

ZOOTECNICIZING THE INTEGRATED FOOD SYSTEM, BASED ON THE PRINCIPLES OF BIOHARMONISM

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Abstract. *This paper examines the transformation of cereals into meat, milk, eggs, and other animal products, alongside optimizing the Farm-to-Fork flow as a core objective of the integrated food system in the modern world. The study focuses on optimizing agro-zootechnical anthroposystems by introducing systemic-level conceptual contributions. With the goal of developing highly efficient solutions, the primary objective is to explore future pathways for animal husbandry, driven by multi-layered integration aimed at maximizing added value through the process of bioharmonization. The paper discusses aspects of the dynamic biological-technological equilibrium tied to the homeothesis process, a feature of the "Living Planet" model. The concept of new zootechnicization promotes the implementation of the bioharmony model within the integrated food system, guiding animal production anthroposystems toward scientific and technological harmony with the environment and its resources, while responding to the needs of a rapidly evolving society.*

Keywords: bioharmonism, food system, integration, zootechnicization

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1. Introduction

"Studies by the UN through FAO show that it is becoming urgent to address how we use natural resources across the entire 'farm-to-table' axis, focusing on sustainability and resilience. This means optimizing and maximizing the yield and efficiency of the food supply chain in the face of climate, social, and geopolitical changes. In this regard, FAO offers a comprehensive guide explaining strategies for integrating livestock farming with other agricultural sectors to achieve more efficient and sustainable food systems [3].

Of interest along this axis is the approach based on the integrated food system, within which the role and importance of animal-based foods are clarified. The integration of livestock farming into global circular agriculture is addressed,

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