

Mast Cell Activation Syndrome and Diet

What is mast cell activation syndrome (MCAS)?

MCAS is a syndrome with symptoms related to overactive mast cells. Mast cells are part of your immune system. They are found in most parts of your body especially your skin and intestines. They protect you by making chemicals like histamine when a foreign substance enters your body. In MCAS, mast cells are triggered when a harmless substance enters your body and causes a reaction.

How do I know if I have MCAS?

Symptoms in two or more organs in your body.

Skin

- Hives
- Swelling under the skin
- Skin flushing
- Itchy skin
- Red eyes

Intestines

- Nausea
- Vomiting
- Diarrhea
- Belly cramping

Heart

- Fainting
- Fast heart rate

Respiratory

- Wheezing
- Hoarseness
- Nasal congestion
- Headache

You have a positive test of MCAS that is done while you are having symptoms.

You have a clear decrease in symptoms while on medicines that target MCAS.

Why is nutrition part of treatment for MCAS?

Certain foods may trigger your symptoms. You can't eat the same amount of food you used to. You may have unwanted weight loss and poor nutrition. A dietitian can help you:

- Eat a balanced diet.
- Maintain a healthy weight.
- Fix problems with vitamin and mineral levels.

Is there a special diet for MCAS?

Current guidelines do not suggest any special diet for people with MCAS.

What about a low histamine diet?

You may have heard about a low histamine diet. It removes foods from your diet like fish, hard cheeses, and alcohol. They may be high in a chemical made by mast cells in your gut (histamine). There isn't an accurate list of high histamine foods because histamine content changes based on many factors.

There is no proof this diet will help you if you have MCAS. You may not feel better after taking these foods out of your diet.

We suggest you work with a dietitian to find safe foods to eat as part of a balanced diet.

- A variety of foods such as meats, fish, eggs, vegetables, fruits, grains, dairy, and oils.
- Enough calories to support a healthy weight.
- Limited added sugar, trans fat, saturated fat, and salt.



Other Nutrition Tips

- Avoid diets that take many foods out of your diet to see if your symptoms improve.
- Follow the “Rule of Threes”
 - Eat 3 meals a day and up to 3 snacks.
 - Eat at least every 3 hours.
 - Eat at least 3 food groups at each meal.
- If you are not able to eat enough, you may need a multivitamin.
- Liquid nutrition shakes may help if you need more calories. (Boost®, Ensure®, and Orgain®).
- If you feel limited in what you can eat, a dietitian can help you choose the best foods to add back into your diet at your own pace.

Resources

<https://www.aaaai.org/conditions-and-treatments/library/allergy-library/food-intolerance>

Teach Back:

What is the most important thing you learned from this handout?

What changes will you make in your diet/lifestyle, based on what you learned today?

Who to Call

If you are a UW Health patient and have more questions, please contact UW Health at one of the phone numbers listed below. You can also visit our website at www.uwhealth.org/nutrition.

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children’s Hospital (AFCH) can be reached: **(608) 890-5500**. Nutrition clinics for UW Medical Foundation (UWMF) can be reached at: **(608) 287-2770**.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©10/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8114