



## Advancing Food Safety, Nutrition Security, and Sustainable Diets through Innovation

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With the global community still struggling with the coupled issues of population increase, climate change and the redefinition of food systems, the need to ensure safe, healthy, and sustainable diets has never been more significant. Food safety and nutrition security are not scientific or policy issues, but they are the basis of human health, economic growth and environmental stability. The latest Acta Scientific Nutritional Health (Volume 9, Issue 12) comes at a most critical juncture when science, innovation and inter-disciplinary cooperation are redefined in the way we should perceive and react to global nutritional issues.

The initial step in ensuring nutrition security is by ensuring food safety. Food that is not safe not only compromises health, but the confidence placed in it and the availability of the necessary nutrients. Tampered food is a major cause of global burden of disease in the sense that cases of foodborne diseases have been recorded to be in millions every year. These threats are being mitigated by the advances in analytical technologies and enhanced hygiene practices, as well as, modern risk assessment frameworks. However, in most of the world, especially in low- and middle-income nations, there are loopholes in the food value chain, i.e., production to the consumer. These gaps cannot be addressed through a single solution to scientific innovation, but a combination of scientific, educational, regulatory and community-collective efforts can close them.

Nutrition security however goes beyond food accessibility. It includes adequate access, low cost and consumption of various foods that are nutritious and healthy in support of healthy living. With the diets changing with urbanization and global trade, there is an increasing worry of the change in traditional and nutrient rich foods to processed energy rich foods. Although this is a convenient shift in nutrition, it has led to the increase of non-communicable illnesses like obesity, diabetes, and heart related illnesses. To solve such a complicated problem, one needs the synthesis between ancient dietary knowledge and the contemporary science of nutrition, making sure the trio of elements, health, culture, and sustainability are in balance with one another.

The focal point of all these activities is the idea of sustainable diets, the types of diets which ensure the well-being and good health and also cause minimal environmental pollutions. The sustainable diets do not violate the biodiversity, cultural heritage and food systems in the areas, and hence people and the planet prosper. To accomplish this aim, innovative approaches in the future of sustainable agriculture, food processing, packaging, and distribution are implied. In addition, consumer awareness and policies have a key role to play in changing the global food systems into resilient, equitable, and sustainable ones.

There is further advancement in nutritional health due to innovation. New knowledge in the field of functional foods, microbiome science, and biofortification, as well as personalized nutrition, is informing the context of the diet and human health connection. Nutrition research and dietary assessment are being revolutionized by the use of digital tools and data-driven solutions to provide more specific and inclusive interventions. It is also encouraging that biotechnology, food engineering, and behavioral sciences can be integrated to forming promising avenues of ensuring better nutrition outcomes and reducing environmental footprints around the globe.

The current problem of *Acta Scientific Nutritional Health* features a set of research articles, reviews, and case studies that add to the existing discussion of food safety, nutrition security, and sustainable diets. The contributions demonstrate the interest of the journal in furthering the knowledge in bridging science, policy, and practice. Both articles emphasize the importance of interdisciplinary cooperation, i.e. the cooperation between food scientists, nutritionists, health professionals, policy makers and innovators as a solution to the complex issues of our time.

Following the launch of this new issue, we want to underscore our overall commitment to our mission which is to develop scientific excellence and offer solutions to safe, nutritious and sustainable food solutions. Through innovation and evidence-based practice, we will be able to build sustainable food systems that will feed the people and the planet.

May this issue inspire new ideas, partnerships, and activities that will bring us closer to a healthier and more sustainable future.