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Good Gut Family Go-To™

As a registered dietitian nutritionist, with expertise in gut health and prebiotic fiber, it is important to share some key facts about proven prebiotics like inulin. I hope you find these helpful.

Gut Check-Quick facts about Inulin

- Inulin is a prebiotic fiber that is naturally extracted from chicory root through hot water processing and can easily be added to different food, beverage and supplement formulations.
- Inulin is one of the most well-studied prebiotic dietary fibers on the market. It is referred to as a ***"proven prebiotic"*** because a vast amount of human clinical evidence exists, to support inulin as a prebiotic dietary fiber that can help support gut health, weight management, mood and more.
- Since inulin is a prebiotic, it is selectively fermented by beneficial bacteria, leading to the production of short-chain fatty acids (SCFAs). SCFAs acidify the gut environment and stimulate motility, while increased bacterial growth contributes to greater fecal bulk, both supporting normal gut function.
- Many factors influence digestive tolerance because everyone is built differently. Your habitual diet and daily fiber intake, individual gut microbiota composition, psychological factors like stress and other health conditions can play a role in how you tolerate inulin.
- If your gut reacts to inulin with symptoms like bloating, gas, etc. just remember that it is a natural process and a signal to the prebiotic working in your gut. Inulin is unique and selectively stimulates beneficial bacteria and positive metabolites like SCFA. So don't be alarmed with any occasional symptoms, allow your gut time to acclimatize to inulin. A quick tip to help you acclimate to inulin, is to

start with a lower dosage of inulin in your daily diet (1-3 g/day) and increase slowly.

- Contrary to popular belief, inulin is well tolerated with a clinical study supporting that even those individuals with digestive hypersensitivities can tolerate inulin at doses of 8 grams per day[2].
- Low FODMAP diets are intended for those individuals who suffer from IBS and can be somewhat restrictive if followed over a longer period of time. Fructans, like inulin, are not always the culprit of digestive symptoms with clinical studies showing that lactose and fructose may be more concerning.
- Chicory root fibers like inulin offer several health benefits within a well-tolerated range. Just 3 grams per day can have a prebiotic effect, but the range of 3-12 g/day can offer benefits for digestive health, increased calcium absorption, mood and weight management.

Are you looking for Scientific Articles to Use in Media?

Here is a useful list by topic area:

Inulin and Weight Management

Reimer R.A., Theis S, Zanzer Y.C. The effects of chicory inulin-type fructans supplementation on weight management outcomes: a systematic review, meta-analysis, and meta-regression of randomized controlled trials. *Am J Clin Nutr* 2024; 120(5): 1245-1258.

Inulin and Bowel Function

Nagy D.U., et al. Effect of chicory-derived inulin-type fructans on abundance of Bifidobacterium and on bowel function: a systematic review with meta-analyses. *Crit Rev Food Sci Nutr* 2023; 63(33): 12018-12035.

Inulin and G.I. Tolerance & FODMAP Research

Azpiroz F, et al. Effect of Chicory-derived inulin on Abdominal Sensations and Bowel Motor Function. *J Clin Gastroenterol* 2017; 51(7): 619-625.

Bohn L, et al. Diet low in FODMAPs reduces symptoms of IBS as well as traditional dietary advice: a randomized controlled trial. *Gastroenterology* 2015; 149(6): 1399-1407. Doi: 10.1053/j.gastro.2015.07.054.

Commented [TB1]: @Colindres, Denisse : Additional references: Nybacka et al. 2021 and Zanzer and Theis 2024 - added below
They make the actual link between symptoms and the FODMAPs fructose and lactose

Zahedi M.J., Behrouz V, Azimi M. Low fermentable oligo=di-mono-saccharides and polyols diet versus general dietary advice in patients with diarrhea-predominant IBS: A randomized controlled trial. *J Gastroenterol Hepatol* 2018; 33(6): 1192-1199. Doi: 10.1111/jghh.14051.

Harvie.R.M. et al. Long-term IBS symptom control with reintroduction of selected FODMAPs. *World Journal of Gastroenterology* 2017; 23(25): 4632-4643.

Staudacher H.M., et al. Fermentable carbohydrate restriction reduces luminal bifidobacteria and G.I. symptoms in patients with IBS. *J Nutr* 2012; 142(8): 1510-8. Doi: 10.3945/jn.112.159285.

Halmos E.P., Power V.A., Shepherd S.J., Gibson P.R., Muir J.G. A diet low in FODMAPs reduces symptoms of IBS. *Gastroenterology* 2014; 146(1): 67-75.e5. doi: 10.1053/j.gastro.2013.09.046.

Nybacka, S., Störsrud, S., Lindqvist, H.M., Törnblom, H., Simrén, M., Winkvist, A. Habitual FODMAP Intake in Relation to Symptom Severity and Pattern in Patients with Irritable Bowel Syndrome. In: *Nutrients* 2021; 13(1). doi: 10.3390/nu13010027.

Zanzer, Y., Theis, S. Systematic review and meta-analysis of habitual intake of fermentable oligo-, di-, mono- saccharides and polyols in the general population and revisiting the low FODMAP diet concept. In: *Journal of Functional Foods* 2024; 112, 105914. doi: 10.1016/j.jff.2023.105914.