

Could it Be Histamine Intolerance?

Histamine intolerance (HIT) happens in 2 different ways:

1. A build-up of histamine as a result of eating foods high in histamine and your body inability to break down consumed histamine. Your body breaks down histamine with the help of Diamine oxidase (DAO) and histamine N-methyltransferase (HNMT).
2. A release of histamine from your cells as a response to certain triggers.

Do you have any of the following symptoms?

- Migraines/headaches
- Hives, itching
- Skin flushing after certain foods and alcohol
- Racing heart after certain foods
- Nausea/vomiting
- Digestive issues / maldigestion
- Anxiety
- Fatigue
- Dizziness
- Menstrual pain / cramps
- Difficulty falling asleep
- High blood pressure
- Nasal congestion / Post-nasal drip

Why is it happening?

There are several underlying causes of histamine accumulation:

1. Small Intestinal Bacterial Overgrowth (SIBO)
2. Small Intestinal Fungal Overgrowth (SIFO)
3. Celiac Disease (usually undiagnosed) or Non-Celiac Gluten Sensitivity

4. High Intestinal Permeability (aka “Leaky Gut”)
5. IBS, IBD (Crohn’s and Ulcerative Colitis), and other GI issues.
6. Eczema.
7. Histamine-rich foods
8. Medications (Antihistamines – Zyrtec, Claritin; acid reflux medications – pantoprazole, omeprazole, ranitidine; NSAIDs – ibuprofen, Aleve, Advil, etc.)
9. Diamine-oxidase enzyme deficiency.

Diamine oxidase (DAO) and Histamine N-methyltransferase (HNMT) genetic SNPs that predispose a person to impaired histamine breakdown. **DAO enzyme** deficiency is the lack of the digestive enzyme responsible for the histamine elimination. Most of the histamine we consume from foods. **DAO** is located in the intestinal walls and is contributing to the digestion of foods. If the intestinal mucosa is under stress and is “leaky” the DAO enzyme is “injured” and cannot perform properly. Hence, if you have “leaky gut” your ability to break down histamine is impaired and histamine builds up and causes above-listed symptoms. **HNMT** is an **enzyme** that is responsible for degrading histamines generated as a result of the functions of mast cells. HNMT, unlike DAO, is concentrated in the liver.

What is the treatment of Histamine Intolerance (HIT)?

Heal the gut. While healing the gut, avoid high histamine foods and DAO blocking foods listed below to reduce symptoms of histamine build-up. Unfortunately, a lot of healthy foods such as fermented veggies, yogurts, etc. can be problematic for people with an impaired ability to breakdown histamines.

High Histamine Foods to Avoid

- Fermented Alcohol: beer, wine, champagne
- Grains
- Legumes: different kinds beans, chickpeas, peanuts,

soy/edamame

- Fermented/Aged/smoked cheeses, meats, fish such as mackerel, sardines, blue cheese, salami, prosciutto
- Fermented milk products: kefir, yogurt, buttermilk
- Fermented and pickled vegetables: sauerkraut, kimchi, pickles, soy sauce, etc.
- Grains: wheat is the worst offender. Sprouted brown rice can be tolerated by some people.
- Leftover chicken, fish, and meats.
- Fruits: oranges, grapefruits (citrus fruits), strawberries, different dried fruits (raisins, apricots, cherries to name a few)
- Vegetables: Tomatoes, spinach, avocado, eggplant.

Histamine-Releasing Foods

- Alcohol
- Bananas
- Chocolate
- Cinnamon
- Cow's Milk
- Nuts
- Papaya
- Pineapple
- Shellfish
- Many artificial preservatives and dyes

DAO Blocking Foods:

- Alcohol
- Black / Green Teas
- Energy drinks
- Sodas and other caffeinated drinks

What Can I Eat? – Low Histamine Foods

- Freshly caught or flash frozen cooked fish (fresh or

- frozen – no leftovers)
- Freshly cooked meat / chicken (fresh or frozen – no leftovers)
 - Eggs
 - Leafy green vegetables, except for spinach
 - Herbal teas
 - Gluten-free grains: brown sprouted rice, quinoa, buckwheat
 - Fresh fruits: mango, pear, watermelon, apple, kiwi, cantaloupe, grapes
 - Fresh vegetables (except tomatoes, spinach, avocado, and eggplant)
 - Any other vegetables that are not listed earlier
 - Dairy substitutes: coconut milk, hemp milk, almond milk (if you have no reaction to almonds)
 - Cooking oils: olive oil, coconut oil

How to Know That you Have Histamine Intolerance / Histamine Overload?

Elimination/Reintroduction

Remove the above high histamine foods for 30 days and reintroduce them one at a time 3 times a day for 3 days and watch any of your symptoms get a flare in the next 3 days.

Blood Testing

The whole blood histamine level could be useful when treating patients with severe anxiety, OCD, bipolar, and depression. Unfortunately, it may not be covered by insurance and the price-tag at LabCorp for this test is around \$300! Checking just histamine in the blood depending on the time of the day and what was eaten may not be very helpful otherwise as it fluctuates during the day a lot. There are other functional blood lab tests to test for histamine levels, but they are not covered by insurance.

Avoiding the DAO blocking foods and medications, high

histamine foods, and foods that release histamine for 4 weeks is the cheapest and most accurate way to find out if you have histamine intolerance.

It is definitely challenging and restrictive in the beginning, but as you start feeling better with an elimination of these foods (triggers) for your eczema, hives, and any other symptoms, you will get more reassurance that your body is powerful and you can heal it yourself. While avoiding these foods, it is a good idea to start a gut-healing protocol and figure out the underlying root causes of your histamine intolerance. Do the necessary testing: Is it SIBO? Is it Celiac? Getting rid of medications that block DAO enzyme is by far the easiest root cause and can be addressed right away.

Remember: You did not acquire your health symptoms in one day, healing the gut takes time and patience. As you heal your gut, you may be able to introduce most of the foods back into your diet. After all, if you break your leg today, you do not expect to start playing your favourite kind of sports tomorrow, right?