

PROTEIN: Essential For All Life's Processes

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Specializing in Nutrition

Derived from the Greek word *proteios*, meaning “chief,” protein is so called because it is the chief constituent of living matter. Protein is a varying group of nitrogenous organic compounds, composed principally of amino acids of high molecular weight. Protein occurs in all living cells and is essential for all life's processes in humans, animals, and plants.

The human body is largely made up of protein; it accounts for approximately half the dry weight and 20% of the total weight of an adult. Protein is 90% of the dry weight of blood, 80% of muscles, and 70% of skin. Proteins provide the building blocks for connective tissue and are the primary constituents of enzymes, hormones, and antibodies. Proteins are part of many important chemicals, including enzymes and immunoglobulins. Protein forms the foundation of muscles, skin, bones, hair, teeth, blood, the brain and heart, and the billions of biochemical activities going on in our bodies every minute.

Protein contains approximately 22 amino acids, eight of which are essential because the body cannot produce them. Therefore, they must be obtained from our diet or supplements and be balanced. The essential amino acids are: **L-Histidine, L-Isoleucine, L-Leucine, L-Lysine, L-Methionine, L-Phenylalanine, L-Threonine, L-Valine**

Essential amino acid *L-Lysine* supports the production of cellular energy and protects skin structure. It is also an important building block of *collagen*, which protects connective tissue by controlling the enzymatic digestion of *collagen*. Research has shown that *L-Lysine* inhibits the formation of the herpes, shingles, and other viruses, which makes it a vital supplement to help protect from CV (corona virus) infection. It also assists *Carnitine* production. *L-Lysine* is also an important amino acid in children's growth, development, and appetite.

Essential amino acid *L-Methionine* is a substrate for other amino acids such as *Cysteine* and *Taurine*, versatile compounds such as SAM-e, and the important antioxidant glutathione. It plays a critical role in metabolism, health, and healing. It is also an important part of angiogenesis, the growth of new blood vessels. It can help reduce symptoms of copper toxicity. But, too much can promote tumor growth.

The sulphur-containing amino acids: *Methionine*, *Cystine*, and *Cysteine* are particularly important for development and health of the brain and nervous system. Studies have shown as little as 20 mg of bio-available *Cysteine* per day produces dramatic results in individuals using resistance training*1.

Essential amino acid *L-Phenylalanine* is a precursor for *Tyrosine*, the monoamine neurotransmitters *dopamine*, *norepinephrine* (noradrenaline), and *epinephrine* (adrenaline), and the skin pigment *melanin*. It is found naturally in breast milk of mammals and reputed for its analgesic and antidepressant effects. It is a direct precursor to the neuro-modulator *phenethylamine*.

L-Arginine, while not an essential amino acid, is essential for infants and young children who lack the ability to make it. It is an important part of the immune system, aiding the construction of antibodies to fight viruses. It is also required for insulin and haemoglobin manufacture. It also has a major role in energy production, fertility, erectile function, and growth hormone production. However, it must be in balance with *L-Lysine*. Too much *L-Arginine* in ratio to *L-Lysine* can cause an outbreak of herpes, shingles, or CV.

Taurine is found in high concentrations in the heart, skeletal, muscle, and the central nervous system. It helps lower cholesterol and can help regulate the heart muscle itself. *Taurine* acts as a neurotransmitter in some areas of the brain and the retina. It has been used to treat some forms of epilepsy by controlling seizure outbursts.

Collagen is the most abundant protein in mammals and makes up 25% to 35% of the whole body protein content. It is the structural protein in the extracellular matrix found in the body's connective tissues and skin. Collagen proteins are bound together to form a triple helix of elongated fibril known as a collagen helix. Collagen proteins are shaped like cords, which transmit tension between cartilages, ligaments, tendons, and other connective tissue. They are also abundant in skin, corneas, blood vessels, the gut, intervertebral discs, and the dentin in teeth. Fibroblast is the most common cell in the connective tissue that produces collagen.

In his book, *Fluoride-The Ageing Factor*, Dr. John Yiamouyianous, PhD reveals how fluoridation of our water supply, fluoride in our food, medicines, and environment destroys the body's collagen. This in turn produces premature ageing, wrinkling of the skin, weakened immune function, bone and joint damage, fluorosis of the teeth, and many other harmful effects. Fluoride is also a neurotoxin and endocrine disruptor creating immense damage that worsens with each generation.

ADEQUATE QUALITY PROTEIN

When we fail to consume adequate amounts of quality protein, the blood and tissues can become either too acidic or too alkaline; muscle tone, tendons, and ligaments atrophy; and many bodily functions, including hormone production cease performing properly. Additionally, protein deficiency can be a contributing factor in chronic fatigue, burnout, depression, loss of memory and concentration, slow wound healing, and decreased resistance to infection. Lack of dietary protein can also retard growth in children*2.

