

“Antibiotics will fix my symptoms”

- **Rifaximin** is advocated in guidelines as second line for **IBS with diarrhoea**

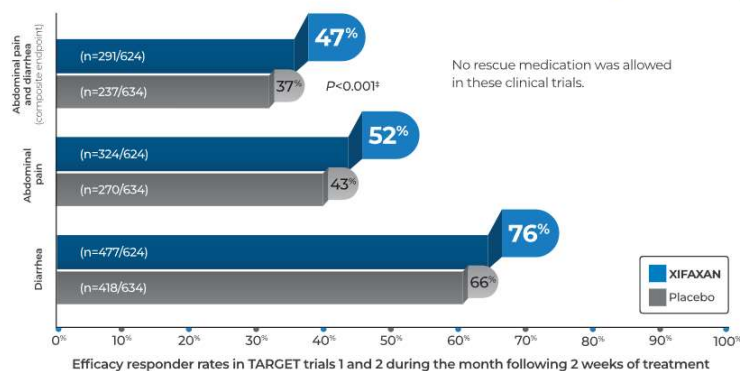
- ▶ The non-absorbable antibiotic rifaximin is an efficacious second-line drug for IBS with diarrhoea in secondary care, although its effect on abdominal pain is limited. The drug is licensed for IBS with diarrhoea in the USA but is not available for this indication in many countries (recommendation: weak, quality of evidence: moderate).

- No serious adverse events (nausea 2.8%, deranged LFTs 1.3%)

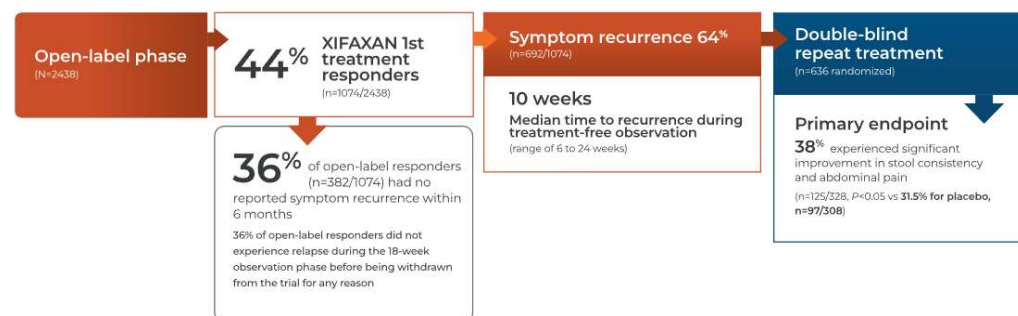
- **Not funded** for IBS in NZ (Est \$625 for a 14-day course)

2 weeks of XIFAXAN provided significant relief of abdominal pain and diarrhea^{1,2,*}

Percentage of composite efficacy responders[†] in TARGET 1 and 2 during the month following 2 weeks of treatment (pooled analysis)



