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Editorial

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Balancing microbial ecosystems within humans and animals to prevent medical conditions

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Medicine claims victory in battling against major infections but medicine is at loss to deliver therapies in the field of chronic noncommunicable diseases.[1,2] About twenty-five percent (25%) of the population is affected. In recent years the field of Nutrition, Food Research & Technology has experienced an enormous increase of interest in the field of microbiology.[3] Since the discovery of penicillin by Alexander Fleming and different antibiotics that all have wide range antimicrobial impact (e.g. tetracyclin or the allergen lysozyme (Egg allergy is one of the most common food allergies in childhood[4]),the microbiological research focus has been on the avoidance of infection (communicable diseases) in animals and humans. Almost all-important bacterial infections are becoming resistant to antibiotics and to revert this phenomenon has become a major challenge for research and development[5] in which the end goal may justify the means of how to get there.[3,6] The World Bank warns that, by 2050, drug-resistant infections could cause global economic damage on a par with the 2008 financial crisis.[7] A drastic reduction in use of antibiotics and smart new strategies to balance microbial growth are key for success and important to advance the modern society.[5,8] There is an important role for Food Technology and Nutrition companies to bring new innovations in the fields of Human health, Wellbeing and Animal Husbandry. To balance the gastro-intestinal Microbiome is an important goal because it has an important involvement in the prevention and treatment of a medical condition.[8] Correlations have been found between the Microbiome in the gastro-intestinal tract and (non) communicable diseases (e.g. inflammatory bowel disease, the metabolic syndrome (obesity, type-2 diabetes), irritable bowel disorder, autism, cancer[1,2] and others). The Microbiome catalyzes biochemical reactions influencing the bioavailability and metabolism of bioactive molecules like nutraceuticals, pharmaceuticals and nutrition. The changes in the microbiome and (dis) favoring the growth of certain microbial species in the gastro-intestinal tract can become effected by food, feed, specialty nutrition, prebiotics, fermentation (products) and probiotics.[8,9] Thus, it is now -maybe more than ever- that there is an important responsibility for R&D to provide unbiased advances in food/feed processing and specialty nutrition that aids in controlling public health. The Journal of Nutrition, Food Research and Technology is an International Peer Reviewed Open Access journal presenting original research contributions and scientific advances in the field of Food and Nutrition. In the field of Open Access journals, JNFRT has the challenging task to be recognized for the efforts that all of its contributors make that leverage the journals impact. We cordially invite all readers to submit high quality research in order to address one of the major challenges of today.

Sincerely Yours,
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