

**Creatine Whey Glutamine Powder (Vanilla)**  
**1000 grams (2.2 lbs)**  
 Item Catalog Number: 01096

**Whey protein isolate** can build lean muscle and prevent protein breakdown. Recently studies suggested whey protein isolate as a useful supplement for muscle recovery and immune regulation for athletes. In addition, protein supplementation may help enhance muscle protein anabolism and provide a means of reducing the progressive loss of muscle mass with age. It has also been shown to enhance the production of glutathione, the body's natural antioxidant.<sup>58-62</sup>

Long used by athletes to improve strength and exercise performance, creatine is being recognized as more than a muscle-building supplement. Creatine is present in the body. Skeletal muscles, the heart, brain, and other tissues metabolize creatine and use it as a major energy storage form.<sup>57,63-69</sup> Creatine boosts levels of ATP in the mitochondria, the cells' energy powerhouses.<sup>70-72</sup>

While studies have shown that creatine may indeed help build muscle and strength in explosive short duration activities, other research has demonstrated the supplement's role in enhancing healthy muscle mass in aging humans.<sup>56,57,73,74</sup>

**Glutamine** is a non-essential amino acid that generates energy and helps increase strength, quicker recovery, and exercise endurance.<sup>75-77</sup> Blood ammonia concentration increases during endurance exercise and has been proposed as a cause for both peripheral and central fatigue. In recent trials, glutamine supplementation reduced the accumulation of blood ammonia during prolonged, strenuous exercise in high-level athletes.<sup>78,79</sup> As an immune booster, glutamine supplementation may prevent the negative effects of strenuous exercise on immune function. Moreover, glutamine supplementation has a protective effect in the DNA fragmentation, mitochondrial membrane depolarization and apoptosis, and in regulation of the inflammatory process and immune suppression, which are induced by a single session of exercise.<sup>80,81</sup> Glutamine also plays an important role in maintaining functional integrity of the gut. As a gut-trophic factor, glutamine improves intestinal function, allowing better absorption of nutrients.<sup>82-89</sup>

**Creatine Whey Glutamine Powder** contains micronized creatine for optimal assimilation. The whey has gone through a cross flow micro-filtration process, which allows the product to retain its important subfractions in natural proportions.

**References**

**Supplement Facts**

Serving Size 1 level scoop (20 grams)  
 Servings Per Container approximately 50

**Amount Per Serving**

Calories	60
Calories from Fat	< 5
Total Fat	< 0.5 g
Saturated Fat	0 g
Trans Fat	0 g
Cholesterol	0 mg
Sodium	30 mg
Potassium	70 mg
Total Carbohydrate	1 g
Dietary Fiber	0 g
Sugars	0 g
Protein (from 15.4 g whey protein isolate)	13 g
Calcium	70 mg
Phosphorus	50 mg
Magnesium	15 mg
Creapure® Creatine monohydrate	2 g
L-glutamine	3 g

Other ingredients: natural flavors, soy lecithin, stevia, maltodextrin.

Contains milk and soybeans. Contains corn.

This product contains NO egg, fish, peanuts, crustacean shellfish (lobster, crab, shrimp), tree nuts, wheat, yeast, gluten, or rice.

Contains NO sugar, and no artificial sweeteners, flavors, colors, or preservatives.

## Dosage and Use

- Mix one level scoop once or twice daily with water, milk or juice (4 to 8 oz.), or as recommended by a healthcare practitioner.
- Drink immediately.

## Caution

If you have significant kidney or liver disease, please consult your healthcare practitioner before using this product.

## Warnings

- Keep out of reach of children.
- Do not exceed recommended dose.
- Do not purchase if outer seal is broken or damaged.
- If you have a bad reaction to product discontinue use immediately.
- When using nutritional supplements, please consult with your physician if you are undergoing treatment for a medical condition or if you are pregnant or lactating.

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