## Expense & Lack of Evidence Regarding Pre-Workout Supplements

by Brian LeMay

Part 1 of 3 – Pre-workout nutrition

Pre-workout supplements are popular and widely used amongst gym-goers, specifically those who enjoy to weight lift and resistance train. But are they worth it? Let's look at a few deciding factors that you should keep in mind...



• Commercially available pre-workout supplements are *expensive*. The cost per serving may not seem like much at first glance – however it can add up very quickly over time!



### Lack of Evidence

- Many available pre-workout supplements are not third party tested meaning it is hard to know *exactly* what these products contain. This can be dangerous as you will not know which substances you are putting into your body.
- Even if the supplement is tested by a third-party, many of the ingredients that these products contain *may not be effective*. Numerous ingredients in pre-workout either have not been researched extensively or the research conducted has been *weak* or *inconclusive*.



# **Effective Pre-Workout Nutrients**

by Brian LeMay

Part 2 of 3 – Pre-workout nutrition

In order to maximize the results of your workout, it is important to receive the proper pre-workout nutrients beforehand! Let's look at some key macronutrients that you should focus on consuming and some macronutrients that you should limit consumption of preworkout...

### Focus on:

#### **Carbohydrates**

- Can increase both endurance and high-intensity performance due to the storage of carbohydrates in both muscles and liver called *glycogen*.
- Carbohydrates are the most efficiently metabolized or broken down macronutrient, making it very important for your workout!
- Carbohydrates should be your *main focus* pre-workout.

### <u>Protein</u>

- Can increase muscle protein synthesis rates the process in which protein is produced to repair muscle damage caused by exercise.
- Protein should be your *secondary focus* pre-workout.

### Limit:

### <u>Fat</u>

- *Small* amounts of fat can be tolerated pre-workout.
- However, large amounts of fat may cause discomfort and feelings of sluggishness this is because fat does not digest as quickly as other macronutrients.

#### <u>Fiber</u>

- Fiber is a type of carbohydrate that the body can *not* digest.
- Fiber also helps to slow the digestion of carbohydrate.
- Due to these two factors fiber consumption prior to a workout can cause discomfort and bloating.

## **Alternative & Convenient Pre-Workout Options**

by Brian LeMay

Part 3 of 3 – Pre-workout nutrition

To maximize the results of your workout, you learned that carbohydrates and protein should be the focus of your pre-workout nutrition. What does that look like? Let's take a look at some simple, yet effective options...

- It is important to consider that each individual is *different* and our bodies may respond *differently*
- These are general recommendations do what *works* and *feels* best for you!
- These pre-workout snack suggestions can be utilized anywhere from 2-hours to 30-minutes prior to your workout – whatever is most tolerable for <u>you</u>!
  - As mentioned previously, these snack ideas focus on carbohydrates and protein!
  - They are meant to be both *convenient* and *easy* to prepare and transport.

#### Low-Fat Greek Yogurt & Fruit

- Low-fat (or non-fat) Greek yogurt
- Plain or Vanilla
- Fruit of choice
- Honey (optional)

#### Fruit Smoothie

- Milk of choice
  - 1% cow's milk or soy milk
- Fruit(s) of choice
- Old-fashioned oats
- Honey





#### Peanut Butter Banana Toast

- Bread of choice
- 1 banana
- Peanut butter
- Honey (optional)
- Cinnamon (optional)

