# 9 Things To Know While You're Still In MOLD

THIS HANDOUT IS PART OF THE 9 Things to Know While Still In Mold Course. THERE'S MORE! BE SURE TO WATCH THE VIDEO WHERE DR. JILL SHARES ADDITIONAL INFORMATION, INCLUDING APPROPRIATE DOSING, AVAILABLE ONLY IN THE COURSE.

If you have finally identified MOLD as the cause of years of unexplained symptoms, you're possibly feeling two feelings. First, relief! Relief to finally have an answer and a direction in order to restore your health and get your life back. The second feeling, however, snaps you back to reality - a sense of doom. When you embrace the full implications that the answer is MOLD, it's natural to feel overwhelm, panic, and fear. What if you're still in mold? It may take some time to figure out your next steps to accomplish the most important step in recovery - Avoidance.

# 1. YES, START TREATMENT

Is it even worth starting treatment?

Yes, yes, a million times yes. I can tell you with full confidence that it is not only helpful, but in my experience, *necessary* to start engaging solutions, despite your exposure situation. The key is to be mindful to the fact that you're still being exposed, and work within that limitation.

I beg you, PLEASE don't take this information as an excuse to delay what we know is the most important part of healing from mold - AVOIDANCE OF MOLD.

I encourage you to work with a <u>mold-literate practitioner</u>. The things I'm sharing here are the tip of the iceberg of what you can do to protect yourself while you work out next steps. Also, some things mentioned may not be suitable for you as an individual. I'm sharing the things I've seen that helped the bulk of my patients in your exact situation.

I created this to give you tools to reduce harm as much as possible while you take action to get out of your exposure.

So let's get you set up with practical things to do while you're still in mold. But first, a very important message:

NOTE: IF YOU ARE PREGNANT OR PLANNING TO GET PREGNANT - GET OUT AT ALL COSTS

AVOIDANCE is still the key. It has to be said, repeatedly.

#### 2. AIR FILTRATION

The name of the game with air filtration is to reduce particulates, especially ultrafine particulates.

Ultrafine particulates are small enough to carry mycotoxins, meaning they're sized down to the 0.1 micron level. A few key brands have independent testing to validate that they're clearing the air to this level.



Ultrafine particulates also carry around chemicals related to chemical sensitivity, such as VOCs and aldehydes, as well as endotoxins which are commonly found in damp buildings. Mold-sick people can have marked reactions to these. When we clear the ultrafine particulate, we reduce the microbial chemical load as well.

A HEPA air filter may not filter down to the level needed to clear mycotoxins. Look for the term "HyperHEPA" to get to the ultrafine particulate level.

What about UV? Experts that I work with say that UV filtration doesn't allow the particle to be exposed for long enough to kill a spore. Apparently this takes some concentration of time. They counsel me that UV in an air filter is not worth the added expense. I do, however, recommend UV wands for sports bags, athletic shoes and lockers, and suspicious closets, cavities, and cabinets where the UV light can be applied for an extended period of time.

Ozone output from an air filter is an important factor to assess. Ozone is a well-established respiratory irritant. Mycotoxins in the presence of ozone become more toxic and damaging to the respiratory passages. Ask the air filter company for independent testing to verify that their air filter is within the accepted level.

The biggest mistake I've seen is that people don't match the air filter capacity to the size of their space. Most single family homes require both a whole house filter and at least one smaller, focused filter for problematic, dustier spaces.

The most important space to filter is where you sleep.

Other air filter issues to consider are the noise factor when set at the appropriate fan speed for your space, cost to maintain, ease of maintenance, and EMF output.

Check out <u>my video</u> on factors to consider when choosing an air filter. The feature *for mold specifically* that has my vote is a system that zaps the filter so that any spores that are trapped in the filter can't grow or make mycotoxins. Other filtration needs, such as wildfire smoke, don't necessarily need this added feature, but for mold, it's paramount. For mold air filtration, I choose Intellipure. Use code DRJILL2024 for 10% off.

# 3. EXPOSURE REDUCTION

If the problematic area is isolated, my patients have felt slight improvements sealing off the area. They close and seal any venting to the space. Seal by covering with plastic and sealing with a thick tape, such as duct or frog tape. I've seen this work for under sink cabinets, closets, and even entire basement rooms.

Exchanging the air with outdoor air is another tactic, assuming your outdoor air quality is desirable. Watch humidity levels however. Since mold thrives in high humidity, avoid opening doors and windows on humid days.