Efficacy and safety evaluation of TARGET 3: an extended retreatment trial^{1,7}

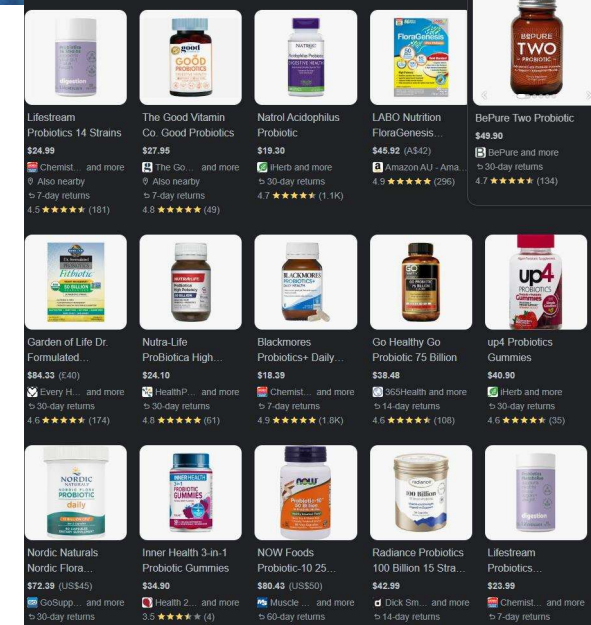
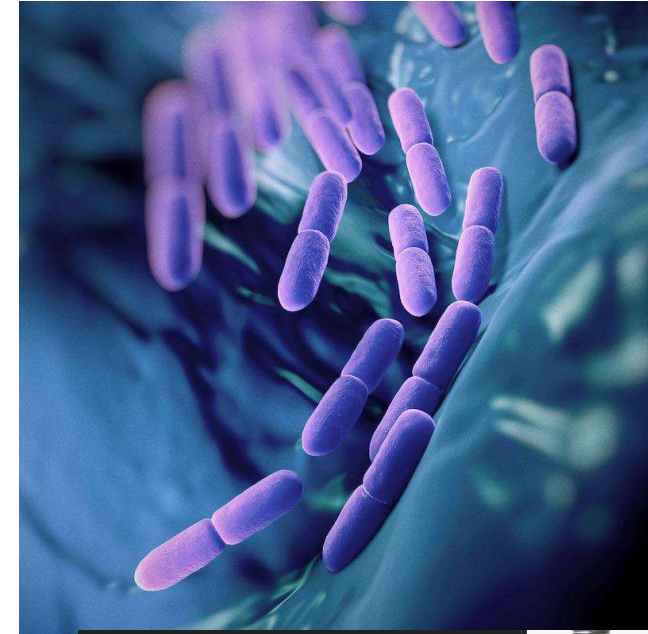


“Probiotics are a cure-all for IBS”

- GI infections increase the risk of IBS x6
- Dysbiosis demonstrated in IBS
- Meta-analysis show overall benefit NNT 7
 - Pain, bloating and global IBS symptoms
- American guidelines do not recommend probiotics due to small heterogenous studies/strains, lack of vigorous end-points

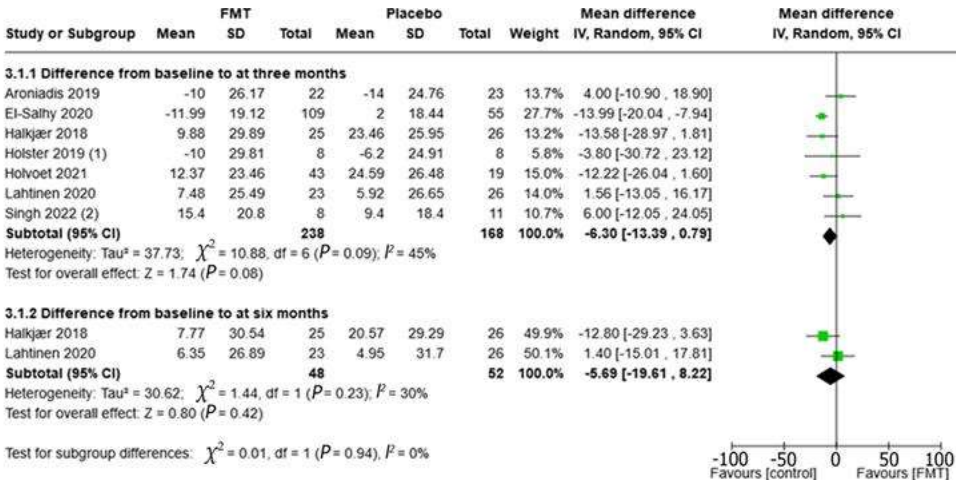
- ▶ Probiotics, as a group, may be an effective treatment for global symptoms and abdominal pain in IBS, but it is not possible to recommend a specific species or strain. It is reasonable to advise patients wishing to try probiotics to take them for up to 12 weeks, and to discontinue them if there is no improvement in symptoms (recommendation: weak, quality of evidence: very low).

- **Which individual species & strains remain unclear**
- **Which commercial product? Does yoghurt help?**



“Faecal microbiota transplant (FMT) can cure IBS”

- FMT show inconsistent efficacy in IBS
 - 8x RCTs (n=484)
 - No significant benefit in IBS symptoms at 3 months
 - FMT reduced the quality of life in some participants



- Reserved for refractory cases in research settings

We recommend against the use of fecal transplant for the treatment of global IBS symptoms.

