INT/WELLNESS · A FIELD GUIDE

Why you're *reacting.*

What to do instead of just blocking histamine. A workbook on hives, flushing, brain fog, and the midlife symptoms that keep coming back.

WHAT THIS IS

A plain-English map of where histamine comes from, why it builds up, and the things you can work on so you need the pills less. Two worksheets inside.

WHAT THIS IS NOT

Medical advice, a diagnosis, or an instruction to stop a medication. It is opinion and education from Sarah, a Functional Nutrition Practitioner, written to be taken to your doctor, not used instead of one.

01 READ THIS FIRST

The two pills work. *That is the problem.*

If you have been taking a daily antihistamine and a daily acid blocker for hives, flushing, or a face that goes red after wine, you already know they help. This guide is about why they help, why that help tends to shrink over time, and what you can do upstream so you need them less.

Histamine is not the enemy. It is a signal your body uses for digestion, alertness, immune defense, and the menstrual cycle. Symptoms show up when there is more histamine around than your body can clear.

Claritin blocks the H1 receptor. Pepcid blocks the H2 receptor. Together they cover the two places histamine lands most often, which is why allergy and dermatology use this exact combination as a first step for chronic hives. It is real medicine and it does its job.

What it does not do is change how much histamine you are making, eating, or failing to clear. It puts a lid on the bucket. The water keeps rising. Over time, the same dose covers less, and people start adding a third pill.

> PLEASE DO NOT SKIP THIS
>
> Do not stop famotidine (Pepcid), an antihistamine, or any other medication because of something you read here. Stopping an acid blocker suddenly can cause rebound symptoms, and stopping an antihistamine can bring hives back harder. Everything in this workbook is meant to be done alongside your prescriber, so that when you do reduce a medication, it is a decision you make together.