Energy is readily produced and sustained when adequate protein is provided. For your heart and body's electrical system to function properly, a balance between protein, essential fatty acids, and natural daylight/sunlight is necessary. Your selection of quality protein at breakfast can prevent fatigue throughout the day.

Symptoms of protein deficiency, include hypoglycemia and high levels of blood pressure, cholesterol, and triglycerides. Combine protein deficiency with a diet high in refined carbohydrates and damaged fats/oils and you have a recipe for heart disease, obesity, diabetes, and viral infections. In fact, a low protein diet can actually make an over weight person gain even more weight. The glands must have sufficient protein for hormone production. When deficient glands cannot produce the necessary hormones, the body will

actually put on more fat and fluid as a defence mechanism, because fat and fluid help provide the missing hormones.

High protein content in a food may not necessarily mean sufficient or the right balance of amino acids that the body needs. Quality, organic animal protein has many advantages over vegetarian sources because vegetarian sources are typically low in one or more of the essential amino acids, even when overall protein content is high. This makes it difficult for vegetarians and more so for vegans to get enough quality protein.

The use of soy protein is high in mineral-blocking phytates and thyroid depressing phytoestrogens, which can suppress the thyroid. Potent enzyme inhibitors in soy may even depress growth^{*3}. Also, soy is high in copper and low in zinc. This imbalance disrupts the body's copper/zinc ratio and can cause many symptoms of copper toxicity such as skin eruptions, emotional mood swings, PMS, elevated estrogen, aversions to meat, and even cancer.

High-energy proteins are best consumed early in the day. Having fresh fruit **before** or with protein (e.g., smoothies) at breakfast, and a colorful, raw salad with Omega Nutrition's omegaflo flaxseed oil and fresh lemon juice **after** an animal protein at lunch or dinner, promotes better digestion.

Proteins are digested into amino acids in the intestine where they are then absorbed. If too much protein is consumed the excess amino acids travel to the liver where they are broken down and converted into sugar, or into waste chemicals that are eliminated from your body in your urine. This insures that the blood does not become too acidic. **Balanced** meals of quality protein help to prevent the body from becoming too acidic. Care must be taken with high protein drinks that can damage the liver and kidneys. Consuming smaller, frequent meals, or two well-balanced meals (depending on various factors) is more ideal.

STRUCTURE IS FUNCTION

What happens with the large, complex molecules of protein inside the cells is essential for all life's processes. Almost every function that the body performs, depend on proteins, their shape, and how they move and change. This includes muscle contractions, turning food into energy, immune responses, and sensing light. In molecular biology, "Structure is function" is an axiom. In other words, a protein's shape is closely linked with how it functions.

In science, the ability to predict its structure provides a greater understanding of what protein does and how it works. Proteins are guided by the laws of physics to adopt their shape. Diet, nutrition, EMFs, including 5G, environment, and chemical contamination all influence the shape of proteins. Therefore, one has to consider if the deformed shape of blood cells causing hypoxia is being created by something other than the CV19 virus.

Predicting how chains of protein will fold into the intricate 3D structure of protein is what is known as the "protein folding problem." Scientists have worked on this challenge for decades. 1972, Nobel Prize winner in Chemistry, Christian Anfinsen, postulated in his acceptance speech that, in theory, a protein's amino acid sequence should fully determine its structure. This sparked decades of quest to be able to computationally predict a protein's

3D structure based solely on its 1D amino acid sequence. For nearly 50 years, scientists have been stuck on this one problem of how proteins fold up.

However, in 2018, at a biennial global competition called CASP13 (Critical Assessment of Protein Structure Prediction, founded in 1994 by Prof. John Moult and Prof. Krzysztof Fidelis), Deep Mind's AlphaFold version (using AI), predicted a significant degree of accuracy. They published a paper in Nature, and then, at CSAP14, improved on this.

According to their study published in Nature, 15 January 2020, (1) What proteins can do and how they function depend on their unique 3D structure. For example, antibody proteins utilised by our immune systems are 'Y-shaped' and form unique hooks. By latching on to viruses and bacteria, these antibody proteins are able to detect and tag disease causing microorganisms for eliminations.

A follow-up to this is when the body produces a fever to eliminate harmful viruses through sweat via the skin, or mucus via the lungs and nasal.

Many diseases are linked to mal-functioning or abnormal protein molecules. As mentioned, proteins are compromised of chains or sequences of amino acids bonded together. This includes the distance between pairs of amino acids, the angles between chemical bonds that connect amino acids, and neural networks of fragments that are involved.

