



LINDGREN  
functional medicine

# HISTAMINE

*Histamine* is a biochemical produced by immune mast cells as part of the normal inflammatory immune reaction. It functions as a neurotransmitter and helps regulate digestion. Histamine only causes issues in the body when someone has *too much*. Symptoms of excess histamine include: seasonal allergies, congestion, hives, heartburn, or adverse reactions to high-histamine foods.

## HISTAMINE ISSUES

Why would someone have too much histamine (aka "histamine intolerance" or "mast cell activation syndrome")? There are 2 primary reasons: their body is either producing too much OR not breaking it down properly. This dysregulation can be influenced by genetics (i.e., poor methylation), hormonal imbalances, or gut dysbiosis (the majority of your immune system is in your gut).

What should you do if you suspect you have too much histamine? Many experience relief by avoiding high-histamine foods in their diet and reducing exposure to irritants like dust and pollen.

If the root issue is gut dysbiosis, then addressing that imbalance can help manage symptoms. Finally, there are many herbs and nutrients that help the body moderate its histamine response.

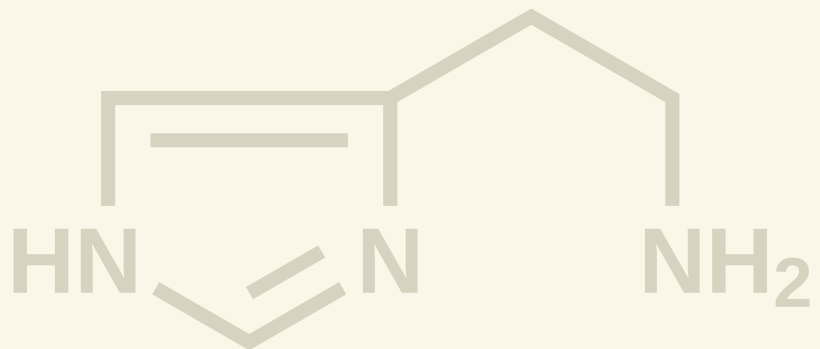
## NUTRIENTS FOR ALLERGIES

- probiotics (esp. *B. infantis* & *L. rhamnosus*)
- raw honey, propolis, bee pollen
- vitamin D
- vitamin C
- quercetin
- bromelain
- butterbur
- stinging nettle
- peppermint
- ginger
- turmeric

*Find these anti-histamine nutrients & herbs as whole foods, supplements, or tea.*

## HIGH-HISTAMINE FOODS

- pickles & sauerkraut
- cheese, yogurt, kefir
- wine
- vinegar
- bone broth
- smoked & cured meats
- canned fish & seafood
- grains



*Grains are not necessarily high in histamine, but reducing grain consumption can help alleviate symptoms of gut dysbiosis, allergies, and sinus pressure.*