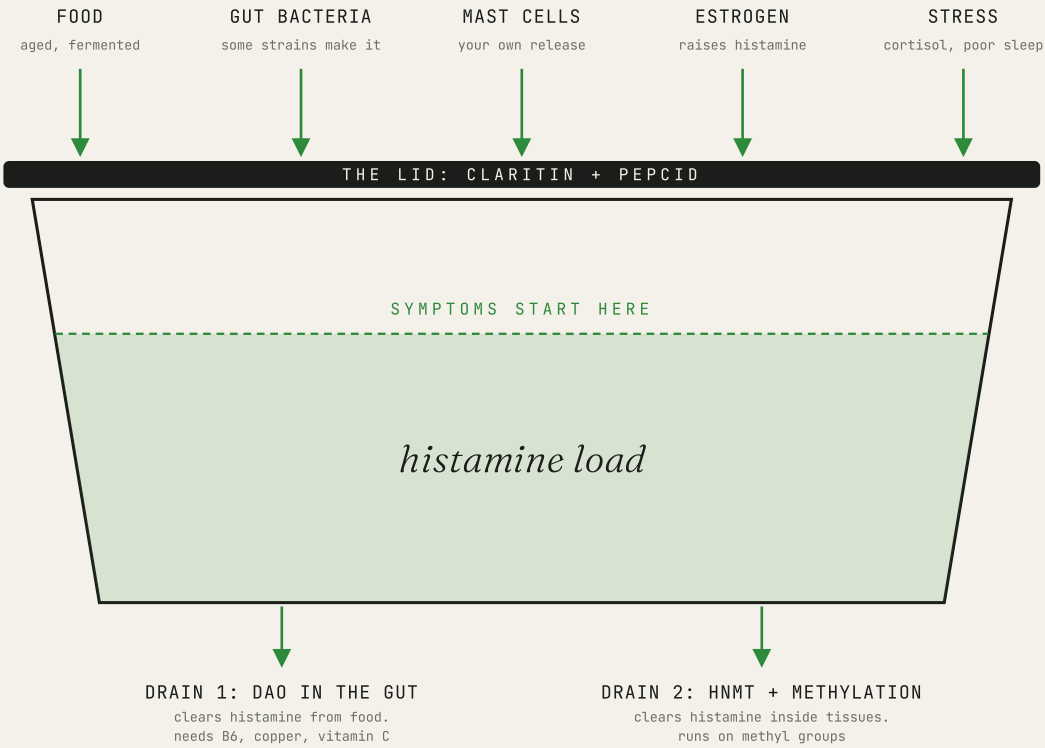
ONE CORRECTION WORTH MAKING

You will see it said online that Pepcid "shuts off" stomach acid. It does not. Famotidine reduces acid. The drugs that switch it off are proton pump inhibitors like omeprazole. The nutrient concern is real for both classes, though. A large 2013 study in *JAMA* linked two or more years of either drug type to a higher rate of vitamin B12 deficiency, with the effect strongest for PPIs.[1] Stomach acid is part of how you free B12, iron, and magnesium from food, and it is your first line against bacteria coming in with what you eat. Suppressing it for years has a cost. That is a reason to work on the cause, not a reason to quit the drug on your own.

02 THE ONE IDEA THAT EXPLAINS ALL OF IT

Think of histamine as a *bucket.*

Five things pour in. Two drains let it out. Symptoms start when the water reaches the rim. Antihistamines are a lid. This whole guide is about lowering the inflow and clearing the drains.



WHY TWO PEOPLE REACT DIFFERENTLY

Same wine, same cheese, same stressful week. One person is fine and one is covered in hives. The difference is usually the size of the drains, and the drains are partly set by genes: **DAO (AOC1)**, **HNMT**, and the methylation genes that feed HNMT, like **MTHFR**. Page 10 covers this.

WHY SYMPTOMS CLUSTER AT MIDLIFE

Estrogen and histamine push each other up. When estrogen starts swinging in perimenopause, histamine swings with it. That is why hives, flushing, migraines, and wired-but-tired sleep often show up together in the 40s and get blamed on "hormones" without anyone asking about the bucket.

Where is the water *coming from?*

Tick everything that is true. Most people have two or three sources running at once, which is why one fix rarely does it. The column with the most ticks is where to start.

FOOD

- [ ] I react to wine, beer, or champagne more than to spirits
- [ ] Aged cheese, salami, smoked fish, or sauerkraut set me off
- [ ] Leftovers bother me more than the same meal fresh
- [ ] Tomato, spinach, avocado, or citrus seem to be a problem
- [ ] I feel worse after a "healthy" fermented food like kombucha or kefir

GUT

- [ ] Bloating within an hour of eating, most days
- [ ] I have been told I had SIBO, or I suspect it
- [ ] Loose stools or constipation that changes week to week
- [ ] I have taken more than two courses of antibiotics in the last two years
- [ ] I take a probiotic and I am not sure which strains are in it

MEDICATIONS THAT SLOW DAO

- [ ] I take an NSAID like ibuprofen or naproxen most weeks
- [ ] I take metformin, an SSRI, or a blood pressure drug and have not asked whether it affects histamine

Several common medications lower DAO activity. Do not stop any of them. Bring this list to your pharmacist and ask.

HORMONES

- [ ] Symptoms are worse around ovulation or the week before my period
- [ ] I am between 38 and 55 and my cycle has started to change
- [ ] I get migraines that track with my cycle
- [ ] Hot flashes and hives, or flushing, seem to arrive together
- [ ] I started reacting to foods I have eaten my whole life

STRESS AND SLEEP

- [ ] A bad week at work shows up on my skin
- [ ] I wake at 2 to 4 a.m. and cannot get back down
- [ ] I feel wired and exhausted at the same time
- [ ] My heart races after meals or in the evening

MAST CELLS

- [ ] I flush or itch with heat, exercise, or a hot shower
- [ ] Perfume, cleaning products, or a hotel room can set me off
- [ ] I get random hives with no food I can point to
- [ ] I react to more than one supplement "everyone tolerates"

MY TOP TWO SOURCES

1. _____ 2. _____

The 14-day reset. *A test, not a diet.*

Two weeks of low-histamine eating is the fastest way to find out whether food is a big part of your bucket. It is not a way to live. Low-histamine forever shrinks your diet and, in my opinion, your gut with it. Run it, learn from it, then bring foods back one at a time.

