

Study first to report benefits and safety of FODMAP diet in children

September 24 2019



Credit: CC0 Public Domain

The low FODMAP diet, a diet low in carbohydrates that trigger digestive symptoms like bloating and stomach pain, is a useful treatment in children and adolescents with gastrointestinal problems, new University

of Otago research confirms.

The Otago research involved a clinical review of 29 children from Christchurch Public Hospital aged between 4 and 17 who were following the low FODMAP diet under the guidance of specialists.

Complete resolution of gastrointestinal symptoms was observed in 92 percent of the children with bloating, 87 percent of those with diarrhea and 77 percent of those with abdominal pain.

Lead author of the review, Professor Andrew Day from the University of Otago, Christchurch, explains that while the low FODMAP diet is well established as a safe and effective dietary strategy to alleviate bowel symptoms in adults, there is currently little data examining the benefits and safety of dietary interventions that restrict carbohydrates in children with bowel disorders.

"To our knowledge the present study is the only one to report efficacy and safety data for the low FODMAP diet in children with functional bowel disorders in a real-world setting," Professor Day, a pediatric gastroenterologist, says.

Given the increase in the number of children worldwide suffering from some form of functional bowel disorders, Professor Day says studies are required to determine the efficacy and safety of the diet in children.

"This study showed that more than 50 percent of children with a bowel disorder who complete the FODMAP restriction and reintroduction process will have complete resolution of symptoms, particularly those with lower GI (gastrointestinal) symptoms."

The results are similar to those previously reported in adults. The diet appears to be more beneficial for participants with symptoms of

flatulence, diarrhea, abdominal pain and distention.

In the study, most participants reported a "substantial improvement" of their symptoms with those with abdominal bloating having the highest rate of improvement, followed by those with abdominal pain.

Fructans were the most common intolerance (67 percent), followed by [lactose](#) (56 percent), polyols (7 percent), fructose (7 percent) and galactose oligosaccharides (7 percent). Six children (24 percent) specifically identified that apples (fructose and sorbitol) triggered symptoms.

Professor Day says further studies are needed in children to better understand factors such as the impacts on growth and the gut microbiome and the consequences of long-term dietary restriction.

The research was recently published in the science journal, JGH Open:

About FODMAP

FODMAP stands for Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols. They are found in a wide range of foods in varying amounts. Some foods contain just one type, while others contain several.

The main dietary sources of the four groups of FODMAPS include:

- Oligosaccharides: Wheat, rye, legumes and various fruits and vegetables, such as garlic and onions.
- Disaccharides: Milk, yoghurt and soft cheese. Lactose is the main carb.
- Monosaccharides: Various fruits including figs and mangoes and

sweeteners such as honey and agave nectar. Fructose is the main carb.

- Polyols: Certain fruits and vegetables including blackberries and lychee, as well as some low-calorie sweeteners like those in sugar-free gum.

More information: Stephanie C Brown et al. Low FODMAP diet in children and adolescents with functional bowel disorder: A clinical case note review, *JGH Open* (2019). [DOI: 10.1002/jgh3.12231](https://doi.org/10.1002/jgh3.12231)

Provided by University of Otago

Citation: Study first to report benefits and safety of FODMAP diet in children (2019, September 24) retrieved 24 April 2024 from <https://medicalxpress.com/news/2019-09-benefits-safety-fodmap-diet-children.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.