



CLINICAL MASTERCLASS

Managing SIBO in Clinical Practice



Navigating diagnostic uncertainty and long-term management

With Rebecca Coomes

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This presentation is for educational purposes only.

It is not intended to diagnose or treat SIBO and does not form a patient-practitioner relationship.

Please work with a suitably qualified practitioner to develop an individual treatment protocol.

Disclosure: Rebecca Coomes is the founder of The Healthy Gut, a commercial business offering 1:1 consulting, cookbooks, meal plans, courses and other paid products and services, including the free resources shared today. This session is presented in partnership with Nerva (Mindset Health); Rebecca receives no fee or in-kind benefit for presenting.



A LITTLE ABOUT ME

From patient to educator

- Diagnosed with SIBO in 2015 after decades of IBS-type symptoms. I know the burnout, dietary restriction and the trial-and-error from the inside.
- Nutritionist focused on gut health and SIBO. Founder of The Healthy Gut.
- Host of The Healthy Gut podcast (over 1 million downloads) and author of SIBO-friendly cookbooks and meal plans.
- A patient advocate driven to raise awareness of SIBO, so others aren't left without answers for decades, the way I was.

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Rebecca Coomes

Nutritionist & founder of The Healthy Gut

TODAY

What we'll cover

01

What is SIBO

Definition, and how it presents in clinic

02

Gas profiles, testing & treatment options

Hydrogen, methane/IMO, hydrogen sulfide, how it develops, symptoms, comorbidities and overlap with IBS

03

Where do I start?

A framework for clinicians

04

Dietary management

Available diets, where it goes wrong, and protecting the patient from nutrient deficiencies

05

A staged treatment model

Improve adherence across a multi-stage management process

06

Gut-brain therapies & Nerva

How they fit alongside dietary and medical management

FOUNDATIONS



01

What is SIBO

Definition and how it presents in clinic

DEFINITION

What is SIBO

“A clinical syndrome of GI symptoms caused by the presence of excessive numbers of bacteria within the small intestine.”^[1]

- Defined by symptoms + bacterial excess.
- Modern definition (Pimentel, REIMAGINE): duodenal aspirate culture $\geq 10^3$ CFU/mL^[2], with reduced microbial diversity and a coliform signature (E. coli, Klebsiella)^[3].

The patient who arrives exhausted & desperate for answers

They usually come in...

- Symptomatic
- Self-diagnosed, or diagnosed by another clinician, often before they reach you
- Burned out on elimination diets
- Often self restricted nutrition and under eating or nutrient deficient
- Tired of being told "it's just IBS" or their labs are "fine"
- Frightened of food and their own symptoms
- Carrying months, or years, of failed attempts to improve

And for us, the clinician:

- Overlapping presentations that look like everything and nothing
- Unsure of what tests are best
- The tension between clearing the overgrowth and protecting long-term gut health
- Many of you tell me the same thing: **you feel overwhelmed, and don't know where to start.**

GAS PROFILES & TESTING

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02

Hydrogen, methane and hydrogen sulfide

How to identify and differentiate between them

THREE GAS TYPES

Is it SIBO, IMO or ISO?

North American Consensus 2017: H₂ and CH₄ diagnostic criteria using lactulose or glucose substrate.^[4]

Hydrogen (H₂)

Rise ≥ 20 ppm above baseline by 90 min

Source: Bacteria (E. coli, Klebsiella)

Pattern: More diarrhoea & bloating

Diagnosis: 2-3 hour hydrogen breath test

Methane → IMO (CH₄)

≥ 10 ppm at any point in the 3-hour test

Source: Archaea (M. smithii & other methanogens)

Pattern: Strongly linked to constipation

Diagnosis: 3 hour methane breath test. M Smithii present on comprehensive stool analysis can indicate large intestine involvement

Hydrogen sulphide (H₂S)

≥ 3 ppm at any point during the breath test*

Source: Proteus mirabilis (SI), Fusobacterium varium & Desulfovibrio piger (LI)

Pattern: Diarrhoea or constipation, rotten egg gas, possible flatline H₂/CH₄ lactulose breath test ^{[5][6]}

Diagnosis: 2-3 hour hydrogen sulphide breath test (TrioSmart or CoLab) or clinical presentation and/or comprehensive stool analysis

Hydrogen sulphide: *Not in the 2017 Consensus. Cut offs still being evaluated. Testing available: TrioSmart (US), CoLab Services (UK). Testing not available in Australia. **Clinical clue:** Because sulfate-reducing microbes consume hydrogen, flatline hydrogen + methane ppm in a symptomatic patient may point to H₂S. Use fructose substrate if lactulose and/or glucose is flatline before assuming H₂S.

