

Rec. Agric. Food. Chem. 4:SI (2024) OP:46-46

records of agricultural and food chemistry

Food Components: Protein with all Aspects

Authors: Birsen Başak Adamoğlu 1 and Gizem Çalışgan Ünay 1

Affiliation: ¹ETİ Gıda Sanayi ve Ticaret A.S., Hoşnudiye Mah. Kızılcıklı Mahmut Pehlivan Caddesi No:11,

Tepebaşı/Eskişehir, Türkiye birsen.adamoglu@etietieti.com

Proteins, as the most important part of the human diet, contribute significantly to human development, structural functions, and biological properties. It is not hard to see that due to these essential roles, proteins also play a crucial role in the food industry. Beyond their dietary properties, proteins are used to create structure (such as foam, elasticity, etc.), enhance taste, aroma, and color in food products [1]. In recent years, consumer preferences regarding dietary proteins have shifted due to health, ethical, and environmental concerns [2]. Consumers are increasingly opting for proteins derived from alternative sources such as plants, fungi, and microorganisms. Another critical aspect of proteins is their bioavailability. If the human body cannot effectively digest and absorb proteins, consuming them becomes meaningless [3]. Despite the significant impact of proteins on food structure and dietary benefits, there is still insufficient information about their interactions with other food components, alternative protein sources, and methods to enhance their bioavailability. In our research, we aim to clarify these gray areas and uncertainties. To address our questions, we conducted a detailed literature search and prepared a presentation summarizing our findings.

Keywords: Protein; protein-food interactions; consumer's choices; bioavailability.

References:

- [1] Z. Karami and B. Akbari-adergani (2019). Bioactive food derived peptides: a review on correlation between structure of bioactive peptides and their functional properties, *J. Food Sci. Technol.* **56**, 535-547.
- [2] C.A. Gómez-Luciano, L. Kluwe de Aguiar, F. Vriesekoop and B. Urbano (2019). Consumers' willingness to purchase three alternatives to meat proteins in the United Kingdom, Spain, Brazil and the Dominican Republic, *Food Qual. Prefer.* **78**, doi:10.1016/j.foodqual.2019.103732
- [3] J.J. Patricia and A.S. Dhamoon (2019). Physiology, digestion. In: StatPearls. Treasure Island (FL): StatPearls Publishing.

