.

Dr. Veech also mentioned that he had a patient with Parkinson's for 16 years. He found that by increasing his ketones to 0.3, which is a very, very mild form of ketosis, he could control his tremors. Dr. Veech said the only way to determine ketosis levels was by blood.

Dr. Steven Haltiwanger also shared at the IAACN meeting in 2013 that "If ketones are present in circulation, even at low levels they can increase cerebral blood flow by as much as 40%." Dr. Haltiwanger reinforced that ketones used within mitochondria can be used to drive the chain reaction that produces ATP. Ketones, by increasing ATP, reduce the generation of free radicals, increase production of endogenous glutathione and act as an anti-inflammatory agent.

MCT oil refers to carbon lengths from 6-12. The C-8 fraction is the one most researched for neurologic issues and appears to raise ketones the highest. Bio-MCT oil by Biotics Research Corporation contains approximately 98% of the C-8 fraction.

To maximize ketones, reduce carbohydrates and use a form of intermittent fasting by eating in a 6-8 hour span. For example, stop eating after 7:00 p.m. and don't eat lunch till noon the following day. To sustain mental clarity and capacity use Bio-MCT oil and grass fed butter in organic coffee or tea.

You've probably heard of using organic coffee and how healthy short chain fats carry the caffeine into the brain. I was pretty sceptical but it really works; and although I am an intense breakfast advocate, I can easily go until noon with the coffee,

Bio-MCT oil, and butter blend. I'm surprised how clear and focused I feel. Use 1 tablespoon of Bio-MCT oil, 1 tablespoon of organic grass fed (Kerrygold) butter, place in a small blender and blend until you get foam.

Ingesting too much oil too fast will definitely cause diarrhea, so go slow with the amount of oil you use. If patients are sensitive to caffeine, Bio-MCT is tasteless and can be used on vegetables or in a protein smoothie.

Do you or any family members have brain fog or unexplained fatigue, prediabetes or inability to lose weight despite diet and exercise? Or do you have patients experiencing Alzheimer's, Parkinson's, MS or other neurological conditions that are not responding to your therapies? If so, it might be worthwhile learning more about ketosis and how you can use it personally and therapeutically.

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