AMINO ACID COMPOSITION AND NUTRITIONAL VALUE OF DIFFERENT PROTEIN SOURCES

Proteins are major components of a healthy diet. They are a source of amino acids, of which 9 are essential. This means, that we cannot synthesize those in our body, but we need to capture these from our food on a daily basis (recommended daily values). Many different foods can be good sources of protein, but not all proteins are equal.

Why are proteins important?

Protein is essential for growth and the maintenance of good health. They are not only a source of amino acids, but they encode, in their amino acid sequence portions that, when digested, also play roles linked to physiological and metabolic functions. Proteins also create interesting and pleasant structures in our food.

Protein Quality

Amino acids are building blocks for new proteins in our body. Missing one of the essential amino acids, will limit the utilization of other amino acids and prevent normal rates of protein synthesis even when the total nitrogen intake level is adequate. The protein quality then, is determined not only by the amino acid composition, which has to be balanced, but also by the digestibility.

Are all proteins digested the same way?

The concentration of essential amino acids are sometimes lower in plant food proteins than in animal food proteins. The digestion of proteins can be limited by the presence of anti nutritional factors, by processing history, or by presence of fiber encapsulating and decreasing the digestion kinetics in the whole food. A vegetarian diet requires attention to be able to achieve an adequate intake of protein, and blends of proteins are needed.

What will be the future parameters for measuring protein quality based on?