SUGAR SUBSTRATES

Which substrate to use?

10g

Lactulose

Most common

75g

Glucose

Misses distal SIBO

25g

Fructose

May identify overgrowth other substrates miss ^[7]

A flatline or negative breath test may be due to the substrate used. If symptoms suggest SIBO/IMO/ISO, try a different substrate. Comprehensive stool analysis can provide additional insight.

WHAT TO LOOK FOR

Symptoms, associated conditions & comorbidities

Common symptoms

- Bloating & distension
- Abdominal pain or discomfort
- Excess gas, belching
- Diarrhoea and/or constipation
- Nausea, reflux
- Fatigue & brain fog
- Anxiety & depression
- New food intolerances
- Headaches
- Skin issues (eg. Eczema, rashes)
- Respiratory issues

Malabsorption signs

- Unintended weight loss
- Steatorrhoea (fatty stools)
- Iron & vitamin B12 deficiency
- Low fat-soluble vitamins (A, D, E, K)
- Low albumin / protein

Associated conditions

- IBS, IBD, coeliac
- Rosacea
- Psoriasis,
- Restless leg syndrome
- Fibromyalgia
- Chronic fatigue
- Hypothyroid
- Diabetes
- Scleroderma, EDS, Parkinson's
- Fatty liver (NAFLD)
- Interstitial cystitis

Indicative, not exhaustive. Source: siboinfo.com (symptoms & associated conditions).

AETIOLOGY

SIBO = A failure of one or more defences

This framing instantly explains the comorbidities you already see in clinic.

Motility

Post-infectious IBS, scleroderma, diabetes, hypothyroidism, a sluggish MMC, EDS, opioids, Parkinson's, GLP-1 receptor agonists

Structural

Adhesions, strictures, surgery, blind loops, an absent ileocaecal valve, diverticula, prior surgery

Reduced secretions

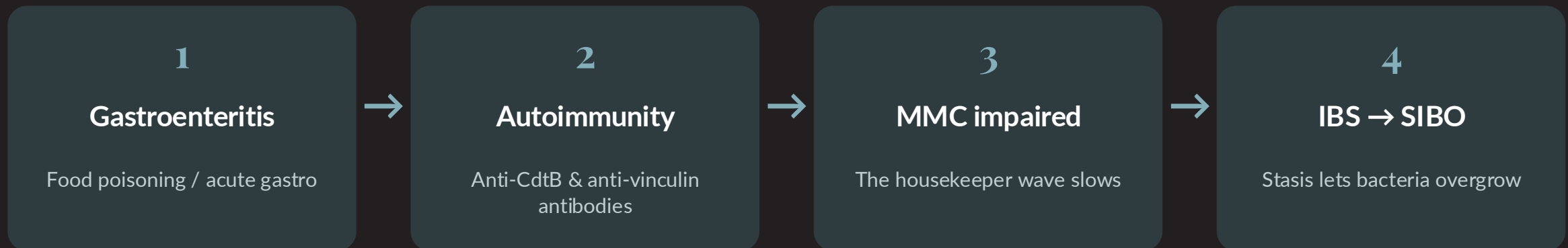
Acid suppression, bile and pancreatic insufficiency, insufficient digestive enzymes, PPIs

Host factors

Immune deficiency and ageing reduce the gut's ability to self-regulate, IgA deficiency

#1 CAUSE OF SIBO

The post-infectious pathway



A single bout of food poisoning can lead to lasting IBS (D and mixed more predominantly) and SIBO^[8]. ***IBS-Smart blood test to determine Anti-CdtB & anti-vinculin antibodies***

The IBS blood test (ibs-smart): measures anti-CdtB and anti-vinculin antibodies. A positive result supports a post-infectious origin and flags higher SIBO risk.^[9]

THE DISTINCTION

SIBO and IBS: Deeply entangled, not identical

Where they overlap

- Shared symptoms: bloating, pain, altered bowel habits
- A post-infectious trigger can drive both, anti-CdtB / anti-vinculin antibodies after gastro ^[8]
- IBS-D and IBS-Mixed patients test positive on IBS Smart blood test ^[9]
- Older lactulose studies overstated SIBO in IBS (up to ~80%); modern duodenal-culture work refines the link ^{[2] [3]}.

