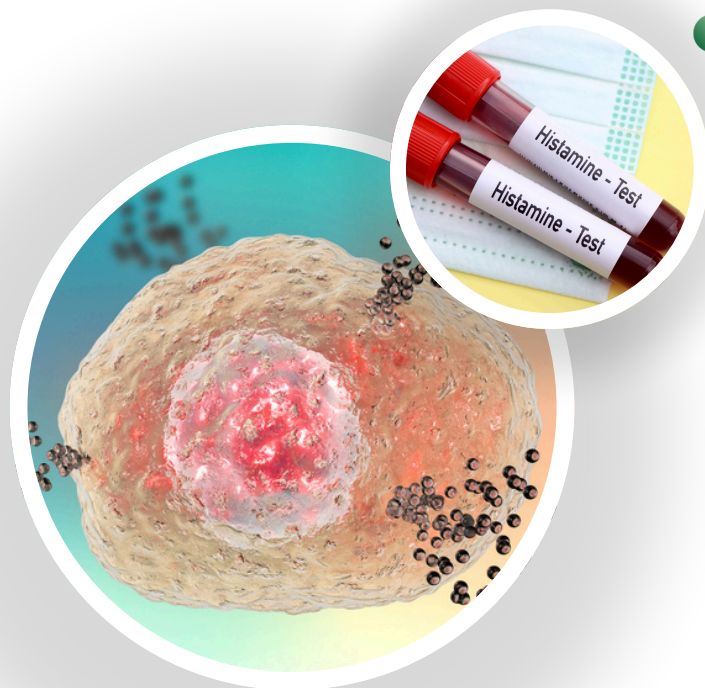




HISTAMINE INTOLERANCE

A condition where the body can't break down histamine efficiently due to low DAO enzyme activity and/or a buildup of histamine from internal or external sources, leading to a wide range of symptoms.



Possible Contributing Factors

- High estrogen (commonly due to oral contraceptive pill, obesity or slow COMT gene variant)
- Gut infections & dysbiosis (H. pylori overgrowth, candida overgrowth, SIBO, SIFO, parasites, viral, bacterial overgrowths)
- Lifestyle factors:
 - Frequent high stress events & intense exercise most days
 - Alcohol – a few times per week
 - High caffeine intake & smoking
- Consuming high histamine, histamine releasing or DAO enzyme inhibiting foods & beverages
- Environmental toxins: mold, heavy metals, air pollution, agrichemicals, EMFs, fragrances, BPA, etc
- Histamine producing probiotics: lactobacillus bulgaricus/fermentum/casei/delbrueckii/helveticus, Streptococcus thermophilus
- Medications: metformin, aspirin, NSAIDs, morphine, muscle relaxants, vancomycin (antibiotic)
- Nutrient deficiencies: vitamin D, B vitamins, zinc, copper, magnesium

Lifestyle & Dietary Recommendations

- Follow a low histamine diet to help reduce the overall histamine load from food & beverages
- Consume cruciferous veggies, eggs or broccoli sprouts to support glutathione production
- Eat pea sprouts grown in the dark which are high in DAO enzymes to break down histamine in the gut.
- Eliminate known food sensitivities such as dairy and gluten. Consider KBMO testing
- Hydrate well with filtered or spring water and electrolytes to dilute histamine in the blood
- Stop smoking & eliminate caffeine
- Focus on sleep hygiene to improve sleep quality. Lack of sleep increases histamine.
- Daily sun exposure. Optimize vitamin D levels. Download Dminder app to help track vitamin D intake
- Improve indoor air quality; ventilate home (if possible), buy an air purifier, clean air ducts, AC filters
- Avoid xenoestrogens like BPA, phthalates, triclosan, glyphosate, etc. Choose lower tox personal care and home cleaning products. Visit <https://www.ewg.org/skindeep/> for low tox brands

Supplement Considerations

- DAO enzyme
- Digestive enzymes
- Liver and gallbladder supportive nutrients and/or ox bile
- Methylated B complex
- Zinc/copper
- Magnesium
- Vitamin D
- Liposomal glutathione or NAC