

Food-related gastrointestinal symptoms, nutrient intake and dietary interventions in patients with irritable bowel syndrome

AKADEMISK AVHANDLING

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av

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Fakultetsopponent:

Professor Arnold Berstad

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Avhandlingen baseras på följande arbeten:

- I. Böhn L, Störsrud S, Simrén M.
Nutrient intake in patients with irritable bowel syndrome compared with the general population.
Neurogastroenterol Motil. 2013;25:23–e1.
- II. Böhn L, Störsrud S, Törnblom H, Bengtsson U, Simrén M.
Self-reported food-related gastrointestinal symptoms in IBS are common and associated with more severe symptoms and reduced quality of life.
Am J Gastroenterol. 2013;108(5): 634-641.
- III. Böhn L, Störsrud S, Törnblom H, Van Oudenhove L, Simrén M.
A randomized double-blind placebo-controlled study: Effects of the enzyme alpha-Galactosidase on gastrointestinal symptoms in IBS patients.
Submitted for publication.
- IV. Böhn L, Störsrud S, Liljebo T, Collin L, Lindfors P, Törnblom H, Simrén M.
A randomized, controlled trial comparing a diet low in FODMAPs with traditional dietary advice in patients with IBS.
Submitted for publication.



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ABSTRACT

Food is a recurrent problem in irritable bowel syndrome (IBS) and it is common to exclude foods, which could lead to a reduced nutrient intake. Perceived food intolerance is very common in IBS, but if specific or more generalized food intolerance is the problem is unknown. Incompletely absorbed carbohydrates (fermentable oligo-, di-, mono-saccharides and polyols, FODMAPs) can trigger gastrointestinal (GI) symptoms, but if an enzyme (α -galactosidase), capable of digesting oligosaccharides, is able to relieve meal-related symptoms, or if a diet low in FODMAPs is more efficient in reducing symptoms than traditional dietary advice is not known.

Methods: Paper 1: The nutrient intake (from food diaries) in IBS patients was compared with a sex-and-age matched population from a Swedish national dietary survey. Paper 2: IBS patients completed questionnaires to assess self-reported food intolerance and the association with other clinical and demographic variables. Paper 3: In a randomized, double-blind, placebo-controlled, crossover trial; the effect of α -galactosidase on GI symptoms in IBS patients after carbohydrate-rich meals was investigated. Paper 4: In a randomized, single-blind, parallel group, four-week trial the effect on IBS symptoms of a low FODMAPs diet was compared with traditional dietary advice in IBS.

Main results: The nutrient intake in IBS patients was similar to the Swedish general population. Eighty-four percent of IBS patients reported food-related GI symptoms, especially after intake of foods rich in incompletely absorbed carbohydrates and fat. Self-reported food intolerance was associated with more severe IBS symptoms and reduced quality of life. α -galactosidase was not superior to placebo in reducing GI symptoms after carbohydrate-rich meals in IBS patients. Fifty percent in the low FODMAPs group responded favorably to the dietary intervention (reduced GI symptoms), and 46 % were responders in the group who received traditional dietary advice.

Conclusions: Despite a high degree of self-reported food intolerance in IBS, the majority of these patients seem to have adequate nutrient intake. A low FODMAPs diet and traditional IBS dietary advice, but not α -galactosidase capsules, reduce symptom burden in patients with IBS.

Keywords: irritable bowel syndrome, gastrointestinal symptoms, diet

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