Where they part

- IBS = a symptom-based diagnosis (Rome IV), with no required microbial cause ^[1]
- SIBO = an identifiable testable overgrowth with treatable drivers, motility, structural, post-surgical
- SIBO can be targeted (reduce overgrowth + fix the cause); IBS care is broader symptom + gut-brain

Don't force a binary. The useful question isn't "IBS or SIBO?" but "is there a treatable overgrowth driving this IBS picture, and what's keeping it going?" Many patients have both layers, which is exactly why the staged model and gut-brain therapy each earn a place.

GETTING STARTED



03

Where do I start?

A clinical, repeatable pathway from the first visit.

Identify before you treat anything

1

Exclude red flags

Weight loss, anaemia, blood, nocturnal or new symptoms, family history, IBD → investigate or refer. SIBO is not a label you reach for without excluding other, more serious issues.

2

Take the history that matters

Onset (post-gastro? post-surgery? post-antibiotic?), bowel pattern (H₂ vs CH₄ vs H₂S), diets already tried, current degree of restriction, and relationship with food. Psychological state matters. If it is SIBO/IMO/ISO, understanding why they have and addressing those comorbidities it is critical in preventing or prolonging relapse.

3

Test, treat, or neither yet

Testing gives valuable data to make informed decisions for treatment options. Treat empirically when access is a barrier. Sometimes the first job is simply to stabilise a frightened, over-restricted patient.

4

Set expectations up front

Name it as multi-stage and relapse-prone before you start. This single move prevents many adherence problems later.

Elimination diet first, or treat the SIBO first?

*The instinct to add another elimination diet is usually the wrong one. **Don't pile restriction onto restriction.***

- Multiple food "sensitivities" often signal **visceral hypersensitivity** / a sensitised gut-brain axis, not many true intolerances.
- In that picture, ever-more elimination makes things worse and narrows the diet toward harm.
- **Better sequence:** stabilise → treat the overgrowth if indicated → support the gut-brain axis → then test tolerance.

Dietary restriction should only occur when absolutely necessary as patients can struggle to reintroduce food in the future. A SIBO diet does not treat SIBO.

BEFORE YOU START, ASK YOURSELF

Is this patient ready to be treated?

The highly sensitive / reactive patient

- Often has underlying inflammation and/or increased intestinal permeability driving the reactivity
- Pushing antimicrobials into that picture can backfire, they get flooded with symptoms
- May need groundwork first

So "where do I start?" is not always killing bacteria. Start with:

- What is the best for the **patient**
- Gut healing & **reducing inflammation** where necessary
- **Restoring the barrier** before adding load
- **Nervous-system calming**, settle the system that's amplifying everything

Each patient is unique and your treatment protocol will be tailored to their unique history, symptoms and diagnoses

DIET



04

Dietary management in SIBO

Restriction controls symptoms temporarily. It does not cure, and over-restriction can cause nutritional deficiencies, weight loss and psychological harm.

DIETARY APPROACHES

SIBO-specific dietary approaches

*Short term dietary intervention when necessary. Can alleviate SIBO symptoms but **is not** a SIBO treatment. Biggest risk is patients get stuck on restricted diet long term. Only restrict when necessary.*

Low FODMAP	Reduces fermentable carbohydrates for symptom relief (Monash). A symptom tool, not SIBO-specific.
SIBO Specific Food Guide	Combines SCD and low FODMAP principles (Dr Siebecker).
SIBO Bi-Phasic Diet	Staged: restrict to settle, then rebuild tolerance (Dr Nirala Jacobi).
Low Fermentation Diet	Meal spacing and limiting fermentable foods (Dr Pimentel, Cedars-Sinai).
The SIBO Diet Protocol	Calm, balance and expand the diet (Rebecca Coomes).

Source: siboinfo.com/sibo-diet.

CONSTIPATION DIETARY SUPPORT

Food first philosophy

Specific whole foods have independent RCT evidence for constipation.

● **Kiwifruit** ^[10]

2 per day

More complete spontaneous bowel movements & less straining; comparable to psyllium

● **Mango** ^[11]

~300 g/day

Beat equal fibre for constipation AND lowered IL-6 and endotoxin. Can be challenging if patient reactive to fructose.