Strong recommendation; very low quality of evidence.

Halkjaer et al – World J Gastroenterol 2023



“IBS is caused by food allergies or intolerances that can be identified from testing”

- Half of IBS patients report adverse reactions to food
- IBS patients are no more likely to have food allergies
- Immunological testing (IgE, IgG, skin prick) do not guide treatment and is inaccurate

We do not recommend testing for food allergies and food sensitivities in all patients with IBS unless there are reproducible symptoms concerning for a food allergy.

Consensus recommendation; unable to assess using GRADE methodology.

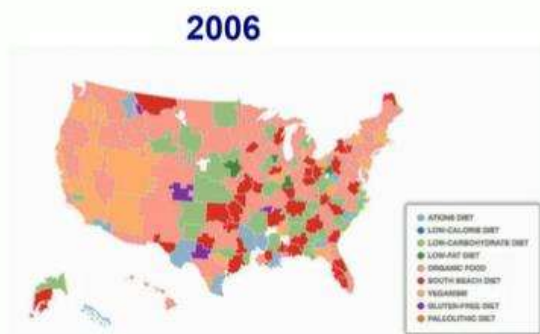
- Other tests lacking scientific support
 - Hair analysis (to detect food allergies)
 - Electrodermal testing
 - Applied Kinesiology
 - Alcat test



Cuomo et al – World J Gastroenterol 2014
Hayes et al – Clin Gastroenterol Hepatol 2010

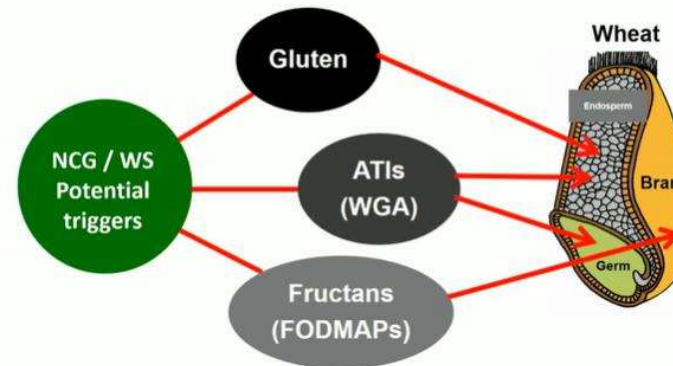
“A gluten-free diet will cure IBS”

Dietary shift over



Non-celiac gluten / wheat sensitivity (NCG/WS): A ‘mixed bag’ with many potential culprits...

...wheat contains gluten and non-gluten proteins as well as FODMAPs...



Volta U & De Giorgio R., *Exp Rev Gastroenterol Hepatol* 2017, 11:9-18

	Celiac disease	Non celiac gluten sensitivity	Wheat allergy
Prevalence	0,5-1% of population; it has been duplicated in the last 20 years	There are no population studies. 20-40% of patients with irritable bowel syndrome	0,5-9% in children
Pathogenia	Autoimmune. Acquired immunity. Gastrointestinal and systemic inflammatory reaction.	Innate immune response	Type I and IV hypersensitivity (type I reactions are better characterized)
Most frequent gastrointestinal symptoms	Abdominal pain Constipation or chronic diarrhea Abdominal distension Vomits	Abdominal pain Chronic diarrhea Abdominal distension	Vomits, diarrhea immediately after wheat ingestion
Extra-digestive symptoms	Ferropenic anemia refractory to supplementation Tiredness Herpetiform dermatitis Weight lost Aftoid ulcers Short stature Delayed puberty Infertility Repetitive spontaneous abortion Increased transaminases Headaches Cerebelar ataxia Idiopathic Epilepsia Periferic neuropathy Depression, anxiety	Tiredness Eczema Headaches Blurred vision Depression Anemia Paresthesias Arthralgias	Exercise induced anaphylaxis. Atopic dermatitis. Urticaria. Chronic asthma and rinitis.
Serological markers	anti-tTG IgA anti- Endomisium IgA IgG anti-DGP	anti-gliadin IgA/IgG (AGA)	Wheat specific IgE or prick test
Duodenal biopsy	Necessary for confirmation* Villous atrophy can be observed	Necessary for CD exclusion	It is not necessary

*ESPGHAN suggest that duodenal biopsies are not necessary for CD confirmation in symptomatic patients, with anti-tTG IgA > 10 times the upper normal limit, positive EMA and DQ2/DQ8 HLA.