Another method of biostasis is the use of essential oils, if you tolerate them. Set cotton balls soaked with 10-20 drops of essential oils around your space or inside problematic spaces before sealing them off. The following essential oils have been shown to be effective against mold:

CedarCuminFrankincenseRosemaryTea TreeEucalyptus

Ajwain Thyme (red or white) Pine

Holy Basil Cloves Citrus (lemon, orange,

grapefruit)

Some brands I trust for essential oils are <u>Snow Lotus</u>, <u>Mountain Rose Herbs</u>, <u>Pranarōm</u>, <u>Aura Cacia</u>, and <u>Young Living</u>.

Burning clean incense on occasion may also be helpful, if tolerated. You can find clean incense and clean charcoal at Enfleurage and Higher Mind Incense.

# 4. LOW-MOLD HIGH-BINDER DIET

Eating a low-mold diet while still in mold supports key nutrients, reduces colonization and microbiome imbalances, and greatly reduces histamine-related issues.

The list of foods to reduce or avoid is an ever-changing list based on agricultural practices, and may be different if you live outside of the US. I start with a shorter list at first, what I'm calling the First Tier. Often that's enough to improve symptoms. Some people need to expand into the Second Tier avoidance list.

While you're being exposed, food-based binders in the form of insoluble fiber are recommended. See the list below for options. Steamed kale also functions as a binder. Stronger binders while being exposed have led to increased symptoms in my patients.

First Tier Foods To Avoid ~

Sweets of any kind Corn
Dried fruits Potatoes

Leavened bread Pickles & pickled foods

Yeast Vinegar
Simple carbohydrates Soy sauce
Baked goodies Cantaloupe
Mushrooms Grapes

<sup>&</sup>lt;sup>1</sup> Kahlon TS, Chiu MC, Chapman MH. Steam cooking significantly improves in vitro bile acid binding of collard greens, kale, mustard greens, broccoli, green bell pepper, and cabbage. Nutr Res. 2008 Jun;28(6):351-7. doi: 10.1016/j.nutres.2008.03.007. PMID: 19083431.



Apples Salami & cured meats

Aged cheeses Peanuts

Moldy cheeses Peanut butter

Second Tier Foods To Avoid ~

All fruit Fermented foods
Starchy vegetables Shelled nuts

All grains Condiments made with vinegar or sugar Non-organic dairy Sour cream or other soured milk products

Beverages To Avoid ~

Any sweetened beverage Moldy coffee

Fruit juice Alcoholic beverages

Oolong and black tea Fermented beverages, cider, kombucha

Better Beverages To Drink ~

Green tea Mycotoxin-free coffee

#### What To Eat To Protect Yourself ~

Colorful vegetables (eat more veggies than fruit) ~

Beets, artichoke, asparagus, radishes (helps the liver)

Broccoli, Brussel sprouts (detox via sulfurophanes)

Tomatoes (lycopene neutralizes mycotoxins)

Cabbage (helps your intestines)

Celery, cucumber (helps kidneys with water balance)

Bitter greens such as arugula, broccoli rabe, endive, watercress, kale, dandelion

greens

Colorful fruits (eat more veggies than fruit)

Essential fats ~

Avocado

Olive oil

Fresh seeds & nuts

Cage-free eggs

Wild-caught fish

Organic butter & yogurt

Organic beef liver



Healing spices ~ Curry with turmeric Parsley

What To Eat To Fight Off Fungus ~

Garlic Scallions
Onions Chives
Shallots Leeks

Spices To Use To Fight Fungus ~

Clove Thyme
Cinnamon Oregano
Cumin Basil
Rosemary Bay leaf
Sage Tarragon

Food-Based Binders To Use Up To 2 Tablespoons Daily ~

Rice bran Chia seed

Oat bran Pumpkin seed

Psyllium husk Sesame seed

Flax seed Sunflower seed

# 5. PREVENT COLONIZATION

Colonization is when the critters in the moldy building move into you, and you become the moldy building. They can invade your sinuses, lungs, and intestinal tract. Once a strong colony is established, it can delay healing after you're out of the mold exposure. So it works best if we prevent it in the first place. Colonization is also referred to as biofilm, or bad guy biofilm, as I call it.

The way to prevent colonization is to re-establish microbial order on a daily basis to the susceptible tissues. It's like providing back up forces for your front line. We accomplish this through nasal sprays, gentle antifungals, and probiotic gut support.

# Nasal Sprays ~

Nasal sprays to use while still in mold should lean more toward supporting the flora versus killing fungus. We start with the assumption that you have not yet become the moldy building, and just offer support to the natural flora. Sinus probiotics are a nice



choice, and can be used once or twice daily to repopulate the good guys. Brands that use the strain most researched for sinus health are <u>NasoBiotex</u> and <u>Lanto Sinus</u>.

