YIN SHI

Digestive disorders

Irritable bowel syndrome

Professional dietetics sheet

A functional disorder with three clinical subtypes: diarrhoea, constipation, alternation. The best documented dietary lever remains the quality and solubility of fibre, far ahead of any prolonged exclusion diet.

UNDERSTANDING THE CONDITION

Irritable bowel syndrome

Irritable bowel syndrome (IBS) is a functional disorder of the gut-brain interaction: recurrent abdominal pain or discomfort, bloating and disturbed transit, without organic lesion on investigation. Diagnosis rests on the Rome IV criteria and exclusion of differential diagnoses (coeliac disease, IBD, lactase deficiency). Three dominant subtypes guide dietary management.

SUGGESTIVE SIGNS

- Abdominal pain relieved or altered by defecation, at least one day a week for three months
- Bloating, distension, borborygmi, post-prandial discomfort
- Disturbed transit: diarrhoea, constipation or alternation of both
- Urgency to defecate, sensation of incomplete evacuation
- Symptoms modulated by stress, meals and sleep
- Absence of alarm signs: no blood, no weight loss, no fever

THE FAVOURABLE TERRAIN

The typical terrain combines visceral hypersensitivity and dysregulated motility, often on a background of chronic stress, prior enteritis (post-infectious IBS, up to 10% of gastroenteritis cases), irregular meals and a diet rich in ultra-processed products. Dysbiosis is documented without yet being a diagnostic tool. The NutriNet-Santé cohort showed an association between ultra-processed food consumption and IBS prevalence (Schnabel et al., Am J Gastroenterol, 2018).

THE PROFILES

One plan per subtype

Subtype classification is not administrative fussiness: it determines the fibre strategy, the meal timetable and the priorities for elimination. The same patient can slide from one subtype to another; the plan must be reassessed at every consultation.

SUBTYPE	DISTINCTIVE SIGNS	QUICK SIGNAL
IBS-D: diarrhoea-predominant	Loose or liquid stools more than a quarter of the time, post-prandial urgency, often worse in the morning	***the urgency that follows the meal***
IBS-C: constipation-predominant	Hard or rare stools, straining, sensation of a full balloon without emptying	***bloated but nothing comes out***
IBS-M: diarrhoea-constipation alternation	Alternation of diarrhoea and constipation phases, strong variability with stress and meals	***one day it flows, the next it is blocked***

Unclassified IBS (IBS-U) groups patients clearly meeting no subtype: treat the dominant symptom of the moment and reassess. Post-infectious IBS follows documented enteritis (up to 10% of cases): it responds to the same framework, with frequent spontaneous remission within 5 years. A frequent comorbidity that changes everything: lactose intolerance, to be screened by elimination-test before attributing symptoms to IBS.

1 IBS-D: diarrhoea-predominant · *the most common subtype in men*

The profile of accelerated motility: the gastrocolic reflex is exaggerated and the bolus has no time to be conditioned. The goal is to soothe motility without creating a blockage: soluble fibre in small regular amounts, digestible starches, removal of transit accelerators.

FOOD	WHY	PRACTICAL ADVICE
Rice	Highly digestible starch, documented moderating effect on stool consistency	*Well-cooked white rice or rice porridge at crisis meals*
Carrot	Soluble pectin with good tolerance, structures the intestinal content	*Melted cooked, purée or soup, 1 portion per meal*
Banana	Pectin + resistant starch early in ripening, provides potassium	*Ripe (spotty), 1 per day, never green*
Quince	Very rich in pectin and mild tannins, the traditional fruit for loose stools	*Cooked only: compote, paste or roasted*
Pumpkin	Very well-tolerated soft fibres, high water content	*Soup or purée, 200 g per portion*
Yam	Mucilaginous starch: coats the digestive tube without jostling it	*Boiled or puréed, alternative to potato*
Millet	Gluten-free cereal with moderate fibre, good tolerance in reasonable portions	*As a creamy porridge in the morning*
Chicken	Lean protein, barely fermentable, no irritating residue	*Poached or braised, skin removed*
Trout	Protein + omega-3, excellent digestibility	*In papillote or gentle steaming*
Job's Tears	Traditional seed of digestive gruels, mild starch	*In a long-simmered congee*

TO LIMIT	REASON
Coffee	Speeds up colonic motility in a dose-dependent way: test stopping for 2 weeks
Wheat bran and raw insoluble fibre	The 2021 ACG guideline recommends soluble fibre and advises against insoluble fibre in IBS
Large amounts of raw vegetables	Hard fibres + osmosis: mechanically aggravate the rapid transit
Fizzy drinks and soft drinks	Fructose + gas: double osmotic and mechanical aggression
Raw onion, garlic and shallot	Concentrated fructans, high FODMAPs: among the first suspects in elimination
Fried foods and very fatty dishes	Fats trigger the exaggerated gastrocolic reflex

GOLDEN RULE

Small regular meals beat three heavy sittings: gastric volume commands colonic motility.

