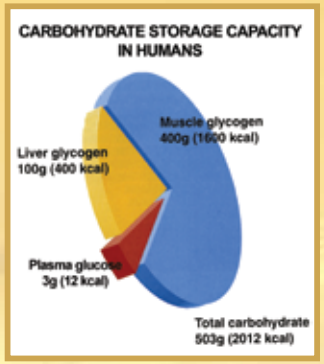
WHY IS GLYCOCHARGE CRITICAL FOR ATHLETES?

Studies show that high-intensity athletic activity drains the human body's energy stores at an amazingly fast rate (It can be more than 4g of carbs per minute!) On the other side, the body can only absorb about 1 gram of carbs per minute. Using **GlycoCharge™** is superior to eating food or consuming sugar-based drinks to replenish or load glycogen for two reasons. First, it is absorbed significantly faster (nearly as fast as water) and secondly, it does not cause stomach upset (especially in large quantities). In other words, it is critical that athletes ingest a fast absorbing, yet easily digestible carb source to prevent fatigue, maintain performance and extend endurance. **GlycoCharge™** is ideal for loading and re-charging your energy stores quickly and efficiently so you can concentrate on performing like a champion.

HUMAN CARBOHYDRATE STORAGE CAPACITY AND UTILIZATION RATE

Storage Capacity: The human body can store about 375g-500g (1500-2000 calories) of carbohydrate energy in the form of glycogen. This is enough stored energy to fuel the average person for a high-intensity 20 mile run. The body's upper limit for glycogen capacity (carb loading) is approximately 15 grams of carbs per kilogram of body mass (about 500-1000 extra calories). [7]



Utilization Rate: The human body can burn about 400-500 calories during 30 minutes of intense exercise or 3.5 grams-4.25 grams of carbohydrate per minute (14-17 calories per minute).[8]

ENERGY UTILIZATION RATES IN HUMANS

At Rest	Light Exercise	Hi-Intensity, Strength Exercise	Hi-Intensity, Endurance Exercise
Protein 2-5%	Protein 2-5%	Protein 2%	Protein 5-8%
Carbs 35%	Carbs 40%	Carbs 95%	Carbs 70%
Fats 60%	Fats 55%	Fats 3%	Fats 15%

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GlycoCharge
Rapid Glycogen Replenishment

Supplement Facts

Serving Size: 1 Scoop
Servings per container: 72

	Amount / Serving	%DV
Calories 120	Calories from fat 0	
Total Fat	0g	0%
Saturated Fat	0g	0%
Trans Fat	0g	0%
Cholesterol	0mg	0%
Sodium	0mg	0%
Total Carbohydrate	30g	10%
Dietary Fiber	0g	0%
Sugars	0g	
Protein	0g	0%

Vitamin A	0%	Vitamin C	0%
Calcium	0%	Iron	0%

* Daily Value Not Established

Ingredients: Waxy Maize Starch
Contains No milk, egg, peanut, tree nuts, fish, shellfish, soy, wheat, yeast, glutens or preservatives.

Stacking Option:
Use with **Cell Drive™** after exercise to enhance recovery.

These statements have not been evaluated by the FDA. The product is not intended to treat, cure or prevent disease.

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To learn more about nutrition, supplements and John Scott's Nitro products visit us at ***www.JSNitro.com***

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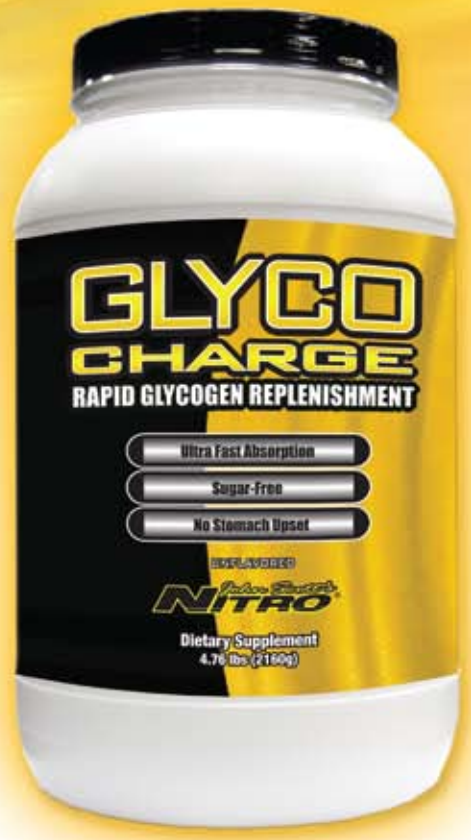
GLYCO CHARGE
RAPID GLYCOGEN REPLENISHMENT

Ultra Fast Absorption
Sugar-Free
No Stomach Upset



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by John Scott, CISSN, CNS, SPN
Developer of John Scott's Nitro

"I understand what an athlete needs because I am one."

GlycoCharge™ contains a unique, sugar-free, long chain complex carbohydrate derived from specially processed, high molecular weight, waxy maize starch. It is an ideal carbohydrate source for athletes at any level. Amylopectin, the glucose polymer in GlycoCharge is rapidly absorbed, recharging your energy immediately. Its unique, highly-branched structure allows it to pass through your stomach ultra-fast, with no bloating and charge your muscles with glycogen to power you through the most grueling training or competition.

Supplementing with GlycoCharge helps maximize glycogen energy storage, increases hydration and promotes increased muscularity. You can use it pre, during and post-training or competition to give you an edge. During intense training, the body can't replenish muscle energy as fast as you use it. Drinking GlycoCharge through your workout helps to provide immediate energy, minimize fatigue, maintains peak performance levels, acts as an anti-catabolic and keeps the muscles feeling full.

