

ELEMENT FITNESS

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Issue 5

In This Issue

*Are You Robbing Your Own Body?

Hello Everyone!

We hope you are all having a wonderful Memorial Day Weekend and are enjoying today off. In the last issue we discussed the importance of proper nutrition and the 90/10 principle. In this issue we will address the most important meal on workout days and the consequences of not capitalizing on this meal.

Are You Robbing Your Own Body?

How would you like to allow your body to burn more fat and improve muscle tone? What would you do if you understood how you were making a huge nutritional mistake right after your workouts? Read on to understand the importance of proper post-workout nutrition.

Proper post-workout nutrition is one of the most overlooked aspects in most individuals' overall nutrition program. When utilized correctly it will dramatically decrease recovery time by replenishing glycogen stores, and rebuilding muscle tissue (this affects your metabolism) so that you can return to your next workout as fresh as possible. Various research has shown that three post-exercise physiological events occur:

1. Glycogen Stores are low
2. Protein Breakdown is increased
3. Muscle Protein Balance is negative

Here's a basic explanation of each:

- Glycogen is your muscles' energy. Having low glycogen stores means that there is less cellular energy for daily life which can lead to less energy for your next workouts. Simply stated, your performance will suffer in your next workout if your glycogen stores are low.
- Protein Breakdown indicates that muscle tissues, which are made of protein, are broken down during exercise. Prolonged increases in protein breakdown can lead to muscle loss.

- Muscle Protein Balance is regulated by the balance between Protein Synthesis and Protein Breakdown and is represented as "Muscle Protein Balance = Protein Synthesis - Protein Breakdown"

When your Muscle Protein Balance is negative, this means you are breaking down more protein than you are creating, again leading to muscle loss.

A failure to address these three post workout events by not rapidly bringing the body back into recovery mode can result in the following consequences:

1. Prolonged muscle soreness and fatigue.
2. Poor subsequent workout performances.
3. Overtraining symptoms and/or lack of workout drive/focus.
4. Minimal gains in improving muscle tone even if you have a well-designed training program.
5. Decrease in muscle tissue which can decrease your metabolism by 5-15 calories (may not seem like much, but it's huge deal).

So you've completed your workout and it's time to consume a post workout meal. What do you eat? Here are a few examples of good post-workout choices in order of effectiveness.

1. A specifically formulated recovery drink/liquid meal
 - 1 serving of Prograde Nutrition Varsity
 - 200 calories - 14g Protein, 31g Carbohydrate, 4g Fat
2. A homemade recovery drink
 - Males: 1 serving whey protein + 2 servings Gatorade: 369 calories - 20g protein, 66g Carbohydrate, 0.5g Fat
 - Females: 1/2 serving of above
3. A whole food recovery meal
 - 12 oz of skim milk + 1 serving Kashi GoCrunch cereal: 325 calories - 22g protein, 54g Carbohydrate, 3g Fat

To summarize, your body NEEDS the necessary raw materials to "remodel" muscle tissue after exercise-induced stress. However, the type of meal makes a significant difference. As you can see from the examples above, that there is a specific ratio of carbs to protein and minimal to no fat. Going into the details of these ratios is another article, but just understand that no more than 4 grams of fat is acceptable because it can slow down digestion rates. The faster your body can assimilate food post-workout, the greater its ability to remodel. To illustrate why option 1 is superior to options 2 and 3, consider this simple analogy.

Option 1 is like having six construction workers rebuilding your home with only the best materials money can buy, option 2 is like having six construction workers rebuilding your home with budget materials, and option 3 is like having only four

construction workers rebuilding your home with budget materials. Not maximizing this important aspect of exercise nutrition is similar to owning a Ferrari and filling up the tank with regular unleaded gas instead of premium gas. You would never do that if you owned a Ferrari, so why would you neglect your own body in the same way?

Follow these simple guidelines and you'll be well on your way to faster recovery. Coupled with proper overall nutrition, you'll be able to increase metabolism (which also increases energy), burn more fat throughout the day, and change your body composition.

Research References:

1. Van Loon et al. (2000a). Maximizing postexercise muscle glycogen synthesis: carbohydrate supplementation and the application of amino acid or protein hydrolysate mixtures. *Am J Clin Nutrition*. 72(1): 106-111.
2. Van Loon et al. (2000b). Ingestion of protein hydrolysate and amino acid-carbohydrate mixtures increases postexercise plasma insulin responses in men. *J Nutr*. 130(10): 2508-2513.

Whether you think you can or can't, you're absolutely right. When will NOW be the right time to commit to a healthier lifestyle?

Dedicated to your success,

Your Element 5 Fitness Coaches
Rommel and Belton