

Eating Enough Fibre

Nourishing Health and Happiness with MCAS



Disclaimers

Trigger warning - this document is about food and contains images of food.

We recognise that many of the images in this guide contain foods that are restricted on low histamine diets. The images are from stock photos and do not exactly reflect a low histamine diet.

We have done our best to reduce references to high-histamine foods wherever possible.

Everyone with MCAS is different, and this is general information, not tailored to your individual needs. This resource is intended to be used alongside support from a qualified health professional. Please seek advice from your medical practitioner or dietitian for specific dietary guidance.

We hope you will be confident to adapt the guidance and recipes for your circumstances, and swap out foods that you are not able to tolerate for others that you are. This sheet is designed for adults with Mast Cell Activation Syndrome. The nutritional needs of children and teenagers will differ, and the nutritional needs of individuals with specific medical conditions will vary.

If your diet is very limited and you feel that you are struggling to get enough nutrients in your diet or have a specific medical condition that may have specific dietary needs, then please ensure you seek individualised dietary advice from a dietitian with experience in this area.

This resource is designed to support, not replace, tailored advice from your medical team.

For more information about low histamine diets and other dietary adjustments, please see our Self-Management Toolkit HERE



Introduction

Why Does Diet Matter?

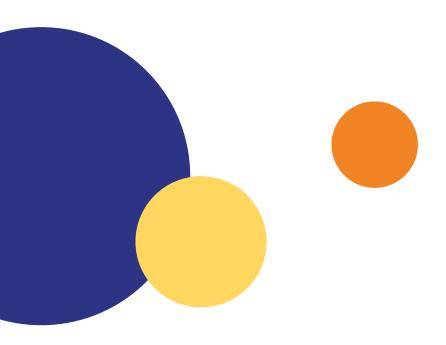
Diet plays a really important role in helping those with MCAS, but can also be one of the trickiest areas to navigate, as those with MCAS often have dietary triggers.

What you eat can directly influence mast cell behaviour and histamine levels in the body.

Common Dietary Challenges with MCAS

People with MCAS often face considerable challenges with food, including:

- Food sensitivities and intolerances: MCAS can cause reactivity to a wide range of foods.
- Variable and evolving triggers: Food triggers can change over time or vary based on other factors such as stress, hormone levels, illness, or environmental exposures.
- Digestive issues: Symptoms like bloating, nausea, abdominal pain, and altered bowel habits are common and may require additional dietary adjustments.
- Nutritional adequacy: Due to multiple food restrictions, maintaining a balanced, nutrient-rich diet can be difficult without careful planning.





Eating Enough Fibre With MCAS

Fibre is essential to keep our gut healthy. As about 70% of our immune system is in our gut, a healthy gut is also really important for a healthy immune system.

This section will cover:

- What fibre is
- Why it is important for those with Mast Cell Activation Syndrome
- · How much fibre is enough
- How to increase fibre

What is fibre?

Fibres are carbohydrates found in food that our bodies can't digest. Instead, they 'feed' the bacteria and other microorganisms in our gut. There are many different types of fibre, and rather than getting too hung up on this, it is more important to make sure you are eating fibre from a range of different food sources if you are able to.

Why is fibre important for those with Mast Cell Activation Syndrome? Including enough fibre in the diet and a wide range of different types of fibres:

- May help stabilise mast cells. (2)
- Reduce the risk of other chronic conditions such as heart disease and type 2 diabetes. (3,4)
- Contribute to keeping gut bacteria healthy and diverse. (5)
- It has a positive impact on the immune system. (6)
- It may play a role in the reduction of allergic disorders. (7)
- Help with specific gut symptoms such as constipation. (8)
- Positively influence mood and reduce the risk of depression. (9)

How much fibre is enough?

It is recommended that we should be eating around 30g of fibre a day, but on average, we are eating around 18g/day.

(8) If you are having to avoid a range of plant-based food sources, the amount could be much less.



HELPFUL TIP

While food can be a trigger, it's not the only one - don't forget to consider other triggers too.

Is an increase in fibre always recommended?

Increased fibre may not be recommended for certain conditions, such as gastroparesis. Some people who have Irritable Bowel Syndrome (IBS) may also find that certain plant-based foods containing FODMAPs may cause them wind and bloating. (10)

How to increase fibre in the diet

- Add fruit, nuts, and seeds to breakfast cereals.
- Add extra vegetables and/or beans and pulses to cooked meals and salads.
- Swap white carbohydrates for wholegrain carbohydrates.
- If you are limited on energy to prepare fresh fruit and vegetables, then frozen and canned produce can be helpful.
- Base snacks around your tolerated plant-based foods.