LEAN ON

- Fresh meat, poultry, and fish cooked the day you buy them
- Eggs
- Rice, quinoa, oats, potatoes, sweet potatoes
- Most fresh vegetables: leafy greens except spinach, squash, carrots, cucumber, zucchini, broccoli, cauliflower
- Apples, pears, blueberries, mango, melon
- Olive oil, coconut oil, butter
- Fresh herbs, ginger, turmeric

PAUSE FOR 14 DAYS

- Alcohol, all of it
- Aged cheese, cured and smoked meats, canned fish
- Fermented anything: sauerkraut, kimchi, kombucha, kefir, yogurt, soy sauce, vinegar
- Leftovers older than one day
- Tomato, spinach, eggplant, avocado
- Citrus, strawberries, bananas, pineapple
- Chocolate, black tea, energy drinks
- Bone broth simmered for hours

THE RULES THAT MATTER MOST

- **Fresh beats stored.** Histamine climbs as food sits, even in the fridge. Cook, eat, freeze the rest the same day.
- **Frozen is fine.** Freezing stops the clock. Thaw and eat right away.
- **Protein goes bad first.** Fish and ground meat build histamine fastest. Buy small, cook same day.
- **Write it down.** Use the tracker on the last page. Memory is unreliable here.

DAYS 15 AND ONWARD: BRING THINGS BACK

Add one food back every three days, a normal portion, at lunch so you can watch the afternoon. Start with the things you miss most. If nothing happens in three days, it stays. If you react, note it and move on. Most people find three or four real triggers and get the rest of their food back. That list, not the whole diet, is your answer.

> **WHAT A BIG REACTION TO THE RESET TELLS YOU**
>
> If two weeks of clean eating makes you feel dramatically better, food is a large part of your load and your drains are probably small. That is a strong reason to look at DAO and the genes behind it (page 10), because the goal is a bigger drain, not a smaller life.

05 CLEAR DRAIN ONE

Help your gut break histamine *down.*

DAO, diamine oxidase, is the enzyme in your gut lining that breaks down histamine from food before it gets in. Low DAO is the most common reason "healthy" foods cause trouble. You can support it three ways.

1. FEED THE ENZYME

DAO does not work without its cofactors. The main ones are **vitamin B6**, **copper**, and **vitamin C**. A diet low in any of them, or a gut that does not absorb them well (see acid blockers, page 2), leaves you with less working enzyme than your genes would otherwise give you. Vitamin C also seems to lower histamine directly. A 2013 study found that intravenous vitamin C reduced blood histamine in people with allergic and infectious disease.[2] That was IV, not a capsule, so treat oral vitamin C as reasonable and cheap rather than proven for this.

2. TAKE DAO WITH THE MEAL

You can swallow the enzyme itself. Taken about 15 minutes before eating, it works in the gut on that meal only. It does nothing for histamine your own cells release, and nothing once the meal is gone. The best human data is small: an open-label study of 28 people with low DAO found fewer and milder symptoms over four weeks of supplementation.[3] Promising, not settled. Two honest notes. Products vary a lot, and a 2023 lab analysis of ten over-the-counter DAO supplements found only two hit their label claim, with two showing no detectable activity at all.[4] Buy from a brand that publishes third-party testing, and think of it as a tool for restaurants and travel, not a daily fix.

3. PROTECT THE LINING THAT MAKES IT

DAO is made by the cells lining your small intestine. A gut that is inflamed, overgrown, or recovering from antibiotics makes less of it. This is why the gut section (page 8) matters even if your only symptom is skin.

> **DRAIN TWO: METHYLATION AND HNMT**
>
> Histamine that is already inside your tissues is cleared by a second enzyme, HNMT, and HNMT runs on methyl groups. If your methylation is slow, which is common with variants in **MTHFR** and related genes, this drain runs behind. Support here is not a histamine supplement. It is the B12, folate, B6, and choline that keep methylation moving, in the forms your genes can use. This is the part I see skipped most often, and it is often the reason the food work alone was not enough.

