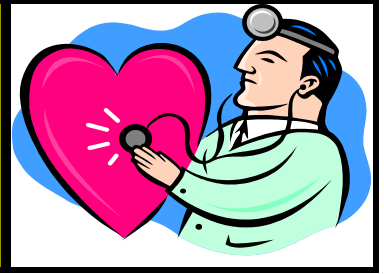


The High Protein/Low Carbohydrate Diet: Another Approach



By Jack Medina, M.A.

A variant on the high protein/low carbohydrate diet is the "Protein Sparing Modified Fast" during which a person eats only protein. Sound familiar? This regimen is based upon the assumption that protein foods eaten will spare the loss of lean body tissue, and the body will brake down its own fat at a maximum rate to meet energy needs. Neither of these assumptions is correct or accurate. The body's top priority is to meet energy or caloric needs. The normal way to do this is by periodic refueling – EATING! The protein sparing modified fast provides 450-500 calories in the nine ounces or so of protein recommended. The body requires more than double this amount of calories. Thus, all the protein eaten has to be converted to glucose (a carbohydrate) for the body to meet its energy requirements. The protein eaten is not used to replenish body protein. If this is true, how does the body meet the caloric deficit remaining after it converts protein foods to glucose?

When food is restricted to less than minimum caloric needs, the body must find other sources of fuel within its own tissue. After glucose is spent, the body mobilizes stored carbohydrates from the liver and muscles in the form of glycogen. This source however, is exhausted in a matter of hours. At this point most of the body cells are depending on fatty acids (from stored body fat) to continue providing their fuel. However, the brain cells cannot use fatty acids; they need glucose. Normally the



brain consumes up to two thirds of the total glucose used by the body each day. The only other source of glucose left is the body's protein tissue such as muscle, and other parts of the body comprised of protein, which is expendable.

Every cell in your body is composed of some form of protein, which means your body begins eating itself inside out. In the first few days on a protein sparing modified fast (high protein diet), the body protein provides approximately 90% of the needed glucose.

As this regimen continues, the liver is unable to oxidize fat completely. This leads to an accumulation of ketone bodies in the blood and urine. Normally produced and used only in small quantities, ketones can enter some brain cells and serve as their fuel. But ketone production continues to rise, until at the end of several weeks, it is meeting about half or more of the brain's energy needs. Still, about 20% of the brain absolutely refuses to use anything except glucose, and the body protein continues to be sacrificed in order to produce it.

Ketone bodies are acidic and interfere with normal metabolic processes. The risk factors associated with increased ketone bodies, as well as the side effects of this kind of high protein/low carbohydrate diet are:

- *Calcium depletion
- *Dehydration
- *Nausea
- *Kidney failure and stones
- *Weakness
- *Atherosclerosis
- *Gout Arthritis
- *Possible heart problems

Some other possible effects of this kind of diet include:

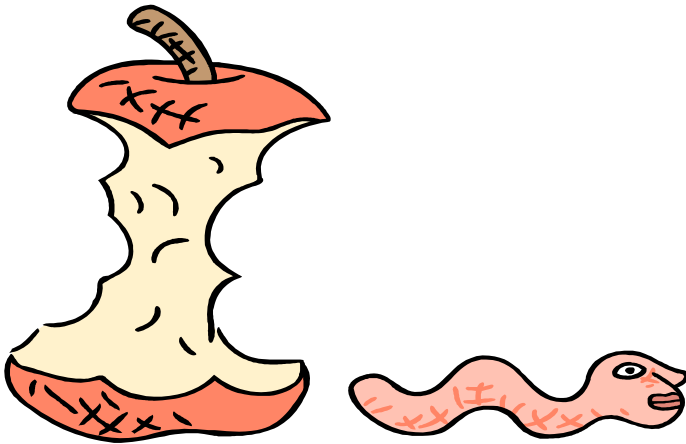
** Rapid weight loss within the first 1 – 2 weeks.* This weight loss is due to losses in glycogen, body protein, water and sodium. For each gram of glycogen lost, three grams of water are also lost. As the body adapts in two to three weeks, water can

be retained even to the point of causing weight gain. Weight lost as water is regained once normal eating is resumed.

* *Contrary to claims being made, this kind of diet does not decrease appetite unless it is secondary to other side effects (dehydration, nausea, etc.).*

* *The safety of this kind of diet has also been questioned. A number of individuals have died of ventricular arrhythmia. The cause of death could not be attributed to the lack of potassium, absence of medical attention, or the protein product being used.*

The person who wishes to lose body fat will



select a balanced diet in the form of complex carbohydrates (fruits, vegetables, grains and legumes: 5-9 servings are recommended daily), protein and fat. At this level, body protein levels will be spared, ketosis need not occur, vital lean tissue will not starve and , body fat will be lost. In combination with an exercise program you will have all the tools to lose fat and maintain this loss permanently.

I suggest you check out the Nutripoints program and the Isorobic exercise concept in the Fitness Tools section of www.FitnessIsForever.com.

What should I ask before starting this kind of high protein/low carbohydrate diet?

* *Ask about the term often used "while under medical supervision" – who is supervising? This diet takes a specialist in this area and eliminates all General Practitioners? Ask his or her qualifica-*

tions to help you control this program and how often your blood will be analyzed.

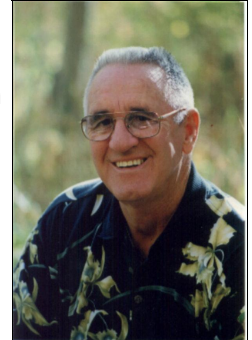
* *Ask the "Nutritionist" that will be working with you, if any, are you a professional nutritionist or dietician? What qualifies you to advise me on this program?*

* *If they are recommending a vitamin/mineral supplement ask them why? Is it because this type of diet is deficient in many of the necessary nutrients and phytonutrients normally found in good food? Vitamin/mineral supplements are fragmented and scientific research suggests they rarely, if ever, get into your system.*

* *Ask, "Can I return to a normal "American" diet in the future without regaining lost weight? If the answer is "yes", how can such a blanket claim be made? Where is good scientific research to substantiate this?*

About Jack:

Author/speaker and an expert in Sports Performance Enhancement". Jack Medina is available for speaking engagements, consultation and personal training of athletes in various sports, professional and amateur. Jack has written a new book, *The Winning Edge: Fueling & Training The Body For Peak Performance* with Dr. Roy Vartabedian, an internationally known New York Times best-selling author of the "Nutripoints" program for optimal nutrition. Both books are available online at www.JackMedina.com and www.FitnessIsForever.com. Jack also has a monthly ezine (newsletter) available free which can be subscribed to on his website. All subscriber's addresses will be confidential and not sold or given to any other organization or group.



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