

## **Workout Drink/ Recovery**

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### **Pre-Post workout drink-** (drink ½ hour pre and post w/ 30-45 minutes)

- 2 scoops of whey protein
  - 2 tsp honey
  - 12 oz OJ
  - 8oz H2O
  - Glutamine- 10 gm
  - Arginine- 200 mg
  - Creatine 5 mg.
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- Drink containing protein are 15% more effective in rehydration, and 40% more effective than H2O. Protein is for muscle and hormone growth and carbohydrates are to place glycogen back into the muscle essential for proper metabolism.
  - \*\*\* Weight training 1st Cardio 2<sup>nd</sup> 30 minutes each recommended. GH (growth hormone) levels remain 3x higher when you weight train first.
  - Train to failure only on the last set of an exercise.
  - \*\*\* Drink, eat protein drink and carbohydrates within 35-40 after workout it is the only time the carbohydrates will infuse directly into the muscle

### **Vitamins to enhance the body's mechanisms**

- Green tea- antioxidant and Thermogenic to burn fat.
- Linoleic acid – burns fat around abdomen and legs. Linoleic acid or ALA comes when Flax seed is broken down into omega 3. So if you are already taking Omega 3 EPA/DHA you are getting the effects of linoleic acid.
- Arginine- increases GH output, which burns fat and has a Nitrous Oxide (NO) effect which helps eliminate plaque from blood vessel walls according to new research.
- Ornithine- has a NO effect.

### **Vitamins to aid Insulin to regulate blood sugar and fat production**

- Alpha-lipoic acid- stimulates glucose transport
- Vitamin D
- Magnesium- helps bind insulin to the sugar (carb) placing it in the cell for energy.
- If the sugar is not able to enter the cell more insulin is released from the pancreas and this is how diabetes starts. Insulin converts HDL (good cholesterol) into VLDL which is poor cholesterol of fat, so by maintaining a balanced blood sugar you have less chance for fat production.

### **Protein**

- Branched Chain Amino Acids (BCAA) enhance energy, reduce muscle breakdown, increase brain fxn, reduce body fat, builds up immune response, reduces muscle soreness and aid in recovery.
- BCAA- Leucine, Isoleucine and Valine
- Taking BCAAs about 30 mins. Before and after workouts inhibit cortisol and catabolic effects (muscle breakdown) and boost testosterone.

## **Creatine**

- Is an amino based compound which helps to regenerate ATP for quick bursts of energy. The more creatine available the faster the body can regenerate ATP and provide energy (5 grams per day). The idea is to saturate creatine storage so it is always available.
- Creatine supplementation increases muscle mass and strength. It enhances glycogen synthesis, work capacity, and recovery.
- Creatine is better for anaerobic exercises like weight lifting.
- Best source is creatine monohydrate and also the cheapest.