These amino acids interact locally to form shapes like Alpha helices and Pleated sheets. These shapes fold up on larger scales to form the full three-dimensional (3D) protein structure. Proteins can interact with other proteins, performing functions such as signalling and transcribing DNA. Remember, that structured water is the medium which enables the cells to communicate with each other. Thus, having the right amount of structured water (fourth phase water, and/or deuterium depleted water) in the cells is vital.

To date, scientists have only mapped structures for about half (170,000) of all proteins made by human cells. Various diseases, dietary factors, environmental pollutants, and/or vaccine ingredients can mutate a single gene. This results in a malformed protein, which can have a profound effect on the health of an entire organism and future generations.

DNA contains information about the sequences of amino acids, but not how they fold into shape. The larger the protein, the more difficult it is to model because of the more interactions between amino acids to take into account. Yet, guided by the laws of physics, (and I believe by diet, nutrition, and the environment), proteins fold themselves spontaneously, within milliseconds. Anything that can damage the body's DNA, such as exposure to EMFs (5G, wifi), radiation, mRNA vaccines, glyphosate or toxic chemicals, can have a devastating effect on a person's health and future generations.

While the 2020, peer reviewed paper published in Nature marked significant progresses in biology, these studies and research focused on creating a drug to be patented. Hence, researchers and medical officials are not addressing the nutritional and environmental factors involved in causing these mal-functioning proteins.

Making matters worse is the complexity of the science in this area. Thus, most people are easily duped. Plus, it doesn't help that medical school curriculums were hijacked in the early part of the 20th century by Mr. Rockefeller, to monopolize his pharma industry, and censor or minimize the study of nutritional and environmental factors on the human physiology and their connection to health and disease; pharma agents or 'bought' medical officials have been implanted in most governments; and we are constantly being bombarded with a powerful, pharma controlled media blitz 24/7.

If a diet is lacking in quality protein or the body's digestion, absorption, and utilization are inefficient, the body can easily become deprived of amino acids. Without sufficient quantities and a balance between all the essential amino acids, the body begins to break down its own protein structures. This catabolism is revealed in a hair analysis. To overcome this, quality protein foods should be included as part of a balanced diet on a daily basis.

In general, you should consume a minimum of 1.0 to 1.25 grams of protein for every kilogram you weigh. To calculate your minimum range of protein intake, divide your weight in pounds by 2.2. Then, multiply your weight in kg first by 1.0 and then, by 1.25. Next, divide each amount by 7 (7 grams in 1 ounce of protein) to obtain the ounces of protein you should eat.

Examples:

A 100 lb/45.5 kg person should consume between 45.5 and 57 grams of protein or 7-8 oz a day minimally.

A 150 lb/68 kg person should consume between 68 and 85 grams of protein or 10-12 oz a day minimally.

PROTEIN SOURCES (Apply to your blood type):

- Pasture-fed or organic meats and poultry that is unadulterated, fresh and of good quality. (Free of hormones, antibiotics, GMOs, glyphosate and other toxic chemicals.) Meats such as bison (American buffalo), lamb, venison, goat, and wild game are excellent sources of protein. AVOID boneless and processed meat.
- Seafood should be fresh, clean and from unpolluted waters (good luck). AVOID most tuna, swordfish, and farmed seafood, which are contaminated with high levels of mercury and other toxic metals, and pollutants.
- Organic eggs, a perfect protein, are good for the brain, nerves, and glands.
- Mother's milk is far superior for babies. Organic goat/sheep milk or goat/sheep milk products are closer in composition to human milk than cow's milk, making them easier to digest and less allergenic than cow's milk protein in susceptible individuals. Its rich source of bio-available *cysteine* can help detoxify harmful chemicals. Cows dairy is not suitable for blood type O.
- Organic seaweed, sea vegetables, Sun Chlorella, and spirulina are good non-animal proteins that contain B-12, chlorophyll, minerals, enzymes, and beta carotene.
- Brewer's yeast, another source of protein, is rich in B vitamins, minerals, and nucleic acids.
- Seeds and nuts should be fresh (not rancid) and refrigerated. Seeds and nuts are better digested in milk or butter form (e.g., nut butters and tahini). Soak chia seeds and wash walnuts, macadamia, and pumpkin seeds. Soak and peel almonds.

- Organic beans and legumes form a complete protein when soaked and combined with complex carbohydrates, but their vibration is not as high as animal protein, nor suitable for all blood types. However, when properly prepared, they are a rich source of minerals and fiber.
- Organic unsweetened, yoghurt, cultured milk, whey, and cottage cheese contain beneficial proteins for AB, B, and to lesser degree A blood types.
- Sprouts, which are rich in vitamins, minerals, and enzymes add protein to salads.

* 1 Musashi

* 2, 3 Sally Fallon and Mary G. Enig, PhD. They Ploy of Soy, Price-Pottenger Nutrition Foundation, San Diego, CA

<https://www.nature.com/articles/s41586-019-1923-7%20>

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