● **Ground flaxseed** ^[12]

~10 g/day

Improved constipation (with glycaemic & lipid benefit)

● **Prunes / dried plums** ^[13]

~50 g twice daily

More complete spontaneous bowel movements vs psyllium. Can be challenging if patient reactive to sorbitol and fructans.



FIBRE

What SIBO-friendly fibre looks like

Slow, steady increases • find what works for THEM • tolerance is a moving target, it improves as the gut heals and SIBO/IMO/ISO reduces ("can't tolerate fibre" → "not yet").

Goal: work toward ~40 g fibre/day

Many restricted patients sit at just 10–15 g now. This is a longer term project of slow titration over weeks/months until tolerated

Cooked lentils

½–1 cup, as tolerated

16 g

Raspberries

1 cup

8 g

Cooked quinoa

1 cup cooked

5 g

Chia / flax

2 tbsp ground

5 g

Rolled oats

1 cup cooked

4 g

Kiwifruit

1 fruit

3 g

Cooked pumpkin

1 cup

3 g

Cooked spinach

¾ cup

3 g

Blueberries

½ cup

2 g

WHAT IS IT COSTING YOUR PATIENT

The real cost of prolonged dietary restriction

Microbiome

Starves colonic bacteria → loss of diversity, the long-term gut-health cost

Nutrition

Inadequate intake; restrictive, fragile eating patterns, undesired weight loss, wasting, frailty, osteoporosis

Psychology

Fear of food, disordered eating, supplement obsession

Symptoms

Hypervigilance reinforced by ever-tighter elimination

The better model: diet for symptom control during a defined window only if necessary, paired with treatment, motility support and an explicit plan to liberalise.

The patient with an eating-disorder history

Strict diets are off the table. You still have a full toolkit, lean on the non-dietary levers.

- **Gut-selective antibiotics or antimicrobials** · Rifaximin acts locally with minimal systemic absorption. There are many herbal antimicrobials that can be used. The liquid only elemental diet is not recommended as a treatment option.
- **Motility / prokinetic support** · Address stagnation
- **Symptomatic support** · Calm the symptoms while dealing with the underlying cause(s), reduce inflammation
- **Gut-Brain & nervous system support** · The food- and supplement-free intervention. Eg. Nerva, breathing, mindfulness
- **Psychological/psychiatric support** · Professional support. Often the first place to start

Introducing tools without triggering obsession: keep protocols minimal and time-limited, frame as short courses with endpoints, avoid "good/bad" food language, name the risk openly, and co-manage with their ED clinician.

05

TREATMENT



A staged treatment plan

*Reduce the overgrowth • address the underlying cause • support the gut-brain axis •
improve nutritional diversity.*

THE SHAPE OF THE WHOLE PLAN

Three jobs, in order

JOB 1

Reduce the overgrowth

Treatment tailored to the patient

JOB 2

Address the underlying cause(s)

Motility, structure, drivers, the step most often skipped and why relapse rate can be up to 80%

JOB 3

Support the gut-brain axis & nutrition

Time-limited diet if necessary, gut-brain therapy

Skip job 2 and you stay on a relapse treadmill, re-treating the same overgrowth forever.

Reduce the overgrowth

Your options are antibiotics, herbal antimicrobials and the liquid only elemental diet.

Hydrogen

Antibiotic: Rifaximin (Xifaxan) 550 mg tid x 10-14 days ^[1]

Herbal: Berberine, oregano, neem, pomegranate, combination formulas (Candibactin-AR/BR, Dysbiocide/FC-Cidal) ^[14]

Elemental Diet: 14-21 days

Methane / IMO

Antibiotic: Rifaximin 550 mg tid + Neomycin 500 mg bid (or Metronidazole 250 mg tid) x 10-14 days

Herbal: Add allicin (Allimax) or Atrantil. PHGG supportive adjunct.

Elemental Diet: 14-21 days

Hydrogen sulphide

Bismuth: binds sulfide (~524 mg qid, 14-28 d; ~95% H₂S drop in 7 days) ^[15]

Plus: reduce dietary sulphur

Treat per bowel pattern: rifaximin, plus neomycin or metronidazole

Targeted antimicrobials by stool producers

Liquid elemental diet: 14 days then retest. Can add an additional 7 days if necessary. Works for both hydrogen and methane; a reset when antimicrobials fail or aren't tolerated.

