

Glutamine:



THE SUPERNUTRIENT FOR WEIGHT LOSS, DIGESTIVE HEALTH AND IMMUNE POWER

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Benefits of Glutamine

- Stops Food Cravings
- Promotes Weight Loss
- Fights Colds and Flu
- Balances Blood Sugar
- Optimizes Muscle Growth
- Helps Heal Leaky Gut and Food Allergies
- Promotes Wound Healing
- Protects the Body from Stress
- Promotes Healthy Acid-Alkaline Balance
- Helps Counter the Side-Effects of Chemotherapy

Glutamine is a nutrient with an impressive range of health benefits. It helps balance blood sugar, build lean muscle, and strengthen the body's defenses. How does this amino acid do so many things? Because of its unique Robin Hood-like nature: it distributes nitrogen freely to the cells which need it most. Since many cells throughout the body – including immune, gut and muscle cells – need nitrogen as a fuel and basic building block, giving your body glutamine has powerful and wide-ranging health effects.¹ Glutamine is also an excellent brain fuel which helps keep mental energy up and cravings down.²

Glutamine is a must supplement for anyone who skips meals. Why? One of the most important reasons to eat regular meals is to maintain muscle tissue. Whether your goal is weight loss, lowered cholesterol, a leaner physique, increased energy, or just maintaining high level health, you always need to optimize the amount of muscle on your body. More muscle burns more fat and lowers cholesterol. More muscle makes you look better. By helping us maintain and grow muscle tissue, glutamine helps us lose weight, lower cholesterol, and look and feel fitter.

Your body needs a steady supply of protein or it will break muscle down for energy. When you wake up in the morning, your body is already in the process of breaking down muscle tissue. You need to stop that process immediately! You can either eat a healthy protein-rich breakfast, or, if you're too busy, take 1-2 teaspoons of glutamine in water or juice. Either way, you must begin your day with protein. By so doing –

whether you get your needed protein through food or glutamine – you will instantly give the body the nitrogen it needs to build and maintain muscle. If you do any kind of exercise – walking, aerobics, weight training, yoga – you do so to gain more muscle and become leaner. Why undermine these efforts by skipping meals? If you skip breakfast or eat low protein meals throughout the day, you are going to slowly lose muscle tissue. The body builds muscle with exercise + protein. So make sure to take a teaspoon of glutamine whenever you find you don't have time for a meal. Taking a teaspoon before and after exercise is also a good idea to help you maximize your results. You'll quickly see the difference optimizing protein intake creates! And don't worry: glutamine won't make you "muscle-bound." It will just help you attain the leaner, fitter physique you want and help you fit more easily into your clothes!

SPORTS APPLICATIONS

Glutamine is an ideal supplement to combine with exercise. Prolonged exercise lowers glutamine levels in the body, sometimes for as long as two weeks after the event.³ Glutamine also helps the body store more glycogen, the energy reserve in the liver and muscle that fuels exercise.⁴ It also enhances growth hormone secretion, which in turn increases muscle growth and overall health.⁵ Glutamine also helps prevent muscle soreness by speeding muscle recovery.

SUPPORTING DIGESTIVE HEALTH

Glutamine is the single most important nutrient needed for a healthy digestive tract. Glutamine is called "the intestinal permeability factor" because of its ability to maintain the integrity of the intestinal wall.⁶ It is important to keep our intestinal tract from becoming permeable. If our gut wall allows large food molecules into the body, a host of problems can develop: arthritis, disturbed immune function, autoimmune diseases, food allergies, and even mood disorders and mental illness. This "leaky gut" syndrome can be greatly helped by taking 10-30 grams of glutamine (3-10 tsp.) per day for a month. Glutamine is also essential for the treatment of Crohn's disease, colitis,⁷ inflammatory bowel disease,⁸ ulcers, and diarrhea.⁹ Glutamine also lessens stomach inflammation during chemotherapy.¹⁰

FIGHTING COLDS AND FLUS

Glutamine is a major energy source for the immune system and its varied cells.¹¹ Viral infections from colds and flus to conditions like HIV all dramatically lower glutamine levels, making supplementation essential.¹² We never want a glutamine deficiency, because this will lower levels of our protective T cells¹³ and reduce the ability of macrophages to kill viruses and bacteria.¹⁴ Glutamine is a must supplement for fighting any kind of cold, flu, or immune weakness. It is especially important when patients are sick and not able to eat well.

SPEEDS WOUND HEALING

Glutamine speeds wound healing¹⁵ and is very important for burn and trauma victims.¹⁴ The body cannot make enough glutamine to meet its needs during any periods of physical stress or injury, and supplementation is essential under such circumstances.¹⁶ Glutamine should also be given to all post-surgical patients,¹⁷ for it improves hospital outcomes and shorten hospital stays.¹⁸ In cirrhosis, glutamine is also very beneficial.¹⁹ It may not be desirable in very late stage liver failure, however, for then the liver cannot handle glutamine very effectively.

HELPING CANCER PATIENTS

Glutamine is an essential supplement for cancer patients because it 1.) enhances immune function 2.) protects the body from side effects from radiation, chemotherapy and surgery and 3.) enhances the effectiveness of chemotherapeutic drugs, including methotrexate.²⁰ Glutamine also protects against infections in patients undergoing bone marrow transplants.²¹ Doses used with cancer patients are in the range of 10 to 40 grams (3-14 teaspoons) per day given in divided doses.

MORE BENEFITS OF GLUTAMINE

Glutamine increases production of glutathione, the main antioxidant of the body. This in turn boosts immune function, protects all tissues from damage, and detoxifies harmful substances. Glutamine is also an important precursor for neurotransmitter substances in the brain, and supports brain wellness and mental energy. When 12 grams (four teaspoons) was given to alcoholics, glutamine eliminated alcohol cravings in 75% of those studied.²² Glutamine also helps promote milk production in lactating women. Since glutamine dissolves instantly in water and has no taste, the powder form is recommended. This allows for maximum purity as well as economy. If using capsules, three 1,000 mg capsules of glutamine equals one teaspoon of powder. Glutamine is very safe and without side effects.

References

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How to Use Glutamine

Controlling appetite 1-3 tsp.
Balancing Blood Sugar 1-3 tsp.
Supporting Muscle
Growth 3-5 tsp.
Treating Colds & Flus 3-10 tsp.
Healing Leaky Gut/
Food Allergies 3-10 tsp.
Wound Healing 3-10 tsp.
HIV Infection 3-10 tsp.
Cancer/Chemotherapy 3-14 tsp.

Glutamine can be taken in water, juice, or mixed into healthy shakes.

Cofactor nutrient: vitamin B6, 50 mg per day, helps the body use glutamine more effectively. Taking 5 tsp. or more per day of glutamine decreases protein needs slightly, as glutamine helps the body use protein more effectively.

Contraindications: liver or kidney failure.

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