

## Abstract

# Nutritional and Bioactive Properties of Plant-Based Sausages Containing Potato Protein, Ferritin, and a Blend of Cold-Pressed Oils <sup>†</sup>

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**Abstract:** Every year, there is an increase in the interest of plant-based foods as alternatives to meat products. In addition to meeting the needs for basic macronutrients, consumers also expect such products to provide bioactive compounds that help to protect their health. In this project, innovative plant-based sausages were developed using protein from potato juice, characterized by a high nutritional value. Moreover, the addition of ferritin, a plant-based well-absorbed source of iron, was used, as well as an appropriate composition of oils with a favorable ratio of  $\omega_6$  to  $\omega_3$  fatty acids of 5:1. Effects on the functioning of the gastrointestinal tract, in particular, cytotoxicity against gastrointestinal cancer cells, were also analyzed. It has been shown that the developed plant-based sausages are not only characterized by a high nutritional value corresponding to meat products, but also contain phytochemicals beneficial in alleviating inflammation and cancers of the digestive tract. The sensory analysis performed also confirmed the high attractiveness of the new products, which can be successfully implemented into the market.

**Keywords:** meat alternative; nutritional value; innovative vegan product



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