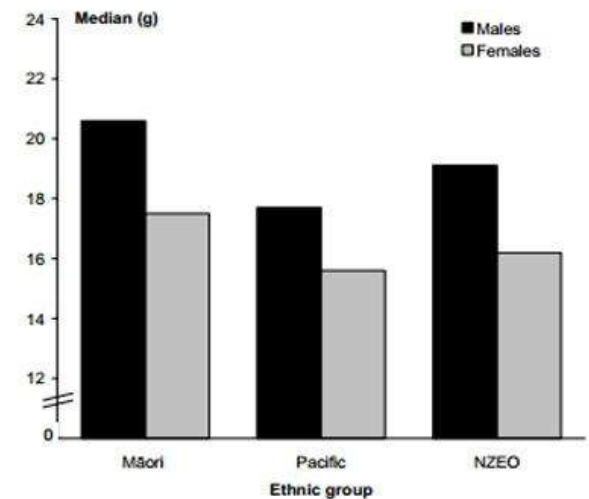
- Non-coeliac gluten wheat sensitivity NGWS: **gastrointestinal/extra-intestinal symptoms** following **consumption of gluten-containing foods** in individuals **without coeliac disease or IgE mediated wheat allergy**
- Up to half fulfil Rome criteria for DGBI(e.g. IBS, functional dyspepsia)
- Double-blind wheat challenge testing in self reported NCGWS
 - <1/5 has sensitivity to wheat
 - 2/5 respond to placebo – non-gluten physiological reaction
 - Many NCGS improve on wheat exclude actually from fructan (FODMAP) intolerance
 - **Complete GFD not healthier and NOT required unless Coeliac disease!**

“Everyone with IBS needs to avoid fibre”

- Dietary fibre intake in NZ falls short of recommended levels (25-30g/day)
- Food contains soluble and insoluble fibre
 - **High soluble fibre is best:** e.g. Oat bran, barley, legumes, chia seeds, apples, bananas, broccoli
 - **Reduce insoluble fibre:** wheat bran, whole wheat breakfast cereals and bread, brown rice, Nuts, seeds
- **Soluble fibre supplements:** Metamucil, Konsyl-D, Bonvit, Mucilax (Psyllium husk powder), Normacol (Sterculia)
- Titrate up, and drink plenty of water
- Can help with both constipation and diarrhoea

► Soluble fibre, such as ispaghula, is an effective treatment for global symptoms and abdominal pain in IBS, but insoluble fibre (eg, wheat bran) should be avoided as it may exacerbate symptoms. Soluble fibre should be commenced at a low dose (3–4 g/day) and built up gradually to avoid bloating (recommendation: strong; quality of evidence: moderate).

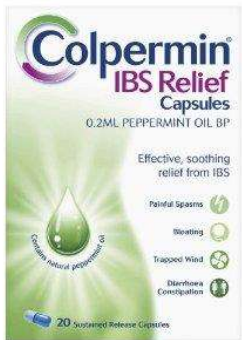
Graph 1: Median dietary fibre intake



Source: Ministry of Health 2003

“Natural remedies (e.g., apple cider vinegar, essential oils) cure IBS”

- **Peppermint formulations** over the counter \$23 for 60 capsules.
- Colpermin or Mintec, enteric coated release in colon.
- Helps pain, bloating and global IBS symptoms
- May cause reflux symptoms
- ▶ Peppermint oil may be an effective treatment for global symptoms and abdominal pain in IBS. Gastro-oesophageal reflux is a common side effect (recommendation: weak, quality of evidence: very low).



Global IBS symptoms at 4-12 weeks
Peppermint oil >TCA > antispasmodic drugs

IBS pain at 4-12 weeks
TCA > antispasmodic drugs > peppermint oil

Black et al – Lancet 2019