> **BEFORE YOU BUY ANYTHING**
>
> Copper is easy to overdo when stacked across products. B6 in high doses over months can cause nerve symptoms. Neither belongs in a "take more" plan without knowing what you are already getting. Bring the labels to your practitioner or pharmacist.

Calm the cells that *release it.*

Mast cells are the immune cells that store histamine and let it go when they are triggered. Heat, stress, perfume, pressure on the skin, and estrogen can all set them off. Antihistamines catch the histamine after release. A different set of tools aims at the release itself.

Dr. Ben Lynch, whose *Dirty Genes* questionnaire is the one I use on my site, frames histamine support in three parts: nutrients that steady mast cells, a probiotic chosen for histamine rather than against it, and DAO with meals. I think that is the right shape. The next two pages cover the probiotic and DAO. This page is the mast cell piece.

COMPOUND	WHAT IT DOES	EVIDENCE, HONESTLY
Quercetin	A plant flavonoid that steadies mast cells and reduces release. Found in onions, apples, capers.	Strong in lab studies. In one human mast cell study it outperformed cromolyn, a prescription stabilizer, and a small human trial improved contact dermatitis.[5] Absorption from capsules is poor, so form matters. MODERATE
Luteolin	A related flavonoid, often paired with quercetin.	Mostly lab and animal work. Reasonable to try with quercetin, not proven alone. EARLY
Stinging nettle	Traditional for hay fever. Appears to block histamine at the receptor and reduce inflammatory signals.	Small human trials in seasonal allergy, mixed results. EARLY
Bromelain	Pineapple enzyme. Used to improve absorption of quercetin and for sinus inflammation.	Support role. Do not expect it to work alone. SUPPORT
Vitamin C	Cofactor for DAO and appears to lower histamine directly.	See page 6. Cheap, safe at normal doses, worth including. MODERATE

THE NON-SUPPLEMENT HALF, WHICH IS BIGGER

- **Sleep.** Histamine is a wakefulness signal. Short sleep raises it and it raises short sleep. Seven hours is not optional here.
- **Stress load.** Cortisol and the stress hormone CRH trigger mast cells directly. The 2 to 4 a.m. wake-up many people with histamine issues describe is often this loop. Anything that lowers the baseline helps: walking, breath work, less caffeine after noon, a real day off.
- **Heat and friction.** Hot showers, tight waistbands, and hard workouts in the heat are common triggers. Not forever. Just while the bucket is full.
- **Fragrance and chemicals.** If a hotel room or the detergent aisle sets you off, that is mast cells, not imagination. Go unscented for the reset.

Your probiotic might be *making histamine.*

Bacteria make histamine. It is how aged cheese and salami get theirs. Some of the most common strains sold as probiotics do the same thing inside you. If you have hives and take "a probiotic" without knowing the strains, there is a fair chance you are pouring water into the bucket every morning.

STRAINS THAT PRODUCE HISTAMINE

STRAIN	WHERE YOU FIND IT
Lactobacillus casei	Many yogurt drinks and general probiotics
Lactobacillus delbrueckii (bulgaricus)	Standard yogurt culture
Streptococcus thermophilus	Standard yogurt culture
Lactobacillus helveticus	Swiss-style cheeses, some blends

These are well documented as histamine producers in fermented foods. Whether a capsule dose raises your histamine meaningfully is less studied, but with a full bucket I would not test it.

STRAINS THAT DO NOT, AND MAY HELP CLEAR IT

STRAIN	NOTE
Bifidobacterium infantis	Often first choice
Bifidobacterium longum	Well tolerated
Bifidobacterium bifidum, breve	Neutral to helpful
Lactobacillus plantarum	May degrade histamine
Lactobacillus rhamnosus GG	Neutral, immune support
Lactobacillus salivarius, gasseri	Neutral
Saccharomyces boulardii	A yeast, not a bacterium. Neutral.

