

## What is Irritable Bowel Syndrome?

Irritable Bowel Syndrome (IBS), is a chronic relapsing disorder characterised by presence of abdominal pain or discomfort, which may be associated with defecation and/or accompanied by a change in bowel habit.

Under the Rome IV criteria 2016, is now listed under 'disorders of gut-brain'<sup>1</sup>

### ROME IV criteria for IBS diagnosis:<sup>2</sup>

Recurrent abdominal pain on average at least 1 day per week in the last 3 months, associated with two or more of the following:

- Related to defecation
- Associated with a change in a frequency of stool
- Associated with a change in form (consistency) of stool.<sup>2</sup>

## What Causes IBS?

The exact cause of IBS is unknown, but it is thought to be multifactorial and therefore requires a multifactorial approach involving mental health, microbiota, food intolerances and consideration of visceral hypersensitivity.<sup>1</sup>

### IBS diagnosis

A diagnosis of IBS can be considered if the person has abdominal pain or discomfort, that is either relieved by defecation or associated with altered bowel frequency or stool form.<sup>1</sup>

This should be accompanied by at least two of the following four symptoms:

- a change in bowels opening e.g. straining, urgency, incomplete evacuation.
- abdominal bloating, distension, tension or hardness.
- symptoms made worse by eating.
- passage of mucus.

Other, common symptoms of IBS include: lethargy, nausea, backache and bladder symptoms.

## Exclude medical conditions & investigate "Red Flags"

Consider 'red flag' indicators which should be referred to secondary care for further investigation if present:<sup>1</sup>

- Anaemia
- Unintentional weight loss
- Rectal bleeding
- Signs & symptoms of bowel cancer
- Inflammatory markers for Inflammatory Bowel Disease.

### Diagnostic Tests

In people who meet the IBS diagnostic criteria, the following tests should be undertaken to exclude other diagnoses:<sup>1</sup>

- FBC, ESR, CRP, TTG / EMA (coeliac screen).

**N.B.** A coeliac screen will be inaccurate for anyone who is already on a gluten free diet. If this is the case, a 'gluten challenge' is recommended, which comprises of consuming 4 slices of wheat bread per day (2 slices for children) for a period of 6 weeks prior to being tested for coeliac disease.<sup>3</sup>

## Fructose, Lactose and Sorbitol Breath Testing

Breath testing can be undertaken for lactose intolerance, fructose malabsorption and sorbitol. These tests involve following a strict diet for 2 days prior to the test. On the morning of the test, after an overnight fast, the patient is given a measured dose of the sugar that is being tested on that day followed by blowing into a bag at timed intervals.

Measurements are taken and analysed to assess malabsorption.

These types of test have been shown to give inconsistent results, furthermore, since malabsorption of these sugars does not cause physical damage, it is only necessary to restrict these foods as far as symptoms dictate. Breath testing does not identify or eliminate the presence of symptoms.<sup>4</sup>

## Dietary Management of IBS

A large proportion of people with IBS associate food intake with the development of abdominal symptoms. Consequently, dietary restriction (both evidence based and not) to control gastrointestinal symptoms is common in this population.

Foods commonly implicated with the onset of IBS symptoms include dairy products, wheat products, caffeine, cabbage, onion, peas, beans and spicy and fatty foods. However, dietary restrictions have implications for nutrient intake and put people at risk of nutritional deficiencies.<sup>5</sup>

### First line:<sup>1</sup>

- General advice around stress management
- Regular and timely meals
- Adequate fluid intake - 8 cups of fluid / day
- Regular exercise
- Reduced caffeine intake – <3 cups /day
- Limit fruit to 3 x 80g portions / day
- Adjust fibre - avoidance of wheat bran
- Ensure fat intake is within general healthy guidelines
- Consider gut irritants e.g. alcohol, spicy foods, carbonated drinks
- Avoidance of sorbitol
- Reduced resistant starch

### Second line:<sup>1</sup>

- Low FODMAP
- Elimination diets e.g. natural food chemicals or whole foods
- Psychological interventions e.g. gut directed hypnotherapy or cognitive behavioural therapy
- Probiotics
- Consideration of further investigations

## The Low FODMAP Diet

Fermentable **O**ligosaccharides **D**i-saccharides **M**onosaccharides **A**nd **P**olyols

The low FODMAP diet limits the consumption of short chain carbohydrates that are malabsorbed in the small bowel, leading to fermentation by microbiota in the large bowel.<sup>6</sup> The low FODMAP diet is evidenced to provide symptom relief by reducing osmotic load and gas production in the distal small intestine and large bowel in up to 75% of patients with IBS.<sup>7,8</sup>

Individuals who are sensitive to FODMAPs will have a range of symptoms which will include: distended stomach, stomach pain, diarrhoea and excess wind.

The low FODMAP diet is followed for 2-6 weeks. After the 2-6 week elimination phase, individuals start on a challenge and reintroduction phase. This can take between 3 - 6 months to complete and is highly complex. It is often where mistakes are made, leading to unclear results and having to re-start the process.

The low FODMAP diet is a process of reduction and then reintroduction. It is not a diet for life. Recent studies have shown that even in the short space of 4 weeks, the low FODMAP diet can negatively affect levels of bifidobacterium in the digestive system.<sup>8</sup> There is currently more research coming out around microbiota in mental health and the immune system, which may link the long term adherence to the low FODMAP diet as a negative influence in these areas of health.<sup>9,10</sup>

## The RPAH Elimination diet

The allergy unit at the Royal Prince Alfred Hospital in Sydney conducts research into food intolerances.

Included in the Elimination diet that they have developed are:

- Naturally occurring food chemical sensitivities (Salicylates, Amines and Glutamates).
- Artificial additives and preservatives that occur in our food supply.
- Whole foods – wheat, milk and soy intolerances.

These molecules have been shown to trigger systemic symptoms in certain individuals including abdominal distress, sinus and airway irritation, skin irritation and nervous system disturbance (migraines, anxiety).<sup>11</sup> The RPAH Elimination diet is variable from person to person. It can take a simple, moderate or strict approach and may or may not include the addition of whole foods, lactose, fructose or FODMAPs. The initial Elimination phase is followed for 2-6 weeks, in which time some patients may complain of withdrawal symptoms. This is followed by a Challenge phase to assess tolerance of individual food molecules. This can take between 3-6 months.

Due to the complex nature of the RPAH Elimination diet and the risk of nutritional deficiencies, it is recommended to only be attempted under the supervision of a specialised dietitian.

## Everyday Nutrition

Joanna Baker and Marnie Nitschke are Accredited Practising Dietitians who are passionate about gut health. We have the knowledge and skills to support you to care for your patients with personalised advice and gut health solutions.

For appointments or seek advice, contact any of the consulting rooms directly or email us at [dietitian@everydaynutrition.com.au](mailto:dietitian@everydaynutrition.com.au)

### Glen Iris Medical Centre

118 High St, Glen Iris 3146

Ph: 9885 4562

### Kew General Practice

798 High St, East Kew 3102

Ph: 9859 7352

### Suite 2A

330 High St, Ashburton 3147

Ph: 9885 8100

Face to face appointments - Yes

Skype appointments - Yes

Medicare Chronic Disease Management Plans (EPC) - Yes

Private Health Insurance – please contact health fund to determine level of cover for “Dietitian”

### Rates & Rebates

Payment can be made by MasterCard/Visa/cash (no eftpos) and is due on the day of appointment.

- Initial consultation (1 hour): \$180
- Standard review (30 mins): \$95
- Extended review (60mins): \$145

## References

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