But if your sinuses are particularly symptomatic, you may need to add remedies that lean toward being antimicrobial. <u>CitriDrops</u> are a nice option for this purpose. Some people also need additional allergy support. In those cases, I use <u>Nasal Guardian</u> propolis spray.

#### Gentle Whole-body Antifungals ~

Gentle is the key word. If you are hosting any biofilm and still in mold, we don't want to "poke the bear" to the degree that it starts to fight back. The goal is to prevent new characters from joining the group - less to clean up later. Often I will combine common well-known kitchen herbs with our safest herbal antifungals.

Kitchen herbs listed in the Low-Mold High-Binder Diet above can be measured out and added to food throughout the day. For dried leafy herbs, try to get up to 4 Tablespoons daily. For powdered spices, try to get up to 2 Tablespoons daily.

Sage and holy basil make lovely daily teas and can be drunk hot or cooled as iced tea. For my mold-sick patients who prefer take something as a pill due to lack of energy or appetite, I turn to <a href="MycoRepel">MycoRepel</a>. It's a well-formulated blend of antifungal herbs that seems to sneak up on the fungus without sounding alarms.

Monolaurin is a compound from coconuts that's also safe to take daily. Because it's from food, it doesn't seem to alarm the colony. As a tasty liquid, this can be used easily with kids.

#### Probiotics ~

Gut support involves using daily <u>spore-based probiotics</u>. Spore-based probiotics do a better job than other probiotic types at helping the body rebalance itself while being exposed to mold. Rather than repopulate, they travel through, establishing order and balance as they go. Proceed very slowly with these. They can cause a die-off of the unsavory characters, which can leave you with a headache or feeling fluey. Start with opening the capsule and sprinkling just a bit on food.

### 6. DOODY IS YOUR DUTY

That's right, I mean poop. Your number one body priority while you're being exposed is Number 2s! The perfect amount of number 2's is two - 2 Number 2's every day. It's the Goldilocks principle. Whether you're going too much or too little, correcting to 2 per day is just right. This number of BMs while still in mold leads to a faster recovery once you're out of mold.



Mold is hard on the gut. It thins the lining, disrupts the flora balance, and alters motility.<sup>2</sup> Don't be surprised if you need more than one therapeutic measure to balance the frequency of stools. I think of it as a many-legged stool. One leg is not enough. You often need 3 or more things combined to get to a steady balance. The most important first leg is diet.

### Going too much ~

Combine insoluble with soluble fiber. Insoluble fiber is the mycotoxin-binding champ and gets the focus in my book. But soluble fiber may also be needed in order to slow the transit time. Check the list below for options.

Source of Insoluble Fiber Source of Soluble Fiber

Rice bran Pear pectin
Oat bran Apple pectin
Psyllium husk Citrus pectin
Flax seed Guar gum
Chia seed Xanthum gum
Pumpkin seed Amla fruit

Sesame seed Slippery elm bark

Probiotics in addition to spore-based probiotics can often regulate over-active bowels.

Eat foods that nourish the intestinal lining, such as organic butter and ghee, and cooked or juiced cabbage.

#### Going too little ~

Quite frequently, those who suffer from constipation from mold exposure also have overgrowth of intestinal fungi or methane-producing bacteria. They also tend to have dehydration and slow motility of the intestines, which stalls out peristalsis (aka gut squishing).

I often combine measures to combat all of the above in order to get the guts moving.

For motility, the best inducer of peristalsis is bitters. The bitter taste on the tongue starts a cascade of digestive juices and activity, including our best mycotoxin detoxer - bile. Drop 5 drops on your tongue 10 minutes before meals to get the digestive juices flowing. Bitters are an acquired taste. If you try one blend and it doesn't suit you, don't give up.

<sup>&</sup>lt;sup>2</sup> Liew WP, Mohd-Redzwan S. Mycotoxin: Its Impact on Gut Health and Microbiota. Front Cell Infect Microbiol. 2018 Feb 26;8:60. doi: 10.3389/fcimb.2018.00060. PMID: 29535978: PMCID: PMC5834427.



Try another. Like cooking, different recipes have different flavors. Some of my favorites are <u>Bittersweet Elixir</u>, <u>Bitters No.9</u>, and <u>BitterX</u>.

Vegetable fiber is also helpful. Many times simply adding steamed or sautéed greens to the daily diet gets things moving. If raw vegetables cause bloating (which is common when exposed to mold), try them steamed or sautéed.