The "may help clear it" claims are mostly lab and animal findings so far. The safer framing is that these do not add to the load.[6]

THE PART THE STRAIN LIST DOES NOT FIX

If your gut is overgrown, meaning bacteria living where they should not in the small intestine, changing probiotics is rearranging furniture. SIBO is one of the most common things underneath histamine intolerance, because the overgrowth both makes histamine and damages the lining that makes DAO. If bloating within an hour of eating is on your checklist, a breath test is worth asking your doctor about before you spend money on anything on this page.

Two things I would do regardless. Eat a wide range of plant fiber once the reset is over, because diversity in what you eat is the best predictor of a diverse microbiome. And stop the daily fermented-food habit until you know it is not a trigger. Kombucha is not a health food if it gives you hives.

Estrogen and histamine *push each other up.*

Estrogen tells mast cells to release histamine. Histamine tells the ovaries to make more estrogen. High-estrogen days, ovulation and the week before a period, are high-histamine days. When estrogen starts swinging in perimenopause, so does everything on your checklist.

This is why women who never had a food issue start reacting to wine at 44. The food did not change. The clearance did, and the estrogen signal got louder and less predictable at the same time. It is also why the reset alone sometimes disappoints. If the biggest inflow is hormonal, the food work helps, but it does not close the tap.

TRACK IT FOR ONE CYCLE BEFORE YOU CHANGE ANYTHING

The tracker on the last page has a cycle column. Mark day one of your period and note symptoms daily for a month. If the flares stack around ovulation and the late luteal week, hormones are a main source. That single page of data is worth more to your doctor than a description.

WHAT SUPPORTS ESTROGEN CLEARANCE

- **Cruciferous vegetables** most days. Broccoli, cabbage, cauliflower, Brussels sprouts, arugula. They feed the liver pathway that packages estrogen for removal.
- **Fiber and a daily bowel movement.** Estrogen leaves through the gut. If you are constipated, it gets reabsorbed and goes around again.
- **Sleep and stress**, again. The same cortisol loop that triggers mast cells disrupts the hormone rhythm.
- **Alcohol off** during the reset. It is high histamine, it blocks DAO, and it slows estrogen clearance. Three strikes.

> ### WORTH ASKING YOUR DOCTOR TO CHECK
>
> If your checklist leans hormonal: estradiol and progesterone timed to your cycle, FSH if you are over 40, thyroid (TSH and free T4 at minimum), ferritin, vitamin B12, and vitamin D. Bring the tracker. Ask specifically whether your pattern fits perimenopause and what the options are. Hormone therapy decisions belong with your physician. My role is to make sure you walk in with the pattern already mapped.

> ### WHERE COMT COMES IN
>
> COMT is one of the enzymes that clears estrogen and stress hormones. People with a slow COMT variant tend to hold both longer. If you flush with stress, run anxious, and react around your cycle, that is a pattern worth testing rather than guessing at.

The drains are *partly written in.*

Everything in this workbook helps most people somewhat. Which part helps you most depends on where your body runs behind, and a lot of that is genetic. These are the five I look at first for histamine.

GENE	WHAT IT DOES	IF IT RUNS SLOW
DAO (AOC1)	Makes the enzyme that clears histamine from food in the gut.	Food is a big trigger. The reset produces a dramatic change. DAO support and cofactors matter most.
HNMT	Clears histamine inside tissues, including the brain.	Brain fog, headaches, and sleep issues outlast the food work. Methylation support matters more than diet.
MTHFR	Central methylation gene. Feeds HNMT the methyl groups it needs.	Slow HNMT by proxy. The right forms of folate and B12 often move the needle when nothing else did.
COMT	Clears estrogen and stress hormones.	Hormonal and stress-driven flares. Cycle and mood track together. Calming the system beats adding supplements.
MAOA	Breaks down neurotransmitters, some of them histamine-adjacent.	Mood, sleep, and reactivity to tyramine-rich foods like aged cheese and wine.

