



## The Truth about Ketones and Ketosis

The following information is based on the information found in 4 highly rated medical textbooks: The Textbook of Medical Physiology, Stryer's Biochemistry, Basic Medical Biochemistry, and Essentials of Biochemistry. Most readers are appalled at the misinformation they have been given. Make no mistake. This column features the scientific truth regardless of what you have been told.

Ketones are generated from fat-burning. You'll never generate a ketone if you keep getting fatter and fatter each year like the average American does. You don't want to keep getting larger, do you? Of course, you don't. By staying lean and trim, by burning excess body fat you'll be generating plenty of ketones automatically – it's a biochemical process you have no control over. The question is "Are ketones harmful in any possible way." The answer is only in this one extreme case. If you are a type I diabetic, without access to insulin, then you may have a concern. Who des this apply to in America? No one! All diabetics in America have access to insulin. The high carbohydrate/low fat/low protein people will stop at nothing to mislead you by acting as though everyone has a problem, when virtually no one does.

Furthermore, it is almost never mentioned that ketones are the preferred for your heart, skeletal muscles, and liver – these organs and tissues don't want carbohydrates at all. Is one of the reasons for heart attacks being the #1 cause of death the fact that we aren't giving our heart enough of the required fuel? Ninety-seven percent of the time (the majority) your muscles can't even use carbohydrates. Muscles only use glucose under intense physical endurance like running, bodybuilding, etc. We have been misled into believing that missing a carbohydrate-based meal will harm you by having the condition termed "metabolic acidosis" occur. This is what the type I diabetics are concerned with if they have no access to insulin. To get low blood pH takes 3-5 days of starvation or fasting! No one is ordinarily doing this. There are plenty of religions requiring fasting for many days and those followers have no issue with acidosis, either. I have never seen a reported blood pH problem in the medical journals caused by not eating carbs. Remember that your body keeps that 1-teaspoon of sugar (glucose) in your system constant by biochemically combining your stored body fat along with the protein you eat.

Next, they try to scare you by saying that your muscles will become "cannibalized" if you aren't "living on carbs." The truth is that after 3-5 days of fasting your body, including your brain, only requires 1/3rd the amount of glucose it normally does. This is amazing. What this implies is that will the great 50-year carbohydrate eating experiment, we have forced our brain and organs to tolerate massive overdoses of sugar. Our natural state is consuming very few carbs to maintain this reduced sugar usage – the exact opposite of what we have been told. Carbohydrates, not protein is "hard on the kidneys." Ask any diabetic specialist what the #1 cause of kidney failure is and they will be forced to answer diabetes (high blood sugar levels).

Protein can't even enter a kidney – the molecular charge is wrong -- never mind harm a kidney!

The next misinformation everyone is told: Does protein cause uric acid and kidney stones? Absolutely not. This is another major myth. Consumed protein gets broken down with the ammonia being converted to harmless urea and readily excreted. Protein is excellent for kidneys and kidney specialists agree. Kidney stones are caused by a blood buffering defect whereby phosphoric acid in sodas precipitates (like too much salt mixed with water) out of solution, you aren't consuming enough salt (incorrectly on a low-salt diet) so critical sodium bicarbonate  $\text{NaHCO}_3$  production is compromised, or you are may be taking harmful calcium supplements. All 3 conditions lead to "stones." Protein consumption isn't on the list!

Few magazines or newspapers ever print the scientific truth concerning ketones and ketosis. After reading this column you will understand more about the ketones and ketosis than virtually any nutritionist or even physician you will ever meet.