

Natural formula. Perfect form.

amino<sup>4U</sup><sup>®</sup>

# INFORMATION FOR MEDICAL PRACTITIONERS

Not for consumers!



# amino4u<sup>®</sup> – THE OPTIMAL ESSENTIAL AMINO ACID FORMULATION FOR HUMAN HEALTH

- **amino4u** is a purified foodstuff consisting of the eight amino acids essential for human health. The product contains absolutely no additives whatsoever.
- **amino4u** has a bioavailability of 100%, i.e. it can be taken up by the body in its entirety.
- **amino4u** contains amino acids in the following proportions: L-leucine (19.64%), L-valine (16.57%), L-isoleucine (14.83%), L-lysine (14.29%), L-phenylalanine (12.89%), L-threonine (11.11%), L-methionine (6.99%), L-tryptophan (3.68%).
- **amino4u** utilises this additive-free formulation to achieve a real-world nutritional value of 99%. Just 1% is converted into nitrogenous wastes that are processed by the liver and kidneys.
- **amino4u** is virtually calorie-free, due to minimal creation of nitrogenous wastes. Although it contains just 0.04kcal per gram, it provides the same quantity of nutritious and bioavailable amino acids as found in 350g of meat, fish or poultry.
- **amino4u** consists of ultrapure, free-form crystalline amino acids, i.e. all eight amino acids are available in a form that requires no further digestion by the body.
- **amino4u** is reabsorbed by the small intestine in approx. 23 minutes, 5–13 times faster than the bioavailability of conventional nutrient proteins.
- **amino4u** places no digestive stress on the digestive tract.
- **amino4u** is 100% of plant origin and contains no additives such as binders, flavourings or performance-enhancing substances.
- **amino4u** has no known side effects or contraindications and can therefore be used without restrictions.
- **amino4u** is hypoallergenic and is safe to consume for allergy sufferers.
- **amino4u** contains no GMOs.

## amino4u<sup>®</sup> IS ESPECIALLY SUITABLE FOR:

- ✓ Recreational and competitive athletes
- ✓ Patients recovering from injuries and operations
- ✓ People involved in strenuous physical activities
- ✓ Vegetarians and vegans
- ✓ Individuals following a weight regulation programme
- ✓ People with a weakened immune system
- ✓ People with compromised protein digestion/absorption
- ✓ Women during and after pregnancy
- ✓ Growing children
- ✓ Everyone over the age of 40

# OPTIMUM PROTEIN BIOSYNTHESIS

Amino acids have been called the “building blocks of life”. Within the body, many thousands of metabolic processes take place every second, for which the body needs nutrients in the form of amino acids. Of the 20 amino acids found in the human body, the eight provided by **amino4u** are considered essential.

To ensure the healthy completion of these metabolic and tissue formation processes, the eight essential amino acids must be simultaneously available in a ratio matched to the body’s needs. This optimum formulation is what **amino4u** gives the body.

This optimum combination of essential amino acids ensures optimum results from the body’s own protein biosynthesis. Any deviation from this formulation would reduce the efficiency of this process, producing nitrogenous wastes needing complex processing by liver and kidneys. And this processing naturally places a strain on the affected organs.

A further part of the product that cannot be used in the body’s own protein biosynthesis is then broken down by catabolic processes and released as energy.

If the formulation starts to deviate from the optimum, and if additives are included, the proportion of nitrogenous waste products that stress the digestive system starts to rise. Figure 1 clearly illustrates the effective percentage proportion of various amino acid sources, which can actually be used by the body in its own protein biosynthesis processes. As the figure shows, while the greater proportion of other products is actually digested by the body, it cannot actually be metabolised into useful protein by the body.

## COMPARISON WITH OTHER SOURCES OF PROTEIN

The table shows the actual nutritional value of nutrient proteins with the proportion of nitrogenous wastes simultaneously created. The figures indicate the amount of a certain protein that needs to be consumed in order for the body to be able to biosynthesise 9.9g of protein itself.

