# DIETARY THERAPIES FOR FUNCTIONAL GASTROINTESTINAL DISEASES

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## Background

Functional gastrointestinal disorders (FGIDs) are characterized by chronic/recurrent gastrointestinal symptoms not related to organic disorders. Due to the limited treatment options and to the perception of subjects with FGIDs of suffering from a food intolerance, dietary management has become an important tool in the treatment of FGIDs. The mechanisms by which food can cause GI symptoms are various, including immune system stimulation and activation of intestinal mechanoreceptors. Moreover, a role of diet has been hypothesized, since nutrients can interfere with GI motility, sensitivity, barrier function, and gut microbiota bringing to an atypical modulatory mechanism in the gut. In the last years, more interest has been focused in the low FODMAP diet, which comprehensively lowers the intake of several fermentable carbohydrates (oligosaccharides, disaccharides, monosaccharides, and polyol).

#### Main achievements

AS, is a worldwide, well-renowned expert of Pediatric Functional Gastrointestinal Disorders. She has been author of the Rome II, III and IV criteria for the definitions and diagnosis of FGIDs. She has been chair of the Motility Working Group of the ESPGHAN and she is currently one of the most active members.

The research group has published several papers on the pathogenesis, the epidemiology and therapeutic management of FGIDs. We recently coordinated a multi-center international study that evaluated the prevalence of FGIDs in the



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Mediterranean region of Europe, enrolling more than 13.000 children and adolescents from 9 different countries. The results of the study have been published in 2 different publications on JPGN and Clinical Gastroenterology and Hepatology. The attention to the possible dietary modifications in FGIDs has recently brought to the publication of 2 different systematic reviews on the role of gluten sensitivity and FODMAP diet.

### Future perspectives

Currently, the research group is conducting an international multi-center study to evaluate whether the prevalence of FGIDs is influenced from the content of FODMAP in the diet and if there is any other specific dietary factor that could explain the differences in the diagnosis of FGIDs in the Mediterranean area. The study has been awarded with 2018 ESPGHAN Networking grant and the results will certainly shed new light on the role of possible dietary modifications in the management of FGIDs.

## Publications

- 1. Russo M, Strisciuglio C, Scarpato E, Bruzzese D, Casertano M, Staiano A. Functional Chronic Constipation: Rome III Criteria Versus Rome IV Criteria. J Neurogastroenterol Motil. 2019; 25:123-128.
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- 12. Buonavolontà R, Coccorullo P, Turco R, Boccia G, Greco L, Staiano A. Familial aggregation in children affected by functional gastrointestinal disorders. J Pediatr Gastroenterol Nutr. 2010; 50:500-5.

#### **External collaborations**

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