Evidence for herbal antimicrobials is limited (largely Chedid 2014 ^[14]), individualise, and treat gas-type matching as pattern-based reasoning. Brand names are examples, not endorsements; some require a prescription. Antibiotic doses are a guide [1]. Recurrence is common, so address the cause (Job 2).

Support the MMC

Herbal prokinetics

- **Iberogast (STW-5), MotilPro, Motility Activator, ginger, SIBO MMC and more**
- Dose at bedtime to support the overnight migrating motor complex
- Not all patients respond to all herbal options. Often need to rotate through to find the one that works, or move to pharmaceutical

Pharmaceutical

- **Low-dose erythromycin or prucalopride**, delay relapse ^[16]
- Dose at bedtime to support the overnight migrating motor complex
- Pharmaceutical options often required for IMO/chronic constipation

Prevent and/or prolong relapse

- **Long-term use often required**

Meal Spacing

- **3-5 hours between meals + 12+ overnight fast**
- Not suitable for people with an ED, underweight, or have other conditions/diseases contraindicated. Use with caution if pregnant or lactating.

Evidence for herbal antimicrobials is limited (largely Chedid 2014 ^[14]). Brand names are examples, not endorsements; some require a prescription.

Address the cause(s): the step most often skipped

Motility

Prokinetics support the MMC and can delay relapse by months^[16]

Structure

Adhesions, strictures, surgical anatomy, recognise what can't be fixed with SIBO treatment

Medication review

Revisit PPIs and other drivers where appropriate

Address the driver

Manage the underlying condition, thyroid, diabetes, scleroderma, post-infectious IBS

Pre-, pro- and postbiotics

Prebiotics

FOS, GOS, inulin, etc can create symptoms in an active overgrowth, reserve for AFTER eradication to rebuild diversity. PHGG can be used successfully. SIBO-friendly whole foods often better tolerated than prebiotic fibre supplements during treatment.

Probiotics

May aid decontamination and reduce abdominal pain, but do NOT prevent SIBO. Heterogeneous, low-certainty. An adjunct, not a cure; some patients worsen. Specific strains can be used for specific symptoms.
[17]

Postbiotics

Microbial metabolites and components, e.g. short-chain fatty acids (SCFAs) such as butyrate^[18]. Butyrate fuels colonocytes, strengthens tight junctions and the mucus layer, and is anti-inflammatory (lowers IL-6, IL-8, TNF), supporting barrier repair and mucosal healing^[19]. SIBO-specific evidence is limited; most relevant in the gut-healing and recovery phase.

Practical rule: Only use as required and develop personalized protocol for patient based on clinical presentation of symptoms and test results.

THE ONE PREBIOTIC FOR THE ACTIVE PHASE

PHGG: partially hydrolysed guar gum

- Usable **during** SIBO/IMO, unlike other prebiotic fibres.
- A regulating fibre: supports **methane reduction and constipation**, but also helps diarrhoea. ^[20]
- Combined with rifaximin it **improves eradication**. ^[21]

SIBO eradication

~62%

rifaximin alone

~85–87%

rifaximin + PHGG

FOS, GOS, inulin → hold until the overgrowth is reduced. SIBO-friendly whole foods are often better tolerated than prebiotic fibre supplements.

ADDITIONAL SUPPLEMENTS

Probiotics: Matched to the symptom

Effects are strain-specific. Choose by the dominant symptom; brand names are examples.

Constipation / slow transit

- **B. lactis HN019** faster transit^[22]
- **B. animalis DN-173 010** (Activia)
- **L. reuteri DSM 17938** (BioGaia); also lowers methane

Diarrhoea

- **Saccharomyces boulardii**^[23]
- **L. rhamnosus GG**

Bloating / global IBS

- **B. infantis 35624** (Align)^[24]
- **L. plantarum 299v**^[25]
- **Saccharomyces boulardii**

How to use: trial one product for ~4 weeks before judging, matched to the dominant symptom. A practical framework (Ruscio): combine one from each category, a Lactobacillus/Bifidobacterium blend, Saccharomyces boulardii, and a soil-based Bacillus (e.g. B. coagulans, B. clausii), which have SIBO-eradication data.

Keep any added prebiotic under ~5 g in a sensitive gut.

WHY DO THEY RELAPSE?

When patients relapse, or only partly respond

Keeps relapsing?

