

AMINO ACIDS

Arginine, Ornithine, Cysteine

In the course of her nutritional protocol, Dr. Clark uses a number of different amino acids. The most important ones are ornithine, arginine and cysteine. She also uses the amino acids methionine, lysine, tryptophane, histidine, glutamic acid, glutamine and aspartic acid.

WHAT ARE AMINO ACIDS?

Amino acids are hydrocarbons that are the basic building blocks of proteins. The assembly of proteins from the 20 amino acids is defined in the DNA. When we eat proteins, they are digested into the individual amino acids in the gastro intestinal tract and reassembled into proteins in the human body, or used in their basic form.

Most amino acids are made of only carbon, hydrogen, oxygen and nitrogen. The amino acids cysteine and methionine also contain sulfur. Because sulfur compounds can bind heavy metals (“chelate”), they and the compounds derived from them (e.g. glutathione, taurine) can be used for oral chelation (excretion of heavy metals).

The body can change some amino acids into others or build them from scratch. Others must be consumed with food. Those are termed “essential amino acids”, of which there are eight: Isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophane and valine.

The amino acid tryptophane, though essential, has practically disappeared from the nutritional market, after some people had severe reactions to taking tryptophane. Some consumers even died. It was later discovered that this was not due to the tryptophane itself but due to highly toxic pollutants that were added during the synthetic production process. Nevertheless, tryptophane is hardly available any more.

Amino acids exist in two symmetric forms, the L and the D structure. It is the same configuration of atoms in the molecule, but mirror inverted. Except for the amino acid glycine, only the L structure is natural for the human body and therefore you should watch out when purchasing amino acids not to get D or DL (mixed) amino acids. We only sell L amino acid varieties.

ORNITHINE

The functions of ornithine are:

- Ornithine is part of the urea cycle. This cycle processes toxic ammonia into urea. In the process ornithine is attached to the ammonia, which eventually turns into arginine. The arginine, absorbing water, turns into urea that is then excreted through the kidneys, and ornithine, which can now bind new ammonia.
- Ornithine can be turned into a number of other amino acids and is part of many proteins in the body.
- Ornithine increases the production and excretion of Human Growth Hormone (HGH) and is responsible for muscle build-up, decomposing fat and increased energy production.

Ornithine is found mainly in meat and fish, eggs and milk. When highly over dosed it can lead to disturbances of the gastro intestinal tract. Children, growing adolescents and diabetics should not supplement ornithine excessively.

Dr. Clark recommends ornithine in the course of the parasite cleanse, because it degrades ammonia in the liver, which according to Clark is released when parasites are killed. Dr. Clark thinks that insomnia is mainly due to ammonia toxicity in the brain. Supplementing ornithine therefore allows for a good night's sleep. It can be taken continuously without harmful effects or potential of addiction.

Dr. Clark recommends taking 2 capsules of ornithine 500mg on the first night of the parasite cleanse, then 4 on the second and 6 on the third. Afterwards, take as needed. Take ornithine 30 minutes before going to bed. In the course of the liver flush, 8 ornithine capsules are taken together with the olive oil and grapefruit juice concoction.

ARGININE

The functions of arginine are:

- Arginine can be used to synthesize glucose and therefore to produce energy.
- Its function in the urea cycle is described in the section on ornithine.
- Arginine participates in the build up of various enzymes (bio catalysts that control metabolism)
- In the white blood cells and neurons (nerve cells) arginine is used to produce the tissue hormone NO. NO plays a role in regulating muscle tension in the blood vessels and can help lower blood pressure. In the white blood cells, NO is used as a chemical weapon, therefore important for immune defense.
- Like ornithine, arginine increases the production and excretion of Human Growth Hormone (HGH) and is responsible for muscle build-up, decomposing fat and increased energy production.

Arginine is found in meat, milk, cheese and eggs as well as nuts and plants (pumpkin, algae). In very high dosages it can lead to nausea and diarrhea. Children, growing adolescents, diabetics and schizophrenics should not supplement ornithine excessively.

Like ornithine, arginine works to degrade ammonia in the liver. However unlike ornithine, arginine imparts energy and should be taken throughout the day, not at night. Take one capsule 500mg before breakfast and lunch. If necessary you can take two in the morning and one each before lunch and supper.

CYSTEINE

The functions of cysteine are:

- Cysteine is a part of many enzymes, also of glutathione, taurine, biotin (a vitamin), heparin (a clotting inhibiting agent) as well as co-enzyme A, which is the link between fat metabolism, sugar metabolism and energy metabolism.
- Cysteine ensures the stability of proteins and enzymes.
- This sulfur compound binds mercury, copper and lead. Hence it can be used as a chelator and for arthritis.
- Cysteine is an antioxidant and can react with free radicals.
- Cystein can be turned into glucose and be used as an energy source.
- Cysteine is used to build up beta carotin which occurs in hair, nails and skin (hence the smell of sulfur when hair is burned).

Cysteine is found in meat, eggs, onion, garlic, asparagus, cabbage, broccoli. Cysteine has no side effects. Diabetics and persons who have cysteine in their urine should not supplement excessive amounts of cysteine.

Cysteine is recommended by Dr. Clark as part of the extended parasite program (mop-up program or tapeworm and Ascaris program). Together with ozonated olive oil it gets rid of hardy tapeworms and tapeworm stages as well as Ascaris round worms. This effect is not described in medical literature, it is entirely based on Dr. Clark's research work with the Syncrometer.

The expanded parasite program uses two times three 500mg capsules of cysteine before meals. Because cysteine is an antioxidant, it should not be taken within 5 hours of ozonated olive oil or other strong oxidizers like Lugol's iodine.