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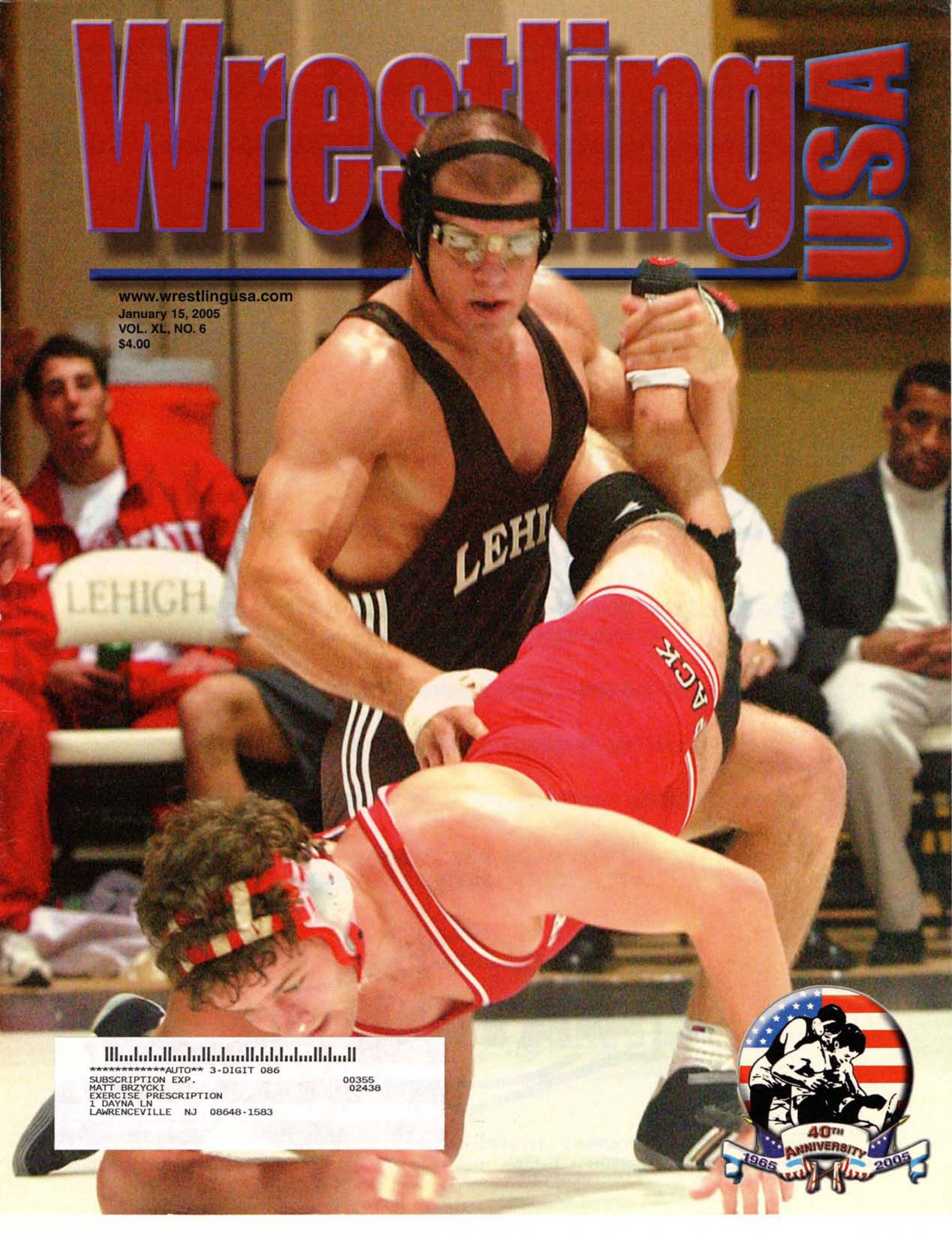

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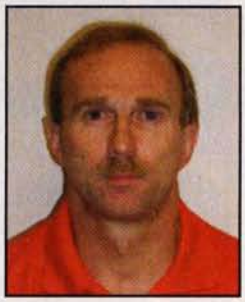
Low - Carb Options to Lose Weight



By Matt Brzycki

The latest craze over low-carbohydrate diets is so prevalent that even someone stranded on uncharted island in the middle of nowhere might have heard of it. Naturally, the widespread panic over carbohydrates has spawned numerous misconceptions. In order to set the record straight, here is a look at some of the most common questions that are asked about carbohydrates.

