# CysteinePePTM



Item #75490 105 Grams Powder Item #75640 150 Vegetarian Capsules

# The Possible Benefits of CysteinePePTM, a Dietary Supplement

- May support glutathione production via the liver, and liver detoxification
- May enhance energy, motivation, sleep and mental alertness

"The new CysteinePeP<sup>TM</sup> whey product is absolutely phenomenal. Raising liver glutathione is so critical because the liver is the chief repository of glutathione and seeds it to all the other key organs including the intestines." - Dr. Michael Rosenbaum, M.D.

"We think that this development represents the state-of-the-art in delivering nutrients that facilitate GSH repletion." - Stephen Levine, Ph.D.

# **Description**

CysteinePePTM is a new, "next generation" hydrolysed whey protein powder that is specifically designed to support glutathione production via the liver. Cysteine is an important precursor to glutathione, one of the most powerful antioxidant nutrients. CysteinePePTM contains cysteine bonded to peptides, and research suggests that cysteine peptides are a preferred form of cysteine delivery.

Glutathione (GSH) is a tripeptide composed of cysteine, glutamine and glycine. It is synthesized primarily in the liver and plays a major role in detoxification, in preventing cellular oxidative stress, and in trapping free radicals that can damage DNA and RNA. GSH levels typically decrease as we age, and there is a direct correlation between the speed of aging and reduced GSH levels. Dr. Paul Cheney, M.D., Ph.D., a well-known researcher, has conducted studies leading him to conclude that GSH levels are critical for health.

Glutathione fulfills most of its many biological functions intracellularly, and is not well transported as a tripeptide into cells. The transport mechanism involves the degradation of glutathione, coupled with the transfer of free cysteine into the cell. To be effective, most orally ingested glutathione must first be broken down to cysteine, absorbed, and then resynthesised by the liver.

Cysteine in peptide-bonded form offers a unique solution to this metabolic challenge, because

research suggests that cysteine peptides are easier for the body to absorb. Additionally, compared to whey protein, much less is needed. Although whey protein can be a source for the glutathione-precursor cysteine, it typically requires a large dose, about 20 grams or 4 teaspoons, to give much benefit. In contrast, CysteinePePTM makes use of a unique process that starts with undenatured (unheated and bioactive) whey protein and concentrates the cysteine in peptide-bonded form. Cysteine-PePTM contains the bioavailable cysteine the body needs to produce GSH in the liver.

In independent experiments, rats were fed a casein-based standard diet, in which the protein portion of the diet was partially replaced by CysteinePePTM. The ingestion of 40% of the diet as CysteinePePTM resulted in a 40% increase of GSH concentration in the rat's livers. Higher amounts of cysteine did not increase the liver GSH synthesis further because a feedback level was reached. In another study with rats, researchers wanted determine CysteinePePTM had an effect on the liver during severe toxic and oxidative stress. They discovered that when GSH binds to toxins in the liver in order to excrete them, GSH levels can be completely exhausted, even if there was a high GSH level before the challenge. But in rats given CysteinePePTM, the reestablished baseline levels of GSH increased 40%. The results indicate that following a stressful condition the liver will attempt to produce more GSH, which

can only occur in the presence of increased amounts of its limiting precursor, cysteine.

In informal product trials, people taking CysteinePePTM reported they experienced improved energy, motivation, sleep, and mental alertness. The subjects reported they felt increased natural energy levels, which allowed them to get more things done. Their comments include the following: "feels like a nice even flow of energy, not hyper energy", "its not a fake type of energy", "just feeling better, more energy", "more alive, but don't know how to explain it."\* After the study was completed, many of them wanted more CysteinePePTM for themselves and for family and friends. Most of the subjects began to notice the health benefits of CysteinePePTM within 3 days to 1 week of taking it.

Cysteine itself can be supplemented as a pure amino acid and has long been used in attempts to raise glutathione levels. Because L-cysteine is unstable and can become degraded during absorption, the more stable acetyl derivative of L-cysteine, N-acteyl-L-cysteine (NAC), is usually used. Taken orally, NAC converts into L-cysteine after being absorbed, and may raise blood and tissue cysteine levels. The cysteine in CysteinePeP<sup>TM</sup>, on the other hand, requires no conversion.

CysteinePeP<sup>TM</sup> is a whey protein hydrolysate prepared under carefully controlled conditions using food grade enzymes. It is well-tolerated by most sensitive individuals. The product does contain whey, so tolerance may vary. Generally, 1 scoop or five capsules (3.5 g) per day produces desired results.

#### #75490 Powder

Serving Size: 1 scoop (3.5 grams) Servings Per Container: 30

## **Amount Per Serving:**

Whey Protein Hydrolysate

3.5 g

Other ingredients: Hydroxypropyl methylcellulose.

**Suggested Use:** As a dietary supplement, one scoop (3.5 grams) daily, mixed in juice or

water, or as directed by a healthcare practitioner.

## #75640 Vegetarian Capsules

Serving Size: 5 Vegetarian Capsules

Servings Per Container: 30

## **Amount Per Serving:**

Whey Protein Hydrolysate

3.5 g

Other ingredients: Hydroxypropyl methylcellulose.

**Suggested Use:** As a dietary supplement, 5 capsules daily, or as directed by a healthcare

practitioner.



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