Low Histamine sources of fibre

Some people with MCAS follow a low histamine diet. Low histamine sources of fibre include:

- Wholegrain carbohydrates such as wholegrain rice, pasta, quinoa, and bread.
- Some beans and pulses, e.g,. kidney beans, chickpeas, white beans
- Nuts (Apart from pistachios) and seeds
- Certain fruits and vegetables. (10)

Other dietary exclusions that are sometimes followed, including the gluten-free diet, can reduce fibre consumption, so it is important to consider this when planning your meals. (11)

There are some examples of meal plans containing at least 30g of fibre at the end of this guide.



Takeaway tips:

- 1. Fibre is really important, and a lack of fibre may increase the risk of conditions we see associated with MCAS, such as depression, allergic conditions, and gut symptoms.
- 2. Include a range of plant-based foods you can tolerate regularly to feed your gut bacteria.
- 3. Gradually increasing fibre can help you to avoid symptoms such as wind and bloating.
- 4. When looking at food labels, choose foods high in fibre (6g/100g) or those that are sources of fibre (3g per 100g) more regularly.

5. It can be much harder to get enough fibre with certain dietary restrictions. If you have concerns about increasing your fibre intake, then please see a registered dietitian.

HELPFUL TIP

Try listening to music or watching something fun while eating to make food feel more enjoyable on a restricted diet



Fibre and MCAS References

- 1. Wiertsema SP, van Bergenhenegouwen J, Garssen J, Knippels LMJ. The Interplay between the Gut Microbiome and the Immune System in the Context of Infectious Diseases throughout Life and the Role of Nutrition in Optimizing Treatment Strategies. Nutrients. 2021;13(3).
- 2. Folkerts J, Stadhouders R, Redegeld FA, Tam SY, Hendriks RW, Galli SJ, et al. Effect of Dietary Fiber and Metabolites on Mast Cell Activation and Mast Cell-Associated Diseases. Front Immunol. 2018;9:1067.
- 3. Zhu R, Fogelholm M, Poppitt SD, Silvestre MP, Møller G, Huttunen-Lenz M, et al. Adherence to a Plant-Based Diet and Consumption of Specific Plant Foods-Associations with 3-Year Weight-Loss Maintenance and Cardiometabolic Risk Factors: A Secondary Analysis of the PREVIEW Intervention Study. Nutrients. 2021;13(11).
- 4. Glenn AJ, Lo K, Jenkins DJA, Boucher BA, Hanley AJ, Kendall CWC, et al. Relationship Between a Plant-Based Dietary Portfolio and Risk of Cardiovascular Disease: Findings From the Women's Health Initiative Prospective Cohort Study. J Am Heart Assoc. 2021;10(16):e021515.
- 5. Meslier V, Laiola M, Roager HM, De Filippis F, Roume H, Quinquis B, et al. Mediterranean diet intervention in overweight and obese subjects lowers plasma cholesterol and causes changes in the gut microbiome and metabolome independently of energy intake. Gut. 2020;69(7):1258-68.

- 6. Cai Y, Folkerts J, Folkerts G, Maurer M, Braber S. Microbiota-dependent and independent effects of dietary fibre on human health. Br J Pharmacol. 2020;177(6):1363-81.
- 7. Venter C, Meyer RW, Greenhawt M, Pali-Schöll I, Nwaru B, Roduit C, et al. Role of dietary fiber in promoting immune health-An EAACI position paper. Allergy. 2022;77(11):3185-98.
- 8. SACN. SACN Carbohydrates and Health Report 2021.
- 9. Saghafian F, Hajishafiee M, Rouhani P, Saneei P. Dietary fiber intake, depression, and anxiety: a systematic review and meta-analysis of epidemiologic studies. Nutr Neurosci. 2023;26(2):108-26.
- 10. Staudacher HM, Whelan K. The low FODMAP diet: recent advances in understanding its mechanisms and efficacy in IBS. Gut. 2017;66(8):1517-27.
- 11. Taetzsch A, Das SK, Brown C, Krauss A, Silver RE, Roberts SB. Are Gluten-Free Diets More Nutritious? An Evaluation of Self-Selected and Recommended Gluten-Free and Gluten-Containing Dietary Patterns. Nutrients. 2018;10(12).





Thank you

This work has been made possible by an award from Postcode Places Trust, a grant-giving charity funded entirely by players of People's Postcode Lottery.





Special Thanks to:

Chloe Hall, The Calm Gut Dietician

Elanna Barrett - Artwork Precious Osawe - Editing

We are also very grateful to members of the Mast Cell Action Community for their input and feedback on this document.