WHAT THE RESEARCH SAYS

Soluble fibres (psyllium first) are the only ones recommended by the ACG guideline (Am J Gastroenterol, 2021); in Bijkerk's randomised trial, psyllium 10 g/day significantly improved global symptoms (BMJ, 2009). Enteric-coated peppermint oil reduces pain in meta-analyses (Ingrosso et al., Aliment Pharmacol Ther, 2022). A gluten-free trial showed benefit in non-coeliac IBS-D (Vazquez-Roque et al., Gastroenterology, 2013), to be read as much a fructan effect as a gluten one.

2 IBS-C: constipation-predominant · *the most common subtype in women*

The profile of sluggish motility and bolus dehydration: content stagnates and dries out. The goal is to restart transit with hydrated soluble fibres and gentle osmolytes, never forcing the dose to the point of swelling further. Water is a full nutrient here.

FOOD	WHY	PRACTICAL ADVICE
Kiwi	2023 randomised trial: 2 kiwis a day improve stool frequency and consistency in chronic constipation	*2 green kiwis per day, at breakfast*
Chia Seeds	Soluble mucilage that holds water in the bolus: the kitchen's psyllium	*1 tbsp soaked 15 min in water or yoghurt, in the morning*
Papaya	Papain + soft fibres, well-tolerated natural osmolyte	*1/2 ripe papaya as dessert or breakfast*
Rhubarb	Plant anthraquinones that gently stimulate peristalsis	*As compote, 1 to 2 times a week, not as a continuous course*
Almond (seed)	Fibres + lubricating lipids, documented effect on frequency	*10 almonds per day, soaked paste if uncomfortable*
Apricot	Mild sorbitol + fibres, seasonal osmolyte	*Fresh or rehydrated dried, 4 to 6 per day in a short course*
Sesame oil	Lubrication of the food bolus, documented traditional use	*1 tbsp per day as a warm seasoning*
Banana	Soluble pectin only when very ripe: useful as a base, not the star	*1 per day fully ripe; green banana constipates*
Black Sesame	Fibres + oil: the traditional duo for lazy stools	*Roasted then ground, 1 tbsp in the porridge*

TO LIMIT	REASON
Excess white rice and refined starches	Slow transit when they form the backbone of the meal
Insoluble fibre without water	Dry bran worsens the plug: any added fibre requires 1.5 L of water per day
Dehydrating foods	Alcohol and excess dry protein draw water out of the bolus (alcohol remains banned as a drink)
Excess fatty unfermented dairy	Reported slowing effect in some patients (expert opinion; fermented dairy may on the contrary help)
Ignoring the urge to defecate	Dulls the rectal reflex: establish a fixed appointment after breakfast

GOLDEN RULE

Fibre only works when hydrated: adding fibre without water worsens the plug.

WHAT THE RESEARCH SAYS

2 kiwis a day improved stool frequency in a randomised trial (Am J Gastroenterol, 2023). The Moayyedi meta-analysis confirms the benefit of soluble fibres on IBS symptoms (Am J Gastroenterol, 2014), specifying that the effect belongs to soluble fibres (Nagarajan et al., Eur J Gastroenterol Hepatol, 2015). Psyllium remains the reference agent: in the kitchen, chia mucilage is its good functional equivalent.

3 IBS-M: diarrhoea-constipation alternation · *the hardest subtype to stabilise*

The profile of unstable motility: the colon oscillates between acceleration and stagnation, often on irregular meals and varying osmotic loads. The strategy is not to treat the two poles but to stabilise the terrain: regular meals, constant soluble fibre in small doses, and methodical pruning of trigger FODMAPs.

FOOD	WHY	PRACTICAL ADVICE
Millet	Mild cereal with moderate fibre: the base that leans neither way	*As porridge or cooked grain, daily possible*
Carrot	Stable soluble pectin: useful in both phases	*Cooked, daily, vary the forms*
Yam	Coating starch, remarkable tolerance in both phases	*Boiled or in soup*
Pumpkin	Non-osmotic soft fibres, great tolerance	*Soup, purée or roasted*
Banana	Pectin + starch: modulates transit in both directions	*Ripe, 1 per day*
Quince	Structuring cooked pectin: regulates without blocking	*Compote or roasted, 2 to 3 times a week*
Chicken	Neutral protein that stabilises the meal without triggering	*Broths and gentle braises*
Trout	Digestible protein + inflammation-modulating omega-3	*Steam or papillote*
Buckwheat	Gluten-free, low-FODMAP cereal: the stable base of both phases	*As cooked grain or porridge*
Fennel bulb	Documented food antispasmodic for gas and spasms	*Braised or in soup; raw in very small amounts*

