
Campus Universitário – Viçosa, MG – 36570-900 – Telefone (31)3612-6705/6760 – E-mail: tca@ufv.br

TAL 797 – Seminário

October 30, 2024

**SCIENTIFIC DEVELOPMENT IN THE FOOD SECTOR: LOOKING BEYOND
MARKET TRENDS**

Pós-graduanda: Flávia Aparecida dos Santos Vieira

Orientador: Eduardo Basílio de Oliveira (Departamento de Tecnologia de Alimentos).

Nível: (X) MS () DS

Changes in food consumption behavior can vary according to religion, health and/or environmental awareness and sometimes these changes are subject to the information available on social media platforms, whether scientifically based or not, which can lead to favoring one type of product or ingredient or another. But beyond fashions, food allergies and intolerances are a problem that require more and more attention from food researchers, so that their studies can provide a basis for products that can meet the nutritional needs of individuals suffering from one of these disorders. The National Sanitary Enforcement Agency (Anvisa) estimates that eggs, milk, fish, crustaceans, nuts, peanuts, wheat and soy account for 90% of food allergy cases. In this context, it is necessary to explore new food matrices and technologies to make viable products that meet the nutritional needs of this public. Oats (*Avena sativa*) are a gluten-free cereal, a source of dietary fiber, with a protein content of 15-20%, high levels of lysine and threonine and a digestibility of 0.41-0.60, making them more nutritious than other cereals. Oat protein isolate (OPI) has favorable gelling, water and oil retention and foaming characteristics, but its poor emulsifying properties and low solubility mean that these properties need to be improved for its use in aqueous foods. Studies show that the complexation of OPI with high-methoxylation pectin achieved significant curcumin retention rates, thus demonstrating its potential as a delivery system for bioactive compounds, making the use of oat protein an ingredient of scientific interest beyond food fads.

Referências

BRASIL. Agência Nacional de Vigilância Sanitária (ANVISA), Resolução RDC nº 26, de 02 de julho de 2015. Dispõe sobre os requisitos para rotulagem obrigatória dos principais alimentos que causam alergias alimentares. Diário Oficial da União, Poder Executivo, Brasília, DF, 03 de jul de 2015. Seção 1, p. 53-54.

Brasil. Ministério da Saúde. Agência Nacional de Vigilância Sanitária (ANVISA). Guia sobre Programa de Controle de Alergênicos. Guia nº5, versão 02. Brasília, 16 de outubro de 2018. <http://portal.anvisa.gov.br/documents/10181/2779039/%281%29Guia+Programa+Controle+d+Alergenicos+versao+2. pdf/69af35f5-cc11-412e-ade5-4d47fef14f5e>.

Cazal, M. de M.; Portes, J.O.L; Silva, S. T. da. Influencia das mídias sociais nos Hábitos alimentares de praticantes de musculação. Revista Brasileira de Obesidade, Nutrição e Emagrecimento. São Paulo, v.18. n.113. p .300-310. Mar./Abril. 2024. ISSN 1981-9919 Versão Eletrônica. <https://www.rbone.com.br/index.php/rbone/article/view/2377/1433>.

Liu, Z. *et al.* Effects of different solid particle sizes on oat protein isolate and pectin particle-stabilized Pickering emulsions and their use as delivery systems. Food Chemistry 454 (2024) 139681 <https://doi.org/10.1016/j.foodchem.2024.139681>

Senarathna, S.; Roshema, M.; Maneka, M., 2014. Utilization of cereal-based protein ingredients in food applications Sachini. Journal of Cereal Science 116 (2024) 103867. <https://doi.org/10.1016/j.jcs.2024.103867>.

Wang, J. et al. Effect of pH on the formation mechanisms, emulsifying properties and curcumin encapsulation of oat protein isolate–high methoxy pectin complexes. Food Hydrocolloids 149 (2024) 109454. <https://doi.org/10.1016/j.foodhyd.2023.109454>

Orientador

Orientada