Another gentle motility agent that also protects the brain and kidneys from mycotoxins is melatonin.<sup>34</sup> Melatonin taken at bedtime helps bowel movement in the daytime.

To bring more water to the colon, magnesium, vitamin C, stool softeners, and/or herbs that act as stool softeners can be used. The herbs can cause a little cramping, so I start with teas that combine herbs to reduce cramping, such as Smooth Move tea by Traditional Medicinals.

And remember to drink plenty of spring water!

# 7. PROTECT

The following herbs and nutrients have been shown in animal studies to protect from mycotoxins in various ways. These are things I plea with remediators to take so they don't end up sick from mycotoxins. Talk with your doctor about whether one or more of these is right for you.

### Milk thistle ~

Milk thistle protects the vital organs, liver, and kidneys, and can promote regeneration of liver cells affected by mycotoxins.<sup>5,6</sup> Milk thistle helps you make natural glutathione, and modulates the pace of detox so it doesn't go too fast to cause a dump of toxins. Milk thistle does induce cytochrome p450, which can alter some drug dosages.

#### Green tea ~

An all-around mold helper is green tea. It protects the organs of detoxification, while also protecting the cells, even certain immune cells, from the damaging effects of mycotoxins.<sup>7</sup> My patients find help with puffiness and weight gain, as well as improved

<sup>&</sup>lt;sup>7</sup> Sugiyama K, Kinoshita M, Kamata Y, Minai Y, Sugita-Konishi Y. (-)-Epigallocatechin gallate suppresses the cytotoxicity induced by trichothecene mycotoxins in mouse cultural macrophages. Mycotoxin Res. 2011 Nov;27(4):281-5. doi: 10.1007/s12550-011-0105-8. Epub 2011 Jun 29. PMID: 23605930.



<sup>&</sup>lt;sup>3</sup> Meki AR, Hussein AA. Melatonin reduces oxidative stress induced by ochratoxin A in rat liver and kidney. Comp Biochem Physiol C Toxicol Pharmacol. 2001 Nov;130(3):305-13. doi: 10.1016/s1532-0456(01)00248-4. PMID: 11701387.

<sup>&</sup>lt;sup>4</sup> Meki AR, Abdel-Ghaffar SK, El-Gibaly I. Aflatoxin B1 induces apoptosis in rat liver: protective effect of melatonin. Neuro Endocrinol Lett. 2001 Dec;22(6):417-26. PMID: 11781538.

<sup>&</sup>lt;sup>5</sup> Al-Anati L, Essid E, Reinehr R, Petzinger E. Silibinin protects OTA-mediated TNF-alpha release from perfused rat livers and isolated rat Kupffer cells. Mol Nutr Food Res. 2009 Apr;53(4):460-6. doi: 10.1002/mnfr.200800110. PMID: 19156713.

<sup>&</sup>lt;sup>6</sup> Kostek H, Szponar J, Tchórz M, Majewska M, Lewandowska-Stanek H. Sylibinina i jej działanie hepatoprotekcyjne z punktu widzenia toksykologa [Silibinin and its hepatoprotective action from the perspective of a toxicologist]. Przegl Lek. 2012;69(8):541-3. Polish. PMID: 23243923.

energy. And as if that's not enough, it's also a gentle antifungal that won't cause flares because the mold doesn't feel alarmed by it. All that in a tasty cup of goodness. Caffeinated and decaf both work against mold.

#### Quercetin ~

Quercetin is a bioflavonoid, which means it's colorful. The colorful part of plants are the most beneficial for mold recovery. <u>Quercetin</u> has an affinity for the sinuses, gut, and bladder, and is great for those who have significant allergy symptoms during their exposure. It was shown to be cytoprotective, meaning protecting cells, when exposed to certain mycotoxins.<sup>8</sup> A great mold-fighting food source of quercetin is onions.

#### DHA ~

Docosahexaenoic acid, or <u>DHA</u>, is a fish oil. When it comes to mold exposure, it's neuroprotective, meaning it protects the brain, brain barrier, and nerves from mycotoxin damage.<sup>9</sup> It protects the kidneys, and reduces inflammatory markers related to histamine release.

#### "Fantastic Four" ~

An interesting study on animals being exposed to certain mycotoxins showed that four different nutrients, when taken together, had a stronger protective effect than any one alone. The sum effect was greater than the parts. These four nutrients were CoQ10, vitamin E, selenium, and L-carnitine. Here are some food sources of each that fit with the first tier of the Low-Mold High-Binder diet.

