Context

Youth obesity is a strong predictor of adult obesity, which has well-known negative health and economic consequences. Thus, addressing adult obesity needs tackling youth obesity. MED4Youth main objective is to strengthen the link between the Mediterranean Diet (MD) and the health benefits against youth obesity and associated cardiovascular disease (CVD) risk factors, identifying the positive effects exerted by an energy-restricted MD including healthy products from the Mediterranean basin (hummus, mixed nuts and pomegranate) and sourdough bread. Secondary objective is to elucidate whether the health effects of MD are associated with changes in gut microbiota and gut-derived metabolites to shed light on the interplay between MD, gut microbiome, metabolome and youth obesity.

Objectives

The novelty of MED4Youth project relies on, firstly, a multicentre clinical and MD-based study (4 months) including ICT educational tools specifically targeting 240 obese adolescents (13-16y) from different Mediterranean countries (Spain, Portugal and Italy); and secondly, on the application of omics technologies and a system biology approach, to elucidate whether the MD can shape the gut microbiota and gut-derived metabolites and unravel in the mechanisms by which MD exert its beneficial effects against youth obesity and CVD risk factors.

Expected Impacts

MED4Youth will contribute to valorise MD products, especially scarcely consumed foods items in European Mediterranean developed countries (sourdough bread, hummus and pomegranate), promoting their consumption in the overall population, especially in adolescents and pave the way for a high, long-term demand of these products, fostering the competitive-