Dear readers,

This Special Issue of the Croatian Journal of Food Technology, Biotechnology and Nutrition features a selection of scientific papers presented at the 9th International Congress of Nutritionists, held in Zagreb from 21 to 23 November 2024. The Congress was organized by the Croatian Federation of Nutritionists, in collaboration with the Federation of European Nutrition Societies, the Association for Applied Nutritionism in Bosnia and Herzegovina, and the Student Association of the Faculty of Food Technology and Biotechnology "Probion." The Congress once again brought together nutritionists, dietitians, researchers, healthcare professionals, food technologists, industry representatives, and pharmacists with the shared goal of advancing nutrition science and improving public well-being by promoting healthy dietary patterns and lifestyles.

As one of the leading nutrition congresses in the region, it served as a multidisciplinary platform for exchanging knowledge, discussing current challenges, and exploring innovative approaches in nutrition research and practice. In addition to the plenary lecture "Redefining the gut microbiome through biomodulators," presented by Prof. Jasna Novak, PhD, the scientific program reflected nine different sections, including Biotics breakthroughs: enhancing life through science; Longevity science: epigenetic innovations and discoveries; Brain health and nutrition in the 21st century; Implementing plant-based diets for a more sustainable future; Sports nutrition for women; Nutrition in reproductive health of women; Understanding the dynamics of motivation and food choice; Complementary therapy; and Innovative food products. Furthermore, the Congress placed a strong emphasis on professional development, offering practical workshops for both students and professionals.

The Book of Abstracts of the 9th International Congress of Nutritionists collected all abstracts of the lectures and posters presented at the Congress. However, this Special Issue presents four peer-reviewed manuscripts that represent a small selection of the research presented at the Congress. Two papers focus on the nutrition of the pediatric population: one investigates the effect of a gluten-free diet on vitamin D, iron, and ferritin status, while the other examines the relationship between vitamin D levels and nutritional status in children with type 1 diabetes. Furthermore, one paper addresses the need for nutritional status and risk of malnutrition assessments as predictors of impaired respiratory function in patients with chronic obstructive pulmonary disease. The last paper provides a case report of successful dietary interventions in endometriosis, a condition that affects 10–15% of women of reproductive age worldwide. Together, these four manuscripts emphasize the growing importance of evidence-based nutritional assessment and interventions in disease prevention and health promotion.

On behalf of the Organizing Committee, I would like to thank all authors for submitting their work and the Editorial Board of the Croatian Journal of Food Technology, Biotechnology and Nutrition for making this Special Issue possible. We hope that the manuscripts presented in this Special Issue will provide valuable insights and inspiration for further research, encouraging interdisciplinary collaboration.

Guest Editors:

Prof.dr.sc. Tomislav Bosiljkov
University of Zagreb
Faculty of Food Technology and Biotechnology
Department of Process Engineering
Laboratory for Unit Operations



Ana Ilić, PhD
Scientific Program Coordinator of the 9th International Congress of Nutritionists
University of Zagreb
Faculty of Food Technology and Biotechnology
Department of Nutrition, Food Quality and Safety
Laboratory for Nutrition Science



ORGANISING COMMITTEE of
9th International Congress of Nutritionists,

Chair:
Tena Niseteo, PhD, Assistant Professor

Members of Organising Committee:

Karmen Matković Melki, MSc in Nutrition
Lidija Šoher, PhD
Ana Ilić, PhD
Iva Dorić, MSc in Nutrition
Marinela Nutrizio, PhD
Marija Selak, MSc in Nutrition
Marina Matković, MSc in Nutrition
Tena Krizmanić, MSc in Nutrition
Ela Kolak, MSc in Nutrition
Marijana Jurić, MSc in Nutrition
Lucija Bakarić, MSc in Nutrition
Mašenjka Katić, MSc in Nutrition
Dora Babić Cikoš, PhD
Martina Bratek, MSc in Nutrition
Vanessa Ivana Peričić, MSc in Nutrition
Dora Bučan Nenadić, MSc in Nutrition

SCIENTIFIC COMMITTEE

Chair of Scientific Committee:

Darja Sokolić, PhD, Assistant Professor, Croatian Agency for Agriculture and Food, Croatia

Members of Scientific Committee:

Danijela Čačić Kenjerić, PhD, Full Professor
Faculty of Food Technology Osijek, Josip Juraj Strossmayer University of Osijek, Croatia

Anet Režek Jambrak, PhD, Full Professor
Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia

Irena Keser, PhD, Associate Professor
Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia

Greta Krešić, PhD, Full Professor
Faculty of Tourism and Hospitality Management, University of Rijeka, Croatia

Marizela Šabanović, PhD, Assistant Professor
Faculty of Technology, University of Tuzla, Bosnia and Herzegovina

Branislava Teofilović, PhD, Assistant Professor
Faculty of Medicine, University of Novi Sad, Serbia

Sanja Musić Milanović, PhD, Associate Professor
Health Promotion Division, Croatian Institute of Public Health, Zagreb, Croatia

Tena Niseteo, PhD, Assistant Professor
Children's Hospital Zagreb, Croatia

Evgen Benedik, PhD, Assistant Professor
Biotechnical Faculty, University of Ljubljana, Slovenia; University Medical Centre Ljubljana, Slovenia

Jelena Đugum, PhD, Assistant Professor
Croatian Chamber of Economy, Zagreb, Croatia

Rouzha Pancheva, PhD, Full Professor
Department of Hygiene and Epidemiology, Medical University of Varna, Varna, Bulgaria

Jasmina Ranilović, PhD, Assistant Professor
Podravka Ltd., Croatia

Michael Chourdakis, PhD, Assistant Professor
School of Medicine, Aristotle University of Thessaloniki, Greece

Maroje Sorić, PhD, Assistant Professor
Faculty of Kinesiology, University of Zagreb, Croatia