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> Aspectos técnico-funcionais de proteínas vegetais Techno-functional aspects of plant proteins

Proteins are large biomacromolecules, consisting of one or more long chains of amino acid residues, with several biological functions. The regular intake of proteins is crucial for a proper metabolism and health maintenance in humans. In addition to their nutritional role, they have technological applications in food formulation, as structuring ingredients, due to their emulsifying, gelling and foaming properties. Although food proteins are typically from animal sources (milk, meat, eggs etc.), there has been an increasing interest in plant proteins, especially for individuals who do not want or cannot consume animal proteins. Among plant proteins that have been studied for their techno-functional applicability, one can cite those from soy, pea, rice and wheat. The utilization of plant proteins combined with other biopolymers (either polysaccharides or other sources of proteins), to form functional complexes or coacervates, is considered a strategic approach for improving their techno-functionalities, and, therefore, their applicability in formulated foods. This seminar, will address some advantages and limitations of using plant proteins, isolated or combined with other biopolymers, to form films, gels and emulsions. The effects of concentration and extrinsic factors, such as pH and ionic strength, will be also discussed.

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