

# Nutritional ketosis- what does that mean and how can it revolutionize human health and wellness?

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## Opinion

Nutritional Ketosis has been studied since 1925. When the first research study was designed, to explore the hypothesis that nutritional ketosis would benefit children challenged by uncontrolled 24/7 epileptic seizures. The results were indeed astonishingly successful.<sup>1</sup>

There is a plethora of peer-reviewed articles spanning decades now, which continues to explode, validating the use of ketogenic diets to improve and revolutionize the current health of humanity.<sup>2-12</sup>

80% of us are faced with the challenges of modern city life. Having a body that has yet to evolve fully to cope with pollution, stressful lives, altered overabundant food sources, and a dependence on “this for that so called cures”, which the current model of “health care” poses as the only choice, in most countries dominantly adhering to Western medicine.

Why have these findings been in the foreground of mass exposure and application in the alternative medicine realm?

Because the application of ketogenic diets is not an easy achievable task to counsel potential patients on, as it takes a herculean effort to adapt into, especially when there are health, lifestyle, degenerative progression, and the stress of modern life to contend with, at the same time a person is implementing a new, rigorous, and seemingly counter intuitive lifestyle change. Which requires utmost focus and self-responsibility.

In late June of this year, I was introduced to the first ever-exogenous ketone product available on the market. For decades scientist and biochemists have been attempting to develop a formula that the masses would be willing to consume.

All prior attempts have been dismal failures and tasted like turpentine.

A patent has now been developed, which was prompted by the US NAVY seeking a nutritional source of exogenous ketones for Navy Seals, at the University of Florida by <http://usf.academia.edu/DominicDagostino>, in order to increase brain endurance for deep sea diving, without the onset of seizure activity.

Now that I have researched this innovative nutritional supplement, consumed it personally, and recommended it to many of my patients, I can attest that what the current literature has been demonstrating is indeed manifest.

The benefits of ketogenic diets are profound and are palliative to the most significant pandemic causes of degenerative diseases today:

1. Anti-inflammatory properties
2. Protects the Pancreas by sparing the use of Insulin, preventing Diabetes, Hypoglycemia and Metabolic Syndrome
3. Are neuro-protective and neurotrophic, preventing brain and nervous system degeneration

4. Promotes increased oxygenation which is protective to all cellular tissues
5. Improves ATP production at the mitochondrial level
6. Aids in the Repair of DNA by preventing cancer
7. Slows aging by promoting elongations of telomeres
8. Increases Glutathione production vital for Liver, Brain and Gut protection
9. Cardio-protective by increasing HDL, reducing LDL, VLDL

The ability to implement a ketogenic lifestyle has become 1000 times easier since this exogenous ketone supplement product has arrived on the scene.

It successfully induces nutritional ketosis within 20-40 min of consuming it.

Once the brain and body receive the message to be in ketosis to provide cellular energy, the process of adaptation can then be undertaken one individual at a time, for a lifetime (Figure 1-4).

The keto-adaptive process takes 15 days to set in motion. This is the amount of time it takes the brain and body to switch from being a glucose=> fat storage receptacle to an efficient eat fat =>> burn fat machine.

Stages of Nutritional Ketosis are achieved by: (Figure 5)

1. Achieving blood level of ketones of 1.5-3.0 (blood ketone meter)
2. Establishing one's individual ketogenic ratios of macronutrients to maintain progress
  - a. Carbs 10-15%
  - b. Protein 20-30%
  - c. Fats 65-95%

3. Maintain the first stage of nutritional ketosis and then modify as needed
- I. The bigger the health challenges the higher the fat ratio needed to achieve optimal health
- II. Individually tailored and self monitored by this App=>> **keto-calculator.ankerl.com** In my opinion, this is now the most viable treatment protocol to prescribe for patients, to make the biggest impact on the quality of their life for optimal health and wellness, on this planet today. I intend on continuing to live a Keto-Adaptive lifestyle and focus on coaching, counseling, and guiding those I serve toward their health goals.

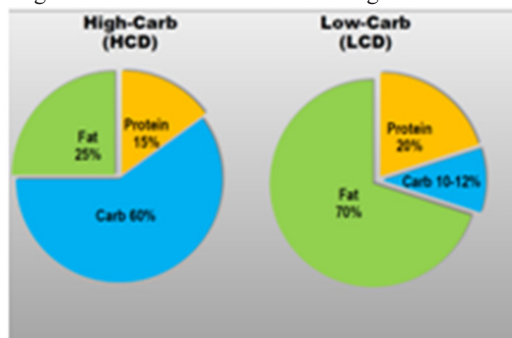


Figure 1 Habitual Diets.

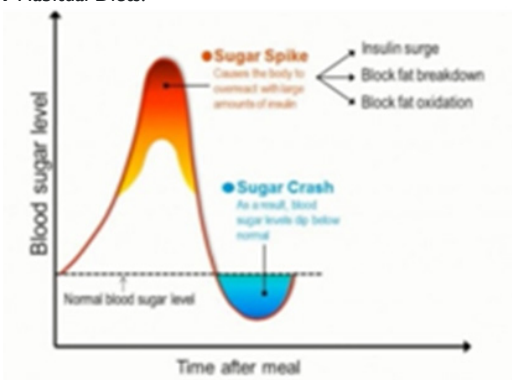


Figure 2 Eating carbohydrate locks you into a glucose-dependent metabolism.

### The Four Phases of a Well-Formulated Ketogenic Diet

	ADAPT	ADJUST	BUILD	MAINTAIN
Weight (lbs)	200	180	160	150
Intake (kcal/day)	1400	1800	2150	2200
Expenditure (kcal/day)	2800	2600	2400	2200
Carb Intake (g/day)	35	45	55	55
Weight (fat) Loss (lbs/week)	2.8	1.7	0.5	0

Figure 3 Sources of metabolic energy across 50 lbs of weight loss.

I believe that this lifestyle is the foundation for delivering a journey for optimal human performance instead of the current pandemics extant on this planet today, which looms larger daily.

I invite my colleagues to perform due diligence on this subject and change old paradigms that no longer deliver health but rather an outdated "sick care" "this for that model".

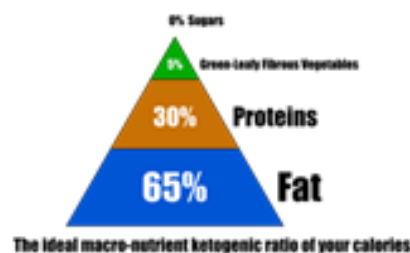


Figure 4 Keto food pyramid.

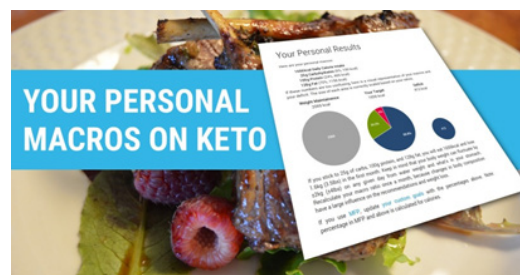


Figure 5 Personal macros on keto.

## Acknowledgments

None.

## Conflicts of interest

None.

## Funding

None.

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