

Title: A multidimensional assessment for tackling malnutrition in inflammatory bowel disease: IBD-onfoods

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Research field: Gastroenterology, Malnutrition, Mucosal immunology

Background: Inflammatory bowel disease (IBD) is an immune-mediated, multifactorial, chronic, and disabling disorder which includes Crohn's disease (CD), that may affect any part of the gastrointestinal tract, and ulcerative colitis (UC), that affects the colon. IBD is a common disease with an estimated incidence of UC at 24.3/100000 and CD at 12.7/100000 person years in Europe. Among factors that may affect the response to treatments, the nutritional status, along with malnutrition, may play a major role. Little is known regarding its pathogenesis and a reliable tool for predicting response to treatments, in relation to the nutritional status and disease phenotype, is not available. In fact, while some patients may experience long periods of remission, others may experience an aggressive course. The nutritional status in these patients, at different ages (i.e., transitional age, adulthood, elderly) may have a different impact in determining the outcomes.

Project description: At least 150 consecutive active IBD patients will be enrolled, stratifying them into three age categories, namely the transitional age (i.e., 12 to 18 years), adults (18-65 years), and elderly (>65 years). Patients will be included in the study only if these criteria are fulfilled: a) written informed consent; b) >12 years of age; c) confirmed diagnosis of IBD according to international guidelines. Patients will be excluded from the study in case of: a) Inability to conform to the protocol; b) Any subject not able to express/understand the informed consent; c) inconclusive diagnosis of IBD. Disease activity will be assessed with serum and faecal biomarkers, clinical indexes, endoscopy (ileo-colonoscopy with biopsies), and bowel abdominal ultrasound. Morphogram Pro, bioimpedentiometry, Mass-Q gastropack I permeability test, and microbiota sequencing will be assessed at the time of disease flare and 3 months after stable remission, along with clinical indexes and bowel abdominal ultrasound. The time needed to achieve remission will be assessed, stratifying according to clinical features, malnutrition, gut microbiota, and immunological mucosal factors.

Techniques: bioimpedanzometry, gut microbiota analysis, quantification of mucosal cytokines, detection and quantification of lamina propria mononuclear cells

