



## Protein & Natural Fats DO NOT CAUSE Ketoacidosis

Exactly one year ago this newsletter covered Ketones, but due to recent misleading news reports, it was decided to cover this subject again.

On March 18, 2006, headlines that the Atkins Diet (eating protein and fats with minimal carbohydrate consumption) caused an individual to be hospitalized for acidosis in the blood (harmful low-pH). Looking behind the headlines, this case is about 1 person. How many people have been on a low-carb diet over the past 20 years? It is fair to say that millions have followed the high protein/high fat/low carb guidelines and after these many years we have one reported case of acidosis.

The average person has **absolutely nothing to be concerned about** following the Adkins diet and the physicians scaring us should be **held accountable** for not understanding the complex physiology required in this case.

Because this topic is so important, I will quote the internet publications and then refer directly to medical textbooks so you can judge for yourself. I already have written the Special Medical Report titled "*Truth About Ketones and Ketosis*." This review will feature much of that report.

Here's what Dr. Lubert Stryer, Professor of Biochemistry at Stanford University and author of a biochemistry textbook used at medical schools says about ketones. "Ketones are normal fuels of respiration and are quantitatively important sources of energy." Translation: Ketones are **needed by your body** and contrary to what you may have heard, are **very useful to your organs!**

This newsletter will thoroughly explain why acidosis:

- Can **never normally happen** to followers of the Atkins diet.
- Occurs as a result of uncontrolled diabetes.

Please understand, the patient in question developed, and was treated for acidosis in 2004. If this case is significant, why did it take so long to have it published? Perhaps it was time for high carb advocates to falsely sound the alarm once again.

FACTS of the CASE: A 40 year old obese woman was admitted to the hospital for ketoacidosis. She was released after a few days. She had begun the Atkins diet a month earlier and had lost 20 pounds. She had abnormally low blood sugars (4.2 mm/liter when normal is 5.0 mm/liter). She was eating **0 carbohydrates**.

**I NEVER recommend going to zero on the carbs!** I recommend less than 10-12 tsp of sugar equivalents per day. And she likely consumed no salt (which is **very hazardous to your health and blood pH**). The physicians ruled out diabetes as the cause.

You Need to Know... Ketoacidosis occurs when you have **very high blood sugars and not enough insulin** - essentially, you have to be a type I diabetic with no access to insulin or a late-stage type II diabetic with blood sugar problems. In the U.S. today **everyone has access to insulin**. Also, steroids can make this condition occur as well as other diseases and abnormal metabolic conditions - the **DIET is NOT the CAUSE**. Consequently, there **must be a special illness-related component**; otherwise, it **MAKES NO Scientific SENSE**.

The Physician stated: “Our patient had an underlying ketosis caused by the Atkins diet....”

**THE SCIENTIFIC TRUTH:** The physician **cannot say that a higher protein/higher-fat diet caused the condition** because:

- Biochemically, **ketones are the #1 preferred fuel** of the following organs: the skeletal muscles, the heart, and the liver. These organs **don't want carbohydrate**.

- Ketones are **natural products of fat burning**. When body fat is oxidized, ketones are produced. Unless you want to retain all excess body-fat and want to **keep adding more body-fat**, you can't prevent generating ketones. A high-carbohydrate diet stops ketone production because it “puts on the pounds” so you **never access your stored body-fat** for energy.

We have been led to believe the medical condition “ketosis” (leading to metabolic acidosis -- low blood pH) happens very quickly. This is incorrect. Only after 3-5 days of **virtually complete starvation** (fasting) do ketones in the body become significant. Our bodies have been **compromised** by running primarily on carbohydrates. “The great 50-year carbohydrate eating experiment” was instituted with **no scientific basis**. It was founded on **biased opinion with no underlying established medical science**.

