



Food and Agriculture
Organization of the
United Nations

IMPROVING KNOWLEDGE AND DATA ACCESS ABOUT PROTEINS TO INFORM BETTER DIETS

Defining accurately the amount and quality of protein required to meet human nutritional needs and describing appropriately the protein supplied by foods and diets is critical in meeting global nutrition targets.

This collaboration between Food and Agriculture Organization of the United Nations (FAO) and International Atomic Energy Agency (IAEA) brought together subject matter experts from around the globe to gather data and plan the next steps needed to ensure improved access to information and advice on protein digestibility. The scientific advice generated by the experts will form the basis for the development of a robust database on amino acid digestibility of foods and diets.

The main technical reports are available to the broader public, as FAO is committed to broad and unrestricted access to information, and all publications are made freely available in a growing variety of formats and media.

WHAT DID THE PROJECT DO?

The project brought together multidisciplinary, subject matter experts from around the globe to achieve consensus on scientific advice related to protein digestibility and to accumulate sufficient digestibility data from human foods. Scientific advice on protein digestibility is being sought by key stakeholder communities, including member countries, food businesses and consumers.

A technical meeting of the joint FAO/IAEA technical meeting was held to discuss the development of a protein quality database and the revision of protein requirements across population groups, summarizing expert opinions; and findings were developed and published. Participants updated evidence and related methods on protein requirements and protein quality assessment, and designed a framework for the development of a protein digestibility database to aid dialogue on the evaluation of protein quality and protein sufficiency in different populations. The report of the meeting offers a global presentation of the concept of protein quality and requirements throughout the life course. It also presents the important elements needed to set protein requirements, such as indispensable amino acid scores and reference patterns and the associated methods. In addition, it provides an assessment of protein digestion and metabolic utilization and related assessment methods, including stable isotope tracer techniques.



KEY FACTS

Latest Approved Budget

USD 101 673

Duration

April 2022-October 2023

Resource Partner

Canada

Partner

International Atomic Energy Agency (IAEA)

Beneficiaries

Member countries, food businesses and consumers seeking advice on protein digestibility

IMPACT

The right to adequate food established and transitioned towards healthy diets for national populations is of crucial importance for the enjoyment of all human rights and is at the core of better nutrition, alongside better production, better environment and better life. In this regard, providing an adequate, sustainable and nutritious supply of nutrients, including protein, is of critical importance and defining accurately the amount and quality of protein required to meet nutritional needs and describing appropriately the protein supplied by foods and diets is essential. The scientific advice generated by the experts in this project will form the basis for the development of a robust database on amino acid digestibility of foods and diets. In addition, member countries and international authorities will use this advice to inform policy and nutritional advice.



SUSTAINABLE DEVELOPMENT GOALS



ACTIVITIES

- An international call for multidisciplinary subject matters experts on protein quality was issued.
- A call for data for protein and amino acid digestibility of foods and diets was issued.
- A letter of agreement with AgroParisTech Innovation provided support to the joint FAO/IAEA secretariat and accumulation of amino acid digestibility data.
- A joint FAO/IAEA meeting was held in Vienna in October 2022, to discuss the development of a protein quality database and the way forward for reviewing protein requirements across populations.
- A report of the joint FAO/IAEA technical meeting was developed and published, summarizing the framework for a new protein quality database jointly managed by FAO and IAEA.
- An Excel document was produced, including amino acid digestibility data on any food that is part of human diets, covering plant and animal foods and novel protein sources, as well as foods from lower-middle income countries, underutilized foods and climate resilient crops.



Project Title
FAO/IAEA working group
on protein quality evaluation

Project Code
FAO: GCP/GLO/1061/CAN
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