Another word to add to your wellness vocabulary is the word "ketones". For some people, learning how to increase ketones will change their life. Why, because ketones have some unique properties that no other substrate contains and because we can train our bodies to make them naturally. You see, the cells in the brain are called neurons and they can use either the blood sugar called glucose or ketones for energy. They prefer glucose; however, ketones can be used as an alternative fuel if glucose is not available.

Ketones can reduce inflammation, act as antioxidants and reduce oxidation especially in the brain. Dr. Richard Veech, one of the world's experts in ketones says 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.

Ketones are used as fuel instead of glucose when you are fasting or eating a low carb diet. In essence when you fast, the body has to make another source of fuel or cells starve. So the body will start to break down fat into ketones, a usable form of energy.

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, MCT oils, have 6-12 carbon saturated fats whereas larger fats like fish oils have 20-22 carbon fats. Though fish oil is essential, it takes longer to digest.

Because of their size ketones can cross the blood brain barrier easy and be used as a source of fuel. Many researchers call Alzheimer's "type III diabetes" because if there is a sugar utilization problem in the brain and if the brain doesn't have enough energy, brain neurons can't repair, inflam-
utation 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. Perhaps you have heard of Dr. Mary Newport who used coconut oil and MCT oil to treat her husband with severe Alzheimer's. Her treatment resulted in some very profound reversals of his cognitive loss. You can click a link to see her website to the right 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 a very, very mild form of ketosis, he could control his tremors.

Dr. Steven Haltiwanger states "If ketones are present in circulation, even at low levels they can increase cerebral blood flow by as much as 40%." I like the idea of more blood flow to feed my brain. MCT oil has from 6-12 carbon atoms. Some MCT oils contain specific fractions; for example, 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, consider reducing 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 again until 12:00 noon the following day.) Have lunch at noon and eat dinner at 6:00 p.m.

To sustain mental clarity and capacity in the morning, use Bio-MCT oil and butter from grass fed cows in organic coffee or tea. To coffee or tea add 1 tablespoon of Bio-MCT oil, 1 tablespoon of organic grass fed (Kerrygold) butter. Place in a small blender and blend until it is foamy like a latte.

If you are sensitive to caffeine, Bio-MCT oil is tasteless and can be added to vegetables or a protein smoothie.

I was skeptical at first, but it really works. Normally, I'm an intense breakfast eater; but if I want to increase ketones, I can easily go until noon with only an organic coffee, Bio-MCT oil, and butter blend. I feel really clear and focused.

However and this is important! Ingesting too much oil too fast will definitely cause diarrhea, so go slow with the amount of oil you use.

Do you or any family members have brain fog or unexplained fatigue, prediabetes or inability to lose weight despite diet and exercise? Do you know someone experiencing Alzheimer's, Parkinson's, MS or other neurological conditions? Study Dr. Mary Newport's book and then ask your wellness clinician about ways to increase ketones. And see if a 30 day trial can increase your performance.