Contrary to popular misinformation, running on ketones is the **body's preferred and most efficient state**, and the leading biochemistry and physiology textbooks support this fact. We have been tricked into **forcing our bodies** to run on a diet of harmful sugar (carbohydrates). Nature **never intended this**, and the real-life results are **terrible**.

- We are told ketosis, by minimizing carbohydrates, will cannibalize our muscle tissue. **Medical Fact:** After just 3-5 days of fasting, our body requires **only 1/3 the amount of glucose** it has been forced to tolerate during “the great 50-year carbohydrate eating experiment” -- we could eat less than 1/3 of a bagel a day and maintain superb health. The brain and nervous system start to use ketones, because they **finally get them**. Our muscle is spared. Natural Size Analysis: If you have spent much time in a gym, then you know how difficult it is to add muscle. Do you really think that Nature would allow that precious muscle to be so quickly wasted?

In a related editorial another physician stated: “[L]ow carbohydrate diets for weight management are far from healthy....” Given the following medical facts I have **no idea what his statement is based on**.

- Protein and ketones are **NOT “hard” on the kidneys and liver**. Most of the nitrogen from the protein is converted to urea in the liver and excreted by the kidneys (a normal process), and the carbons are oxidized to carbon dioxide and water. The **ketones are used as primary fuel by the liver, skeletal muscles, and heart**.

- Carbohydrates, NOT protein, are hard on the kidneys. High blood glucose levels place **excessive stress on the kidneys**. That is why diabetes -- **caused from consuming carbohydrates** -- is the single greatest cause of kidney failure in the U.S. Too many nutritionists and physicians continue to “parrot” outdated misinformation.

- Ammonia, generated as a natural by-product from digesting protein, is **NOT harmful**. Before carbon skeletons of amino acids can be oxidized, the nitrogen must be removed. Ammonia is formed and converted to harmless urea, which is nontoxic, water-soluble, and readily excreted in the urine.

- Perform a Medline Internet search on “kidney, high-protein diet,” and you will find article-after-article attesting to the scientific FACT there is **no problem**. An example is “The concomitant increase of renal net acid excretion and maximum renal acid excretion capacity in periods of high protein intake appears to be a highly effective response of the kidney to a specific food intake leaving a large renal surplus capacity for an additional renal acid load.” Translation: The body’s natural life-systems perform perfectly as Nature intended and has **no issue with huge amounts of protein because WE NEED IT!**

In contrast to protein and fat being a non-issue, a medical journal published in 2001 regarding carbohydrates (sugar) as a **CAUSE of DIABETES and Heart Disease**:

**Glucose (sugar from carbohydrates) causes diabetes!** (*Diabetes* 2001; 50:1683-1690)

- “Our results underscore the importance of tight glucose (sugar) control in limiting beta-cell destruction...”

This statement is **amazing**. The authors are stating that **carbohydrates are a cause of killing the beta cells in your pancreas**. This was in 2001 and the deception that carbohydrates are “good” is still in full force.

A 60% carbohydrate/25% fat diet VS 40% carbohydrate/40% fat diet. Stanford University School of Medicine: *American Journal of Cardiology* 2000 85:45-48 (Dr. Raven) reported the following results:

- Elevated triglyceride levels **persisted through high carbohydrate diet**.

- High carbohydrate diet associated with **increases in both fasting (when not eating) and postprandial (after eating) triglyceride concentrations**.

- Substituting carbohydrates for saturated fat leads to **higher cholesterol in the blood**.

- It is appropriate to **question wisdom of replacing dietary fat with carbohydrates** - carbohydrates **raise the risk of heart disease**.

The last 2 statements from Dr. Raven tell it all. Carbohydrates cause a **MUCH WORSE blood chemistry** than a saturated fat.

We need plenty of protein because most of it is “burned up” in its own digestion as the medical textbook states, if anyone would care to look it up.