Q: What are carbohydrates?

A: Carbohydrates - or "carbs" - are a macronutrient, meaning that they are needed in relatively large quantities. In brief, carbohydrates can be classified as either "simple" (which are sugars such as table sugar and honey) or "complex" (which are starches such as bread).

Q: Are some carbohydrates better than others?

A: Absolutely. The fact is that all carbohydrates are not created equal. A source of high carbohydrates is a banana . . . but so is a soda. Carbohydrates that are more nutritious include fruits, vegetables and whole grains; they are full of vitamins and fiber. Carbohydrates that are less nutritious include processed foods such as cakes, cookies and muffins along with soft drinks and candy; they are full of "empty" calories.

Q: How many calories do carbohydrates provide?

A: Three nutrients provide you with calories: carbohydrates, protein and fat. Carbohydrates have four calories per gram. (Protein also has four calories per gram while fat is the most concentrated form of energy with nine calories per gram.)

Q: What are "net carbs"?

A: In response to the current carbohydrate paranoia, many manufacturers have been using the term "net carbs" (as well as "effective carbs" or "impact carbs") on the packaging of their food products (though not on the nutrition labels). The food industry calculates net carbs by taking the total grams of carbohydrates per serving and then subtracting the grams of fiber and sugar alcohols (which are neither sugar nor alcohol; rather, they are sweeteners).

Food manufacturers claim that because fiber is not digested and sugar alcohols have a negligible effect on blood glucose, they "do not count." It is true that fiber passes through the digestive system largely intact and the impact of sugar alcohols (such as sorbitol and maltitol) on blood glucose is minimal. But here is where the math gets fuzzy: Sugar alcohols have calories and, thus, "do count."

Understand that "net carbs" is an unscientific term that is calculated in a subjective way. Clearly, it was invented and implemented by the food industry to capitalize on the current low-carbohydrate frenzy. At the present time, net carbs - and other popular terms that are used on product packaging such as "low-carb" - have not been defined or even recognized by the Food and Drug Administration (which, by the way, is why they do not appear on the nutrition label).

Q: What are good sources of carbohydrates?

A: Foods that are high in carbohydrates include potatoes, cereals, pancakes, waffles, breads, bagels, spaghetti, macaroni, rice, grains, fruits and vegetables.

Q: What is the importance of carbohydrates?

A: The primary function of carbohydrates is to furnish you with energy, especially during intense activity whether it is wrestling, conditioning or strength training. Your body breaks down carbohydrates into glucose (or "blood sugar"). Glucose can be used as an immediate form of energy during a physical activity or stored as glycogen in your liver and muscles for future use. Highly conditioned muscles can stockpile more glycogen than poorly conditioned muscles. If your glycogen stores are depleted, you will feel overwhelmingly exhausted. For this reason, having greater glycogen stores can give you a significant physiological advantage as a wrestler.

Q: Will carbohydrates make me fat?

A: *No, eating too much and exercising too little will make you fat. If anything, it is important for wrestlers to consume carbohydrates to fuel their active lifestyles. Remember, the main function of carbohydrates is to supply you with energy, especially during intense activity. The other two macronutrients - fat and protein - have major limitations as an energy source. Fat is an inefficient source of energy so it is preferred during low-intensity efforts when there is no need to be efficient; protein is actually a last resort since it is located in the muscles and if you are in a situation where you must rely on it as an energy source, then you are literally cannibalizing yourself.*

Q: But do unused carbohydrates get stored as fat?

A: *Yes. Any carbohydrates that are in excess of your daily needs will be stored in your body as fat. But any protein that is in excess of your needs also will be stored as fat (or excreted). And, of course, any fat that is in excess of your needs will be stored as fat.*

Q: What is the Glycemic Index?