#### CoQ10 -

spinach, broccoli, cauliflower, avocado, seeds, sardines, wild-caught salmon Vitamin E -

broccoli, butternut squash, kiwi, avocado, olive oil, seeds, nuts, wild trout Selenium -

brazil nuts, asparagus, broccoli, Brussel sprouts, parsnips, organic whole grains L-carnitine -

beans, lentils, wild-caught fish, cage-free eggs, wild game

<sup>&</sup>lt;sup>10</sup> Atroshi F, Rizzo A, Biese I, Veijalainen P, Saloniemi H, Sankari S, Andersson K. Fumonisin B1-induced DNA damage in rat liver and spleen: effects of pretreatment with coenzyme Q10, L-carnitine, alpha-tocopherol and selenium. Pharmacol Res. 1999 Dec;40(6):459-67. doi: 10.1006/phrs.1999.0529. PMID: 10660942.



<sup>&</sup>lt;sup>8</sup> Ramyaa P, Krishnaswamy R, Padma VV. Quercetin modulates OTA-induced oxidative stress and redox signalling in HepG2 cells - up regulation of Nrf2 expression and down regulation of NF-κB and COX-2. Biochim Biophys Acta. 2014 Jan;1840(1):681-92. doi: 10.1016/j.bbagen.2013.10.024. Epub 2013 Oct 24. PMID: 24161694.

<sup>&</sup>lt;sup>9</sup> Jia Q, Zhou HR, Bennink M, Pestka JJ. Docosahexaenoic acid attenuates mycotoxin-induced immunoglobulin a nephropathy, interleukin-6 transcription, and mitogen-activated protein kinase phosphorylation in mice. J Nutr. 2004 Dec;134(12):3343-9. doi: 10.1093/jn/134.12.3343. PMID: 15570035.

# 8. TO DETOX OR NOT TO DETOX, THAT IS THE QUESTION

There's a false idea floating around that you can't use anything considered detox when you're actively being exposed to mold and mycotoxins. I'm here to bust that myth!

I invite you to watch my video blog titled <u>Accumulation vs Detoxification</u>. I explain how the body prioritizes resources. Think of these resources as a percentage of 100%. In a perfect, well-balanced world, the body is functioning at 50-50, with an equal balance of resources being spent toward managing things coming in and getting rid of old gunk - accumulation and detoxification.

For accumulation, think repair and building: building strength through joint repair, repairing sun damage and toning the skin, growing thick hair, and building muscles, teeth and bones. This also involves shunting away daily exposures.

For detoxification, think of the process of getting rid of any build-up of internal waste products and outside toxins: a healthy appetite, reliable and consistent bowel movements, hydration, sweating, having a good exchange of air in the lungs through vigorous movement, and great sleep (because we detox the most when we sleep).

When you're actively being exposed to mold, the balance tips toward accumulation in order to handle the situation. We need to respect that...and also rebalance that in a gentle way.

Consider gentle detox measures that support the body's normal, healthy metabolism, but aren't used so frequently as to aggravate the already burdened organs of detoxification.

My patients have also successfully used weekly sauna, and/or lymphatic massage every other week. They've also really enjoyed weekly peloid baths. For information on how to use peloids for detox baths, check out my website. Using body treatments more frequently than what I list above have seemed to flare symptoms in my patients still in mold.

# 9. WELL MEANING BUT NOT HELPFUL WHILE STILL IN MOLD

Glutathione supplementation can push detox too aggressively for some, especially when actively being exposed to mycotoxins. Proceed carefully with glutathione while still in mold.

Strong binders can unburden the body so much that it shifts into detox mode (see above). This can cause a large surge of toxins, not just mycotoxins, into an already burdened system. Proceed carefully with binders while still in mold.



Deep breathing exercises, while helpful after you're out of mold, may cause more aggravation than benefit while still in mold. The body, in its wisdom, reduces the rate and depth of breathing in order to reduce the total respirable toxin load. Working against this protective mechanism may increase anxiety and insomnia.

Be cautious of companies touting mold exposure mitigation techniques that add more chemicals to the mix. I'm seeing a trend of using chemical foggers or ozone before, or in lieu of, remediation. Let me be crystal clear - fogging alone is not sufficient remediation and never use ozone in moldy environments.

A few of my patients found benefit using non-toxic foggers followed by a detailed particulate cleaning in rental or temporary housing situations. Whether you should fog as a mitigation measure is up to you and your certified mold inspector. But for my role as your body expert, make sure to "pre-sniff" any products you're considering. Stay with the chemical, uncapped, for the same duration of time you spend in your moldy environment. If you see ANY worsening of symptoms, this method is not for you.

For brand recommendations and doses, check out my course Still In Mold.

# Best of luck as you BREAK THE MOLD!

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