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Editorial

Journal of Food, Nutrition and Diet Science: A new bilingual open access journal focusing on global nutrition and dietetics science

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Journal of Food, Nutrition and Diet Science(FNDS) is a new journal launched to promote the development of research in the fields of nutrition, dietetics and health. The journal mainly publishes the basic, public, and clinical nutrition-related studies, including molecular nutrition, nutriomics, public health nutrition, clinical nutrition, precise nutrition, personalized nutrition, nutritional epidemiology, and nutritional immunology, with both human nutrition and animal nutrition in the scope of this journal. Besides nutrition, the journal also publishes studies related to food and dietetics, such as food chemistry, food flavors, food bioactive ingredients, food hydrocolloids, functional food, food processing and preservation, and food safety.

The outbreak of coronavirus disease 2019 (COVID-19) reminds the world that nutritional derangements should be managed in our life. Human should pay more attention to food, nutrition and diets because they provide us nutrition homeostasis, immune homeostasis and intestinal microbial homeostasis. For example, for the patients infected by COVID-19, a large amount of nutrients will be needed to support the proliferation of immune cells and the synthesis of antiviral cytokines while the immune system attempts to fight against SARS-CoV-2. Unfortunately, high fever after the virus infection inhibits the appetite and digestive enzyme activity. Malnutrition will aggravate the symptoms of COVID-19 and increase the effect of proinflammatory cytokines. Energy, protein and the balance of nutrients can be key factors for resistance to the virus and health recovery during spreading of the epidemic.

Delicious diets and healthy life are obviously interesting fields for the public in our modern society, but related knowledge from research is limited and fragmented. Generally, people know that we should reduce sugar, fat and sodium in diets, but what to eat and how to eat are still major questions in science and technology. Currently, the brain-gut axis research uncovers the close relationships among food, diet, gut microbiota and human health. Gut microbiota communicates with the brain through a variety of pathways, including the hypothalamic-pituitary-adrenal axis (HPA axis), immune regulation, tryptophan metabolism, and the production of various neuroactive compounds. It has been found that dietary fiber has a profound impact on human health. High dietary fiber intake can improve the gut microbial ecology and reduce the risk of obesity, inflammatory, bowel disease and many other diseases. Recent studies also showed the ketogenic diets influence health by altering the gut microbiome, especially in children with severe epilepsy. Some studies have shown that gut microbiota plays an important role in regulating anxiety, mood, cognition and pain. Dysregulation of gut microbiota is associated with a variety of inflammatory and autoimmune diseases. It is obvious that maintenance of the intestinal microbial homeostasis becomes more and more important for human

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health. Various microbiota modification approaches, including fecal microbiota transplantation, probiotics, prebiotics, symbiotics, postbiotics, healthy diet, and healthy lifestyle, have shown the ability to promote gut-brain, microbiota-gut-brain axis, and brain function. There are also examples for using gut microbiota to improve brain and mental health, and to prevent or treat related diseases.

The global climate change also challenges our human being to create a sustainable food system as soon as possible. Traditionally, we mainly focus on improving food production. Nowadays food losses and food waste have increasingly drawn the public, academic and political attention. The Food and Agriculture Organization (FAO) has estimated that 14% of the global food produce becomes losses before reaching the retailing stage (FAO, 2019). The United Nations Environment Program (UNEP) also estimated that around 913 million tonnes of food waste was generated in retailing, households and food service in 2019 in its first ever Global Food Waste Index Report 2021 (UNEP, 2021). A sustainable food system should cover food production, food safety control, food losses and waste reduction, and environment protection. Scientists and Governments in different countries are facing thought and action transformations for establishing sustainable food systems. For example, both research and management need to change from focusing on food quantity production to emphasizing quality production, nutrient production and health benefit.

Considering the constraints on arable land and water resources, scientists and governments are attempting to discover more protein alternatives and future foods in order to satisfy the food sustainability and security. Therefore, studies focusing on the nutrition and health aspects of future foods, such as microgreens, fermented foods, microbes and meat analogues, are also welcome for submission. Moreover, "medicinal and edible" plants, such as protein-rich duckweeds and microalgae, can be novel food resources, and studies focusing on their nutrition and health function are also welcome.

For the publication types accepted by FNDS, original research articles, reviews, letters, perspectives, case reports, surveys, and communications in the scope of FNDS are welcome for submission.

Finally, publishing in FNDS has many benefits. To encourage more submissions, FNDS will be free of charge at the first two years of launching. In addition, FNDS will publish your paper in both English and Chinese with open access, therefore, it will greatly promote your paper to be read and cited in the world, which will expand your academic influences.