TO LIMIT	REASON
Irregular meals or skipped meals	Time irregularity is the first disorganiser of motility in this subtype
Onion and garlic	Fructans: first FODMAP to test in elimination-reintroduction
Pulses in large portions	GOS + fermentable fibres: tolerated in small portions, hostile as a main dish
Fizzy drinks and soft drinks	Gas + polyols or fructose depending on the versions
Excess raw apple, pear and sorbitol fruits	Excess fructose + polyols: the classic osmotic pair of diarrhoea phases
Excess coffee	Triggers the accelerated phase; variable tolerance, test individually

GOLDEN RULE

Never correct yesterday's constipation at the moment today's diarrhoea begins: stabilise the frame before adjusting the content.

WHAT THE RESEARCH SAYS

The low-FODMAP diet improves symptoms in randomised trials, but prolonged restriction reduces bifidobacteria (Staudacher et al., Gastroenterology, 2017): the elimination phase should last 4 to 6 weeks then give way to reintroduction, and the personalised diet preserves the microbiota (Staudacher et al., Neurogastroenterol Motil, 2022). Probiotics have a modest but significant overall effect (Goodoory et al., Gastroenterology, 2023). The 'gluten' effect in IBS is probably mostly a fructan effect (Biesiekierski et al., Gastroenterology, 2013).

CROSS-CUTTING

What applies to all profiles

Eighty per cent of IBS's dietary benefit comes from five simple gestures, before the first elimination even begins. They apply to all three subtypes and condition the success of any finer intervention.

• Three meals at regular times, never skipped: the colon loves the clock, it is the number-one lever for IBS-M and IBS-D

• Eat sitting down, calmly, chewing: eating speed increases osmotic load and aerophagia

• 1.5 to 2 litres of plain water a day, regularly spread: the condition for any fibre work

• Test structured FODMAP elimination only after simple measures fail: 4 to 6 weeks of restriction, then methodical reintroduction by group, never prolonged restriction without reintroduction

• Gradually replace ultra-processed products with simple dishes: the association with IBS is demonstrated in cohort (Schnabel et al., Am J Gastroenterol, 2018)

• Walk or move 20 to 30 minutes a day: physical activity modulates motility and hypersensitivity

• Keep a food-symptom diary for 2 weeks before any elimination: it designates the real suspects, not generic lists

• Never stack more than one elimination at a time, and always with a planned reintroduction date

IN THE KITCHEN

Recipes that fit

Everyday gentle staples

Complete, tender, low-residue dishes suited to days of sensitivity.

• Veal Blanquette

• Traditional Pot-au-Feu

• Trout en Papillote with Vegetables

• Apple Compote with Cinnamon

• Quince and Apple Compote

• Chicken Waterzooi with Leeks

Broths and gruels from around the world

The family of melted cereals and long-simmered soups: the most digestible format there is, in every kitchen of the world.

• Savory Oat Congee with Mushrooms and Ginger

• Khichdi, Indian rice and lentils

• Fish Soup with Dill

• Daikon and Chicken Soup

• Buckwheat Porridge with Milk

• Rhubarb and Ginger Compote

NOTES FOR THE PRACTITIONER

• A decision-support document for nutrition professionals: it replaces neither medical diagnosis nor clinical judgement. The IBS diagnosis is one of exclusion made by a doctor.

• Alarm signs requiring medical opinion: blood in stools, unexplained weight loss, fever, anaemia, night pain waking the patient, onset after age 50, family history of colorectal cancer or IBD.

• Key references: ACG guideline (Lacy et al., Am J Gastroenterol, 2021); Bijkerk et al. psyllium (BMJ, 2009); Moayyedi et al. fibres (BMJ, 2014); Nagarajan et al. solubility (Eur J Gastroenterol Hepatol, 2015); Ingrosso et al. peppermint (Aliment Pharmacol Ther, 2022); Goodoory et al. probiotics (Gastroenterology, 2023); Staudacher et al. FODMAP and microbiota (Gastroenterology, 2017; Neurogastroenterol Motil, 2022); Schnabel et al. ultra-processed (Am J Gastroenterol, 2018); kiwi trial (Am J Gastroenterol, 2023); Biesiekierski et al. gluten versus fructans (Am J Gastroenterol, 2011; Gastroenterology, 2013).

• Strategy: simple measures first (regularity, water, chewing, activity); FODMAP elimination-reintroduction next, always time-bounded; the lactose hypothesis and the fructan hypothesis before the gluten hypothesis.

• Do not confuse the FODMAP level for 100 g with the real portion: it is the dose per meal that makes the symptom, and tolerance thresholds vary from patient to patient.