

ALMA MATER STUDIORUM Università di Bologna

FOOD AND HEALTH

Multidisciplinary research and innovation strategy for Healthy Foods and Diets based on innovative sustainable solutions and multi-omics approaches.

The University of Bologna offers a multidisciplinary experience and the required technology for food science and nutrition researches dedicated to healthy dietary strategies, by involving a broad range of professional knowledge and having state-of-the-art equipment. Research at University of Bologna covers a wide range of issues:

- Intervention, observational and epidemiological studies aiming at understanding and preventing diet related diseases (DRDs)
- Studies to evaluate the impact of tailored functional foods on the health status and disease risk in the general population and specific subgroups
- Studies to understand the mechanism of action of bioactive compounds and functional foods by multi-omics approach (e.g., metagenomics and foodomics)
- Studies on gut microbiota and gut functions in humans and model animals to develop foods that contribute to gut health from neonate to old age
- Evaluation of digestibility of food and bioaccessibility and bioavailability of nutrients and bioactive compounds by in vitro and in vivo models
- Identification and development of new microbial strains to improve the nutritional value, safety and sensory properties of food products
- Development of communication and marketing strategies enabling citizens to healthy choices

HIGHLIGHTS

H2020 projects: <u>CIRCLES</u> - Controlling mlcRobiomes CircuLations for bEtter food Systems; <u>MyNewGut</u> - Microbiome Influence on Energy balance and Brain Development-Function Put into Action to Tackle Diet-related Diseases and Behavior. <u>NEUROFAST</u> - The Integrated Neurobiology of Food Intake, Addiction and Stress. Explore the neurobiology of addiction, including dietary components and family-genetic influences. <u>PATHWAY-27</u> - Pivotal Assessment of the Effects of Bioactives on Health and Wellbeing: from Human Genoma to Food Industry. Best practices and guidelines for submitting health claim dossiers to EFSA.

Networks: Chair of the Scientific Advisory boards of <u>CLAN</u> (National Technological Cluster on Agrifood).

Infrastructures: **Genomics Laboratories** equipped with NGS technologies for genomics and microbiome metagenomics; **Metabolomics Laboratories** equipped with high resolution NMR spectrometer and Mass spectrometry; **Bioinformatics Laboratories**; **Nutrition Laboratory** equipped with in vitro digestion system.