A: *At one time, it was thought that simple carbohydrates (sugars) increase blood glucose more rapidly than complex carbohydrates (starches). A more recent trend of thought has been to consider the Glycemic Index (GI) of a food. The GI dates back to 1981 when it was conceptualized by a group of scientists as a way to help determine which foods were best for people with diabetes. The GI is a system of quantifying the carbohydrates in foods based upon how they affect blood glucose. A value is assigned to a food that correlates to the magnitude of the increase in blood glucose. For instance, a food with a GI of 25 means that it elevates blood glucose to a level that is 25% as great as consuming the same amount of pure glucose (which has a GI of 100). Incidentally, the GI is not related to portion size. So, the GI is the same whether you consume 10 grams of a particular food or 110 grams. The number of calories, of course, would differ according to the size of the portion.*

Q: Why is it important to consume carbohydrates prior to an activity?

A: *Before an activity, any foods that you consume should satisfy your hunger and ready your body with fuel for your upcoming efforts. Because your body prefers to use carbohydrates for energy during intense activity, it makes sense that any foods consumed prior to an activity should be high in that macronutrient.*

That being said, you should avoid eating carbohydrates that cause a sharp increase in your level of blood glucose. Here is why: In response to a high level of blood glucose, your body increases its level of blood insulin to maintain a stable internal environment (known as "homeostasis"). As a result of this hormonal balancing, your blood glucose is sharply reduced. This leads to hypoglycemia (or "low blood sugar") which decreases the availability of blood glucose as a fuel and causes you to feel severely fatigued. Although this condition is usually temporary, it remains an important consideration. The idea, then, is to consume foods that elevate or maintain your blood glucose without triggering a dramatic response by blood insulin.

Preceding an activity, it is best to consume foods that are high in carbohydrates with a low GI. These foods help to keep your levels of blood glucose within a desirable range. Do not simply assume that a sugary food raises blood glucose more than a starchy food. Indeed, honey has a lower GI than a bagel and, given these two options, would be a better choice prior to an activity. Foods with a relatively low GI include milk, apple juice, orange juice, tomato juice, apples, cherries, grapefruit, grapes, oranges, pears, plums, yogurt, macaroni, plain pizza, spaghetti, beans, nuts and oatmeal. (It is well beyond the scope of this article to provide you with an extensive overview of foods and their GIs. For more detailed information, you are encouraged to pursue other sources.)

Q: Why is it important to consume carbohydrates after an activity?

A: *After an activity - especially one that was intense - proper nutrition accelerates your recovery and better prepares you for your next physical challenge. The idea is to replenish your depleted glycogen stores and to expedite the recovery process as soon as possible after you train or compete.*

Following an activity, it is best to consume foods that are high in carbohydrates with a high GI. These foods will help to restore your muscle glycogen in the quickest fashion. Foods with a relatively high GI include sports drinks, bananas, watermelons, raisins, rice cakes, cereals, pretzels, table sugar, white rice, baked potatoes, white bread, rye bread, bagels, pancakes and waffles.

According to Nancy Clark, M. S., R. D. - an internationally known sports nutritionist and author - you should consume 0.5 grams of carbohydrates per pound of your bodyweight (g/lb) within two hours of completing an intense activity. This should be repeated again within the next two hours. For instance, a 150-pound wrestler needs to consume about 75 grams of carbohydrates - or 300 calories of carbohydrates - within two hours after an intense activity and another 75 grams of carbohydrates during the next two hours [0.5 g/lb x 150 lb = 75g].

Q: But will high-glycemic foods cause me to gain weight?

A: *Not necessarily. A high-glycemic food increases blood glucose which triggers the release of insulin. This, in turn, decreases blood glucose. While this is true, there is no evidence whatsoever that this hormonal reaction causes an individual to gain weight.*

Q: Okay, but will eating a food with a high-glycemic index - such as a baked potato - increase my appetite and make me hungrier?