“Following the ingestion of a high protein meal, the gut and liver utilize most of the absorbed amino acids... The liver takes up **60-70%** of the amino acids in the portal vein. These amino acids, for the most part, are converted to glucose but **doesn’t enter the main bloodstream and raise insulin levels**.” Protein’s own digestion is self-generated. This is why **we require lots of dietary protein!** (*Basic Medical Biochemistry--A Clinical Approach*, page 660)

The American Dietetic Association states: the Atkins diet is a “nightmare.”

The TRUTH: The “nightmare” is the fact that opinion - **not medical science** is used exclusively today. People recommending a high carbohydrate diet have **caused an epidemic of obesity, exhaustion, and diabetes** (among other serious disease problems). Why haven’t they seen Dr. Raven’s carbohydrate experiment that **had to be stopped after a few days because the blood chemistry was so horrific?**

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### **The Professor’s NEWSFLASH!**

“Ketosis” is almost impossible in a normal person! Don’t waste your money on the highly promoted “ketosis strips.” Adapting to a higher fat, higher protein diet will almost never produce ketosis.

We learn the truth from *The Textbook of Medical Physiology*, page 869: “On changing SLOWLY from a carbohydrate diet to an almost [even] COMPLETELY FAT diet, a person’s body adapts to the use of far more acetoacetic acid than usual, and in this instance, ketosis normally does not occur. For instance, the Eskimos, who sometimes live almost entirely on a fat diet, do not develop ketosis.”

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Undoubtedly, several factors enhance the rate of acetoacetic acid metabolism by the cells. Even the brain cells, which normally derive almost all of their energy from glucose, after a few weeks **can derive 50 to 75 percent of their energy from fats.”**

Regarding salt and stabilized blood pH:

Sufficient salt is **required for the circulatory buffer system to work properly.** Was this person with ketoacidosis avoiding salt, leading to decreased sodium bicarbonate -- the Na in NaHCO<sub>3</sub> production? Could an obsession with reducing dietary salt along with dietary carbohydrates be the **real reason** this critical life-system was compromised and unable to do its job? **Salt is critical to proper functioning.**

Also, **salt doesn’t raise blood pressure** as we have been led to believe. Medical researchers should know about Cornell Medical School’s Hypertensive Institute and the famous “Intersalt Study” with **over 10,000 participants** from around the world and the conclusion about the importance of including salt in a healthy diet.

In fairness: Dr. Paul Clayton, president of the forum on food and nutrition at the Royal Society of Medicine in London, stated, “I think this is an isolated case...” It’s nice to see a physician, on occasion, thinking “scientifically” and not “politically.”

(emphasis added)

If you have any questions or comments about this month’s newsletter please e-mail the professor at: [prof-nutrition@sbcglobal.net](mailto:prof-nutrition@sbcglobal.net)

## **This Month's Low-Carb Recipe: Delicious Low-Carb Fried Chicken**

### **Ingredients**

4 chicken breast halves or 8 thighs  
1 tbsp paprika  
salt and pepper to taste  
peanut or coconut oil for frying (about 1 quart)  
3 large eggs - (just the whites, save the yolks for another meal)  
1/3 cup heavy whipping cream  
1 tsp hot sauce (tabasco or other)  
2 cups plain pork rinds (ground)

### **Preparation**

- 1) Pat chicken pieces dry with paper towels. Rub the chicken pieces with paprika and sprinkle with salt and pepper to taste. Cover and refrigerate for 2 hours.
- 2) In a large heavy-bottomed pot or Dutch oven, heat the oil to 375 degrees.
- 3) Whisk the egg whites and heavy cream in a bowl.
- 4) Grind pork rinds in a food processor until relatively fine. Then place them in a shallow dish, such as a pie plate.
- 5) Once oil is hot enough, cover chicken pieces in egg white mixture and let the excess run off. Then dredge in the rinds, making sure all surfaces are coated.
- 6) Carefully place the coated chicken in the oil and fry for about 8 minutes on each side.
- 7) Remove to paper towels to drain and serve immediately.

Makes 4 servings.

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