

# TRANSFORMING HOTEL GASTRONOMY: THE ROLE OF AI IN ENHANCING PERSONALIZED DIETARY RECOMMENDATIONS FOR WELLNESS TOURISTS

Zhi Rui ZHOU<sup>1</sup>

<sup>1</sup> Macau University of Science and Technology, Macao SAR, China;  
zhouzhirui\_0213@163.com

## ARTICLE HISTORY

**Received:** 31 July 2024

**Revised:** 14 August 2024

**Published:** 24 August 2024

## ABSTRACT

The growing demand for personalized dietary experiences among wellness tourists, particularly those with specific dietary restrictions, is driving a paradigm shift in nutrition—from generalized guidelines to individualized recommendations. This study investigates the effectiveness of AI-assisted dietary personalization in enhancing dining experiences for these tourists. Using an experimental design with 412 participants, the research demonstrates that AI-driven personalization significantly enhances dietary adherence and tourist well-being. Although the impact on expectancy violation and memorable experiences varied, these findings reveal important insights into AI-human interaction. This study underscores AI's potential in meeting personalized dietary needs and emphasizes the importance of refining its application to consistently enhance memorable dining experiences. Addressing information overload and fostering effective human-AI collaboration is critical for the successful implementation of AI-driven personalization. By highlighting both the potential benefits and challenges of AI in delivering tailored dietary experiences, this study advances the literature on AI in hotel gastronomy.

**Keywords:** Personalized Dietary Recommendations, Wellness Tourism, Hotel Gastronomy, Human-Ai Interaction, Memorable Dining Experience, Tourist Well-Being

**CITATION INFORMATION:** Zhou, Z. (2024). Transforming Hotel Gastronomy: The Role of AI in Enhancing Personalized Dietary Recommendations for Wellness Tourists. *Procedia of Multidisciplinary Research*, 2(8), 82.