A: *Possibly. But when was the last time that you sat down at the table and ate a plateful of baked potatoes? In other words, you had nothing but baked potatoes. Probably never, right? The fact of the matter is that when you sit down for dinner, for example, you have a variety of foods on your plate. Besides a baked potato, you most likely have other vegetables accompanied by some form of dead animal. In addition, you might have a salad and something to drink such as a glass of milk. These foods would balance out - or dilute - any glycemic effect that might result from the baked potato. So even if high-glycemic foods make you hungrier, most meals contain a variety of foods that would soften the effect. Also keep in mind that the GI is unrelated to portion size. So, eating a small amount of a particular food that has a high GI actually has a less significant impact upon your blood glucose than eating a large amount of it.*

Besides baked potatoes, many low-carbohydrate advocates have condemned several other foods - including white rice and white bread - suggesting that they, too, will make you gain weight. Although the criticism of these foods is unjustified, it has caused people to avoid them like the proverbial plague. A number of restaurants - particularly those that sell "fast food" - have devised a simple and, frankly, ridiculous way to capitalize on a consumer's fear: They have eliminated the bread or bun of a sandwich and offer this a "low-carb option" or "low-carb alternative."

Q: But will eating low-carb options help me to lose weight?

A: *Sure, low-carb options can help with weight loss. However, it is important to understand why. Consider a "fast food" from Burger King(r). According to the company's website, an Original Whopper(r) with cheese has 793 calories of which 441 (55.6%) are from fat, 212 (26.7%) from carbohydrates and 140 (17.7%) from protein. The low-carb version - the same thing without the sesame seed bun - has 545 calories of which 405 (74.3%) are from fat, 32 (5.9%) from carbohydrates and 108 (19.8%) from protein. So, the low-carb alternative has 248 less calories - an important consideration for those who are trying to lose weight. But look what happens to the percentage of calories from fat - it skyrockets from 55.6% to 74.3%. A better choice would be to keep the bun, hold the mayo and - pardon the pun - cut the cheese. This version gives you 544 calories of which 216 (39.7%) are from fat, 208 (38.2%) from carbohydrates and 120 (22.1%) from protein. Choosing to get the burger this way gives you virtually the identical number of calories but roughly half the fat - which is a healthier option.*

Q: Are you saying that calories are the real key to losing weight?

A: *You got it. Any weight loss that is produced by low-carbohydrate diets is due to a reduction in the amount of calories, not a reduction in the amount of carbohydrates. You can lose weight with any diet as long as the calories that you consume are less than the calories that you need. You could lose weight by only eating potato chips provided that the number of calories from the potato chips is less than your caloric needs. Obviously, this is not the healthiest thing to do but the reality is that you could lose weight this way.*

Q: Is there anything wrong with low-carbohydrate diets?

A: *Yes, plenty. If you decrease the amount of carbohydrates that you consume then, by default, you must increase the amount of protein and fat that you consume. Doing so restricts the intake of foods that contain highly valuable nutrients - such as fruits, vegetables and whole-grain products - which may lead to vitamin and mineral deficiencies. Since fewer carbohydrates are available as a source of energy, you will also fatigue more quickly during physical activities. There is no doubt that eliminating carbohydrates from your diet will inhibit your stamina and endurance when training and competing.*

But most importantly, the long-term safety and effectiveness of low-carbohydrate diets are unknown. One thing is certain, though: Diets that are low in carbohydrates and high in protein and fat pose significant health risks. It is important to note that consuming too much protein and fat is associated with a greater risk of heart disease. In addition, excreting an excessive amount of protein stresses the liver and kidneys. There are additional concerns as well. And does it really make sense that in order to lose fat you should eat more of it? Clearly, carbohydrates are not the bad guys.

Q: So, how many of my calories should be carbohydrates?

A: *As a wrestler, your intake of food should emphasize carbohydrates. Specifically, carbohydrates should be at least 65% of your daily calories.*

Q: Hey, how can I get off this uncharted island in the middle of nowhere?

A: *How about rowing back to your cruise ship? Just make sure that before leaving you get plenty of carbohydrates!*

Matt Brzycki has authored, co-authored or edited 11 books on strength and fitness including Wrestling Strength: The Competitive Edge, Wrestling Strength: Prepare to Win and Wrestling Strength: Dare to Excel. The three wrestling books are available at all major bookstores or through Cardinal Publishers Group (800-296-0481).