

# ADVANCED CREATINE and GLYCOGEN LOADING FORMULA for the SERIOUS ATHLETE

## VOLU-GRO VOLU-GRO VOLU-GRO VOLU-GRO VOLU-GRO VOLU-GRO VOLU-GRO

Supplement Facts		
Serving Size: 2 level scoops (76.5g)		
Servings Per Container: 20		
Amount Per Serving		%DV
Calories	246	0%
Total Fat	0g	0%
Saturated Fat	0g	0%
Cholesterol	0mg	0%
Sodium	100mg	5%
Total Carbohydrate	60g	21%
Sugars	0g	†
Protein	0g	0%
Magnesium	50mg	42%
Phosphorus	200mg	40%
Potassium	150mg	4%
Creatine Monohydrate	10g	†
Waxy Maize Starch	60g	†

\*Percent Daily Values (% DV) are based on a 2,000 calorie diet. † Daily Value not established.

**INGREDIENTS:** Ultra High-Molecular Weight Long Chain Waxy Maize Starch, pure pharmaceutical-grade creatine monohydrate, natural and artificial flavors, citric acid, Osmosis Balancing Electrolytes™ (dipotassium phosphate, disodium phosphate, dimagnesium phosphate), silicon dioxide, sucralose, FD&C red 40.

**RECOMMENDED USE:** Days 1-5: During this five day loading phase take two servings daily. Consume one serving in the morning immediately upon waking and one serving immediately after your workout. On non-training days take your second serving in the afternoon between meals.

Day 6 on: Only one serving per day is needed. On training days consume Volu-Gro immediately after your workout. On non-training days take Volu-Gro immediately upon waking or in the afternoon between meals.

**Important: For best results follow these steps:**

- 1.) Mix Volu-Gro (two level scoops) with 20 oz. of water. 2.) Shake vigorously for 30 seconds. 3.) Drink slowly and stir or shake occasionally to prevent residue build up.

Following these steps will allow Volu-Gro to achieve the optimum low osmolality rate (osmolality defines how fast a solution passes through the stomach; the lower the osmolality rate of a solution the quicker it passes through the stomach), and to further accelerate the crucial transport of creatine, water and Waxy Maize Starch from the stomach to the small intestine and subsequently into the bloodstream. This creates an extremely hypotonic solution with a much lower osmolality rate than any creatine/dextrose mixture, which ensures Volu-Gro's ultra fast passage through the stomach. Since Volu-Gro passes through the stomach so quickly and is sugar free you will not experience the stomach discomfort which is often associated with creatine and high glycemic sugars (dextrose, maltodextrin).

On training days always consume Volu-Gro immediately after your workout. Volu-Gro is a vastly superior post workout creatine drink because it replenishes muscle glycogen 70% faster than creatine plus dextrose or any other creatine/carbohydrate mixture for that matter. This leads to accelerated muscle recovery, greater cell volumization and better muscle gains. In order to support muscle growth and recovery over the long-term we suggest that you take Volu-Gro for at least 8 weeks. Since Volu-Gro is such a superior post workout

creatine drink, it can be consumed year round to aid in muscle recovery.

Store this container tightly closed in a cool dry place. Shake container before use.

Warning: If you are a diabetic, consult your physician before using Volu-Gro. Stay well hydrated throughout the day.

Volu-Gro is developed by and exclusively manufactured for:

**Nutrex Research, Inc.**

Oviedo, FL 32765

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**Super-Hydrates Muscles For INSTANT GAINS In Solid Mass**

**Extreme Post-Workout FULL-BODY RECOVERY Formula**

**Ultra-High Molecular Weight Waxy Maize Starch for LIGHTNING-FAST ABSORPTION**

**Fruit Punch**

Dietary Supplement – Net Wt 3.38 lbs (1531g)

### Superior Creatine And Glycogen Loading Results Through Long Chain Waxy Maize Starch: A Unique Sugar Free Ultra High Molecular Weight Carbohydrate

Creatine has and continues to be the most widely used supplement taken by athletes. Its ability to enhance performance, strength, mass, and recovery while doing so in a relatively short period of time allows it to stand above other supplements.<sup>1,2</sup> One of the major issues surrounding creatine has been its effective transport to the muscles. Most creatine formulas depend mainly on dextrose or maltodextrin (two very high glycemic sugars) to raise insulin: the primary element responsible for transporting creatine to the muscles.<sup>3</sup> This approach however is far from ideal since dextrose and maltodextrin have a high osmolality rate, which means they pass through the stomach very slowly and bind water, thus causing stomach discomfort. Another problem with dextrose and maltodextrin is that they don't promote the delivery of creatine into the bloodstream. Insulin blood levels subsequently peak at a time when most of the creatine is still sitting in the gut. Once creatine levels finally peak in the bloodstream insulin levels have largely returned to normal.<sup>3</sup> This leaves a substantial portion of creatine without a carrier and it goes to waste. In scientific studies, dextrose is therefore given sometime after creatine, because scientists are well aware that dextrose and creatine do not peak in the bloodstream at the same time.<sup>4</sup>

In order to solve this inequality, Nutrex Research Inc. has developed **Volu-Gro™**, which uses 60 grams of a very unique and ultra high-molecular weight carbohydrate called Long Chain Waxy Maize Starch per serving to accelerate creatine transport. Waxy Maize Starch is equally as potent in stimulating insulin as dextrose and maltodextrin, yet unlike these two sugars, **Waxy Maize Starch is completely sugar free.** Waxy Maize Starch is revolutionary since scientific studies have shown that it passes through the stomach 80% faster than dextrose or maltodextrin and therefore does not cause any discomfort. In doing so Waxy Maize Starch acts like a pump, pulling creatine and water along with it into the bloodstream. This ensures that creatine and insulin are present in the bloodstream at the same time. A much greater amount of creatine can now be transported into the muscles due to synchronized levels of creatine and insulin in the blood.<sup>4</sup> Additionally, scientific studies have demonstrated that if taken immediately after training, the Waxy Maize Starch element in **Volu-Gro restores muscular glycogen (muscle energy) 70% faster than dextrose or maltodextrin.** This makes Volu-Gro the ideal post workout creatine formula since it not only **delivers more creatine to the muscles**, but also **replenishes glycogen stores** much quicker causing the muscle cells to become super-hydrated while speeding up recovery more efficiently than any other glucose polymer or monomer (dextrose, maltodextrin, sucrose, fructose etc.). The overall result is much greater muscle cell volumization, protein synthesis, and nutrient transport; all major factors contributing to enhanced muscle growth.<sup>5</sup> The fusion of creatine with Long Chain Waxy Maize Starch as seen in Volu-Gro has set a new standard in creatine supplementation.

1. Volek, JS, Duncan, ND, et al. *Med. Sci Sports Exerc.* 312:1147-1156, 1999
2. Pearson, DR, Hamby DG, et al. *J. Strength Condit. Res.* 13:187-192, 1999
3. Steenge, GR, Greenhaff PL, et al. *Am J Physiol* 275:E974-E979, 1998
4. Greenhaff, PL, Simpson EJ, Steenge, GR, *Am J. Physiol* 89:1165-1171, 2000.
5. Persky, AM, Brezeau, GA, *Pharmacol Reviews*, 53:161-176, 2001.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.