Haven't addressed the cause(s). Return to motility / structure / driver, add a prokinetic, and stop re-running the same antimicrobial blindly.

Better on SIBO diet, but every reintroduction fails?

Check SIBO has actually been cleared. Inflammation, gut-brain hypervigilance, large bowel dysbiosis. Generally not a true multi-food intolerance. Support re-adaptation with tailored supplements and use mindset + breathing during reintroduction to meet food with a settled gut. Start with very small quantities of food and slowly titrate.

Only ~60% better after antibiotics?

Not every patient reaches 100%, some symptoms persist as the body recalibrates. The residual is often the gut-brain layer, not leftover bacteria. This is the cue for brain-gut therapy, not endless re-treatment.

06

JOB 3

...

Where brain-gut therapies fit, including Nerva

For the patient who's been treated, but isn't fully better.

THE CLINICAL PROBLEM IT SOLVES

The treated-but-still-symptomatic patient

- Overgrowth treated, yet symptoms persist: **visceral hypersensitivity, gut-brain hypervigilance, motility dysregulation.**
- Restriction and re-testing won't fix this layer, the gut-brain axis is the lever.
- As the last three sections have shown, **this is where a large share of SIBO patients actually live**, especially the post-infectious IBS overlap and the can't-reintroduce-foods group.

Gut-directed hypnotherapy (GDH) targets the miscommunication between gut and brain, calming visceral hypersensitivity, hypervigilance and motility.

THE EVIDENCE

Gut-directed hypnotherapy holds up

In a randomised controlled trial, GDH was **equal in efficacy to the low FODMAP diet** for IBS symptom relief. ^[26]

- A striking finding for a diet-focused room: a food-free therapy matching the gold-standard diet.
- Backed by a robust broader evidence base, durable symptom AND psychological benefit.

Nerva real-world data (app-delivered GDH, self-reported):

~81%

clinically significant drop in overall IBS symptoms

~71%

clinically significant drop in abdominal pain ^[27]

Why I use this with almost everyone

We incorporate stress reduction, breathing and brain-gut tools, including Nerva, with almost every client.

- Chronic stress, hypervigilance and hyperfocus on symptoms are near-universal in this population.
- Especially in people who've carried an "IBS" label for **years or decades**.
- The nervous system is rarely **not** part of the picture, so it's rarely not part of the plan.

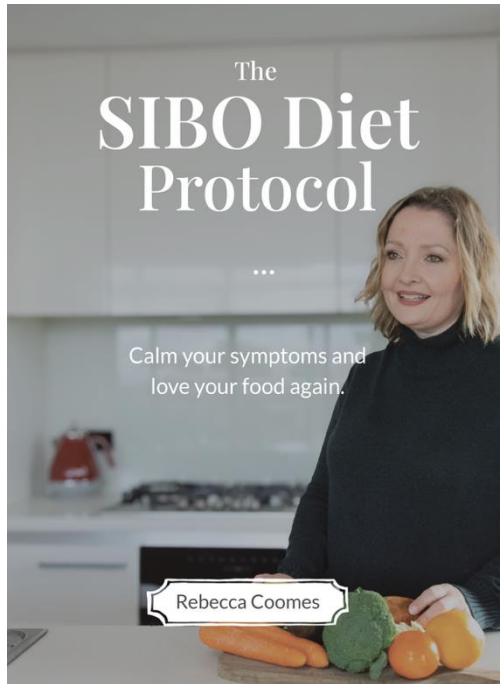
IF YOU REMEMBER FIVE THINGS

Key takeaways

- 1 SIBO is a lens, not a clean diagnosis, hold it loosely.
- 2 You don't need certainty to start: exclude red flags, take the right history, set expectations.
- 3 Diet controls symptoms; it doesn't cure, and over-restriction harms the gut and the patient.
- 4 Treat in stages: reduce overgrowth → fix the cause → support the gut-brain axis.
- 5 When patients don't fully resolve, the answer is usually the gut-brain axis, not more restriction or re-treatment.

A FREE GIFT FOR ALL PARTICIPANTS

My SIBO Diet Protocol + bonus cookbook



Everything you need to support your patient's nutrition alongside treatment

Plus SIBO-friendly recipes to keep patients nourished, not fearful of food.

Download for free for instant access today

Download for free → thehealthygut.com/sibo-diet-protocol-and-cookbook-nerva

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Questions & discussion

Thank you. Let's talk through your cases.

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