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FoodEnTwin: Impact of environment on food quality and safety studied by 'omics methods

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The FoodEnTwin project addresses the major challenge of how environmental pollution affects the food by developing novel tools and approaches to tackle the impact of pollution and environmental oxidative stress at the molecular level resulting in qualitative and quantitative description of modifications in response to external stimuli and in relation to the level of inorganic and organic pollutants, as well as selected microbial hazards(microorganisms and their toxins) towards global profiling of PTMs of proteins, allergens, lipids in food, raw agricultural materials and air-born health hazards.

Through twinning activities an European research network among University of Belgrade – Faculty of Chemistry (UBFC) and its research Center of Research Excellence for Molecular Food Sciences (CoE MFS) and four high renowned institutes from Sweden (KI), Austria (MUW) and Belgium (KULeuven and GentU), together with proteomic and food science experts will be created providing better technology innovation capacity to enable frontier research at the crossroad of food, agriculture, chemistry, nutrition and environmental sciences by the infusion of –omics technologies (proteomics, lipidomics, transcriptomics, allergomics and metallomics) and experimental animal models.

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