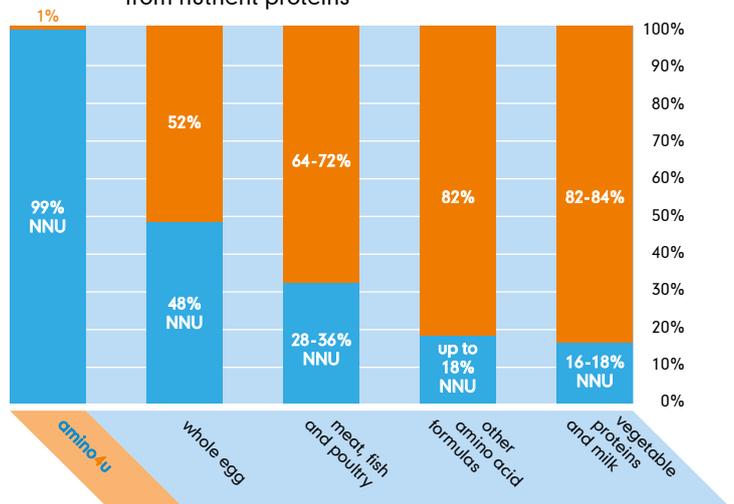
	<b>amino4u</b>	Soy protein	Whey protein
Amount consumed	10,0g	55,0g	61,9g
Percentage proportion of protein to be synthesised by the body	99%	18%	16%
Nitrogenous waste products	0,1g	48,3g	52,0g
Ratio of nitrogenous wastes to <b>amino4u</b>		483:1	520:1

## RECOMMENDED INTAKE

The recommended portion is 5–10 tablets, taken 2–3 times during the day with sufficient fluids. Where possible, tablets should be taken at mealtimes. To achieve optimum results, large quantities of other protein sources should not be consumed approx. 2h before taking the tablets.

Tablet dosages can also be significantly higher during a diet or strenuous physical activity.

Figure 1: Comparison of nitrogenous wastes (orange) from nutrient proteins



## KEY FACTS ABOUT AMINO ACIDS

Amino acids are the building blocks of life. They are transported in the bloodstream to the places in the body where they are needed for metabolic processes. Eight of these amino acids are essential for the body and must be provided by external sources. Only when the body has these eight amino acids available in a certain proportion can the body's metabolic processes and repair mechanisms achieve their true potential.

Many thousands of such processes take place in the body every second. Amino acids form the basis for our immune system, for example, and are the building blocks of bones and muscles. Even in times where energy is in short supply (e.g. poor diet), the body can still use gluconeogenesis to harvest energy from amino acids.

The reason for adopting a diet programme is often poor, calorie-rich nutrition coupled with a lack of physical activity. Of all nutrients, proteins give us the most complete feeling of fullness – which also indicates just how valuable they are to the human body. A carbohydrate-rich diet does not leave us feeling so satiated, and can therefore lead to overeating and weight problems. One consequence can be diabetes, for example: between 1998 and 2012, the number of people suffering from Type 2 diabetes in Germany rose to approx. 6 million – an increase of 38%. A protein-rich, low-carbohydrate diet can significantly reduce the risk of acquiring diabetes.

Two other trends in contemporary nutrition include vegetarianism and veganism. Yet a diet entirely without animal products provides humans with no high-quality sources of essential amino acids: as a result, many adherents of such diets suffer from the consequences of protein deficiencies.

The consumption of an adequate amount of high-quality protein is essential for the human body. By substituting **amino4u**, individuals are given probably the best opportunity to form protein within their own bodies without stressing the digestive system with nitrogenous wastes. In addition, protein supplied by **amino4u** contains effectively no calories.

## ADVANTAGES AT A GLANCE

- ✓ 100% plant origin
- ✓ 100% natural – no additives
- ✓ 100% ultrapure crystalline amino acids
- ✓ 0% performance-enhancing substances
- ✓ Just 1% nitrogenous waste products
- ✓ Only 0.04 kcal per tablet
- ✓ 99% of product consumed is available for the protein biosynthesis
- ✓ Available in the bloodstream within 23 minutes

