

CHARACTERISTICS OF FIBRES TYPES, INCLUDING FOOD AND SUPPLEMENT SOURCES, AND EFFECTS IN IBS

Fiber Type	Food sources	Fibre supplements	Effects in IBS
SOLUBLE			
Highly fermentable (oligos) e.g. FOS, GOS	<ul style="list-style-type: none"> • Vegetables (Onion, garlic, artichoke) • Grains (wheat, rye, pulses) 	<ul style="list-style-type: none"> • FOS 	<ul style="list-style-type: none"> • ↑ growth beneficial bacteria • ↑ SCFA production <p>But, rapidly fermented, so may cause gas, bloating, distension and pain</p>
Highly fermentable 'fibre' (e.g. RS, pectin, inulin)	<ul style="list-style-type: none"> • Vegetables (Cooked and cooled potato & corn) • Fruit (passionfruit, avocado, citrus, canteloupe, jams, strawberries, kiwifruit, firm bananas) • Grains (millet, cooked and cooled rice, pasta (spelt), bread (gluten free, fibre-enriched white bread), Konjac noodles/pasta) • Pulses (canned chickpeas and lentils), tofu, tempeh 	<ul style="list-style-type: none"> • Inulin (Fibresure) • Resistant starch (Hi Maize) • Wheat dextrin (Benefibre) • Partially hydrolysed guar gum (Sunfiber) 	<ul style="list-style-type: none"> • RS slowly fermented, so may cause less distension, pain & bloating than FODMAPs • Guar gum, pectin, wheat dextrin, PHGG have gel-forming properties • May increase overall bacterial species • May increase SCFA production <p>But, rapid fermentation may cause gas, flatus and GI symptoms in IBS. No well-designed studies in IBS</p>
INTERMEDIATE SOLUBLE			
Moderately fermentable fibre	<ul style="list-style-type: none"> • Grains (oats, psyllium husks) 	<ul style="list-style-type: none"> • Psyllium husk (Metamucil Original) • Plantago ovata seeds, ispaghula husks (Agiofibre) • Unprocessed oat bran 	<ul style="list-style-type: none"> • ↑ bacterial mass → stool bulking • Gel-forming properties • Improved laxation <p>But, may cause gas/flatus</p>
INSOLUBLE			
Moderately – highly fermentable	<ul style="list-style-type: none"> • Vegetables (Corn, eggplant, green beans, broccoli, spinach) • Fruit (grapes, strawberries, raspberries, pineapple, blueberries, currants, raisins) • Bread (gluten free multigrain, wholemeal) • Grains (puffed amaranth, brown rice, burghal, buckwheat kernel, quinoa) • Seeds (Flaxseed) 	<ul style="list-style-type: none"> • Unprocessed wheat / rice/oat bran • Linseed / flaxseed 	<ul style="list-style-type: none"> • Slowly fermented • Promotes laxation • ↑ overall bacterial species • ↑ SCFA production <p>But, wheat bran may cause excessive gas, wind & bloating – possibly due to fructans in bran</p>
Non-fermentable	<ul style="list-style-type: none"> • Vegetables (celery, stalks of green leafy vegetables) • Fruits (rhubarb, skins of fruits) • Nuts (peanuts, almonds, walnuts) • Seeds (chia, pumpkin, sesame) 	<ul style="list-style-type: none"> • Methylcellulose (Citrucel) • Sterculia (Normafibe) 	<ul style="list-style-type: none"> • Stool bulking (cellulose) • Gel-forming properties (methylcellulose and sterculia) <p>But, most suited to IBS-C</p>