SCIENCE OF FUELING THE HIGH-PERFORMANCE HUMAN

Any athlete knows that the human body must be fueled optimally to perform at its best. It is also well-known that carbohydrates (carbs) are the body's primary energy source for high intensity exercise. Although choosing the right type of carb, in the right amount, at the right time can be tricky. Myriad scientific studies have shown that these factors have a siginificant impact on exercise performance and recovery.

Choosing The Right Type Of Carbohydrate At The Right Time:

Complex carbs are considered a good choice for glycogen "loading" (Glycogen is how carbs are stored in the body), like for pre-competition prep because they are digested slower and don't typically cause a detrimental hormone response. However, complex carbs are not considered a good post-training nutrient because they don't breakdown quick enough to quickly replenish depleted muscles. Post-training, many nutrition programs recommend using "simple" carbs (sugars) because they are digested very fast and stimulate an insulin response, which drives glucose uptake into the muscles immediately. However, ingesting large amounts of "simple" carbs such as the sugar dextrose can cause stomach upset and cause an unwanted energy "crash" within 15-30 minutes after consumption when your blood sugar level drops too low. Crashing like this leads to the onset of fatigue and a loss of endurance.

Another problem is that many popular carb products contain the sugar, fructose, which doesn't stimulate an insulin response, but does promote fat storage (lipolysis).

Nutrient type and timing have been proven to have a dramatic impact on your body. This usually means an athlete is continuously struggling with deciding what kind, how much carb and when each should be consumed. The JSNitro team has thankfully found a scientifically proven solution in a fast absorbing, yet complex (sugar-free) carbohydrate. Our **GlycoCharge™** makes carb choice easy for you, so you have one product for all your needs. It is ideal for pre, during and post exercise use or loading without any stomach upset and is assimilated very fast (80% faster than dextrose).[1]

The best way to replenish glycogen stores, sustain energy and preserve lean tissue during high intensity exercise is with GlycoCharge. The unique "super" carb source in GlycoCharge is a specially modified, waxy maize. Waxy maize is an amylose-free isomer of maize. Without the presence of amylose, amylopectin, the highly-branched glucose polymer in GlycoCharge, is rapidly absorbed, recharging the energy cycle immediately.

THE NEW "SUPER" CARBOHYDRATE

At JSNitro we strive to understand how the body is enhanced and performance is accelerated with the use of nutritional supplementation. Waxy maize is a supplement that caught our attention. The popularity of waxy maize has been growing with bodybuilders and elite endurance athletes for a few years. What they know about waxy maize is that it is a high molecular weight, rapidly absorbed carb which makes it perfect for sustained energy during an event or to saturate the muscles post exercise. However, the trainers and 'diet guru's" that promoted the use of waxy maize could not explain why and how it works.

UNCOVERING THE PERFECT HI-OCTANE CARBOHYDRATE

Waxy Maize (a mutated species of corn) was first documented by the U.S. Department of Agriculture (USDA) in 1908 and may be traced back to 16th century Burma. Waxy Maize is a staple in the food industry as a stabilizing/texturizing agent for pie fillings, canned foods and frozen foods. Waxy Maize is different from other species of maize (corn), in that it has no amylose (linear polysaccharides or starches). Waxy Maize is the amylopectin (insoluble, branched polysaccharides of high molecular weight) portion of maize. Waxy Maize has a unique osmolarity, allowing it to pass through the digestive system very quickly and shuttle other nutrients into the muscles. In spite of a moderate glycemic index rating, Waxy Maize elicits a strong insulin response, promoting rapid glycogen replenishment. [2]

HOW SHOULD YOU USE GLYCOCHARGE?

Mixing Directions: (one serving): Add 1 scoop to 12 oz. of water and mix well. It can be added to any protein shake or used for athletic events as shown in the suggested use.

Suggested Use:

Pre-Charging (pre-exercise)

For Endurance Events - To load for an event, consume up to 8 servings in even intervals during the 36 hours prior to an event.

For Strength/Short Duration Events - To load for an event, consume up to 1-3 servings, one hour prior.

Charging (during exercise)

Consume up to 2 servings every hour of exercise. Studies show consuming 60g of carbs each hour during activity benefits performance in high-intensity exercise.[3,4] e.g., Mix 2 scoops in 24 oz. of water and consume about 6 ounces every 15 minutes.

Notes: It is important to use only water because other nutrients (especially sugars) will slow the absorption. However, it can be combined with a sugar-free, flavor crystal mix to enhance taste. The extra carbs spares muscle glycogen and provides optimal blood glucose which prevents CNS distress including symptoms of fatigue (headaches, nausea, etc.). Carb ingestion can postpone fatigue by 30 minutes, extending endurance (15%-35% improvement) before anticipated fatigue. Repeated feedings at the beginning of the 1st, 2nd and 3rd hour helps to offset depletion.[5]

Re-Charging (post-exercise)

Following intense exercise, immediately consume 1-3 servings to replenish glycogen stores. We suggest adding **GlycoCharge™** to **Cell Drive™** (**JSN Cell Pump Stack™**) for improved recovery.

Notes: After intense exercise, research shows that immediately consuming high glycemic index foods at a rate of 50g-75g every 2 hours until 500g have been consumed, speeds recovery. At this rate, it takes approximately 20 hours of carb loading to replenish glycogen stores after depletion.[6]

GlycoCharge™ by JSNitro is the premium carbohydrate source for athletes in a carb-loading phase. Consult your physician before starting any exercise program.

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