None of these decide anything on their own. A slow DAO variant with a calm gut and a fresh-food diet may never cause a symptom. A normal DAO with SIBO, nightly wine, and perimenopause will fill the bucket anyway. The genes tell you where to look first, so you stop running every protocol in the order some influencer posted it and start with the one your body is asking for.

FREE, TAKES ABOUT TEN MINUTES

The Dirty Gene Test walks you through these genes, plus methylation, detox, and stress variants, in plain English. It is a questionnaire, not a lab, and it is the place I start with nearly everyone who comes to me with this problem.

TAKE THE DIRTY GENE TEST →

int-wellness.com/dirty-gene-test

When to see a doctor, and *how to talk about the pills.*

GO NOW, NOT AFTER THE RESET

- Any swelling of the lips, tongue, or throat, trouble breathing, or feeling faint with a reaction. That is emergency care.
- Hives most days for more than six weeks. That is chronic urticaria and it deserves a proper workup.
- Unexplained weight loss, fever, night sweats, or blood in the stool alongside the gut symptoms.
- Flushing with a racing heart and a drop in blood pressure.
- Symptoms that started after a new medication.

WORTH A REFERRAL

- An allergist or dermatologist for the hives themselves.
- A gastroenterologist if SIBO, reflux, or the gut checklist is loud.
- Your gynecologist or a menopause-informed physician for the hormone pattern.

THE CONVERSATION ABOUT REDUCING A MEDICATION

The goal of this workbook is to need the lid less, not to rip it off. When you have done the reset, tracked a cycle, and know your top two sources, that is the moment to bring it up. Say something like:

> *"I have been on famotidine and loratadine daily for [months]. I have tracked my triggers and made these changes. I would like to know if there is a safe way to step down, and what to watch for if we try."*

Two things to know going in. Acid blockers are usually tapered rather than stopped, because stopping cold can cause rebound acid for a couple of weeks. And if you have true chronic urticaria, your doctor may want you to stay on antihistamines for a while even as things improve. That is fine. This is a long game.

WHAT TO BRING

- The leak checklist, page 4
- Your tracker, page 12
- Your current supplement and medication list, with doses
- Your Dirty Gene Test results if you took it

THE SHORT VERSION OF THIS WHOLE GUIDE

Find your top two sources. Run the 14-day reset and bring foods back one at a time. Fix the drains: cofactors, methylation, a gut that is not overgrown. Swap any probiotic to histamine-friendly strains. Track a full cycle. Then, with your data, talk to your doctor about needing the pills less. And if you are doing all of it and still reacting, stop adding protocols. Find out what your genes are actually doing.

Write it down. *Memory lies about this.*

Score symptoms 0 to 3 (none, mild, moderate, bad). Cycle: write "P" on period days and "O" around ovulation if you know it. Print two copies for a full cycle.

DAY	CYCLE	WHAT I ATE THAT WAS NEW OR RISKY	SKIN / HIVES	FLUSHING	GUT	HEAD / FOG	SLEEP (HRS)	STRESS 0 TO 3	MEDS / SUPPS
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									

REINTRODUCTION LOG (DAY 15 ON)

Food _____ Day ____ Reaction 0 to 3 ____

Food _____ Day ____ Reaction 0 to 3 ____

Food _____ Day ____ Reaction 0 to 3 ____

Food _____ Day ____ Reaction 0 to 3 ____

Food _____ Day ____ Reaction 0 to 3 ____

WHAT I NOTICED

_____

_____

_____

_____

If you are doing all of this *and still reacting.*

Then the answer is not another protocol. It is finding out which drain is small and why. That is what the genetic work is for, and it is the reason I built the practice around DNA, blood work, and the gut together instead of any one of them.

An intake looks at your genes next to what you actually eat, take, and do, and comes back with the two or three things that are yours to fix, in the order that makes sense. Most people leave with a shorter list than they came in with.

BOOK A DISCOVERY CALL →

OR THE FREE DIRTY GENE TEST AT INT-WELLNESS.COM

SOURCES

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