Got Mold? Mold-Related Illness & How It Impacts SIBO Masterclass with Dr. Ami Kapadia

Shivan Sarna: Hi everyone. Welcome! Dr. Ami Kapadia is here. We're going to be talking about mold and SIBO and the way that those two things interact and just mold in general, being exposed to it, what the implications are (and aren't).

She has an incredible personal story as well of how she has resurrected her health through the generosity of healers around the world, and then decided to pay it forward to help people like us.

Dr. Kapadia can be reached at Kwan Yin Healing Arts Center. And she will work with your physician and your practitioner. She can't work directly with you per se. But she can work as a consultant on your case.

Thank you for being here. It means the world to us that we're able to help you and the people that you help. You know you have other things to do in your life other than to have headaches, brain fog, constipation, diarrhea, SIBO, IBS and mold exposure. We're going to get to Dr. Kapadia right now.

Take it over, Dr. Kapadia. Thank you.

Dr. Ami Kapadia: Thank you, Shivan! Alright! Okay, sounds good. So let's get started.

So, we're going to be talking about mold today, an introduction to mold-related illness. And I just wanted to start by saying that it's a complex topic as a lot of the things are that you've been talking about with your other physicians.

This presentation is a compilation of what I've learned over the last decade or so from learning about this topic from some of the more well-known physicians in the country that have been treating this for a long time. And that knowledge is always evolving. So we're always working and adapting our treatment protocols. But this is what we have so far.

I just wanted to mentioned Dr. Michael Lebowitz. He's a chiropractor that still practices in Washington state and Hawaii. And he's the first physician from whom I learned about mold-related illness. He's been treating it since the early '80s. Feel free to check out his website.

Alright, this is just a general disclosure statement that I'll let you guys read on your own, just to always consult with your doc. This isn't medical advice directly to you.

Alright! So, my goals for today, I'd like to increase awareness of mold exposure as a potential factor in illness, discuss some of the sources of mold exposure, and then talk about symptoms, testing and treatment.

Just to dig into that a little bit more, what are we talking about with this whole mold problem? I want to define that a little bit more as well as the scope of the problem and talk about environmental factors that you can look for in your environment to determine there's a potential issue with mold. And then we'll dig into those symptoms, testing and treatment options.

Alright! So mold and water-damaged buildings, what's the scope of the problem? So I want to start by just going over that there's always going to be mold in all indoor environment. It's just something that's going to be

there. And the question is really: "Which molds are present? And in what concentrations?" as well as "Are these the kinds of molds that can cause illness or produce mycotoxins?"

Sources of mold exposure can come from your home, your work environment, your car, and really anywhere that you go regularly. So if you go to a certain church every week or a bookstore or a movie theatre, we always ask because they can all be potential sources of exposure. [04:45]

Which sources of mold exposure are concerning? So we're not talking about surface molds like what you see on the bathtub if you don't clean it regularly enough or mold that's growing on fruit in the kitchen. Those are easily remediable. We're talking about really gross contamination of buildings. [05:07]

Dr. Ami Kapadia: So when I say that, there's a couple of different ways that buildings can be affected. One is if there's been significant water damage. So we're talking about from flooding, if there's been a roof leak or a burst pipe and materials have been soaked for an extended period of time. We call that a water-damaged building. And you'll see this abbreviation, WDB.

Another factor can be excess humidity. And this is something that can come from crawl space or basement and can be a little bit trickier to figure out, but is another hidden source of potential moisture issues in the home.

And finally, in cars, there can be issues with the HVAC systems in cars in certain models as well as the humidity if you park on the street. It can lead to some mold growth inside of your car.

So, those are the areas that we're looking at.

And when we talk about water-damaged buildings, it's important to know that it's not just the mold that we're talking about. There's been multiple other organisms and basically different factors that can be involved, not just the mold. And we're talking about things like bio aerosols, different fragments of the yeast as well as various bacteria that have been found in water-damaged buildings. [06:17]

I just wanted to mention, when I talk about Chlamydia and mycoplasma species here, we're talking about the respiratory infections and they've actually found some of these bacteria in buildings that have had water damage.

So next, we're going to talk about how many buildings are actually affected by mold and water damage. So these are a couple of statistics from the National Institute of Occupational Safety & Health and the World Health Organization. And then, there's just a picture in the corner there of a mark on a ceiling. So whenever you go into buildings, it can be interesting to look around and see if you see any signs of potential water damage. What we're seeing here could be from old water damage, but it's just something that we want to keep an eye on in our environment.

And unfortunately, these two organizations have found that about 50% of the buildings in the US have sustained some sort of water damage. It doesn't mean that they necessarily have ongoing problem, but they've had a problem at some point. So it's something that we would need to check on. So, that's the number of buildings that are affected. How many people do we think are affected?

So, it's also important to know that not everyone's affected the same way. in a given household, sometimes a mom or the children may be affected and the dad may not be affected. So it's not always everyone that's exposed. Some people have a genetic or acquired susceptibility to the health effects; and other people don't.

They're estimating probably between 18% and 25% are somewhat susceptible. And there can be a wide range of symptoms as far as what you experience when you're exposed.

Next, I wanted to talk about some environmental factors that lead to mold inside a home or a workplace. And like we talked about in the beginning, mold needs a couple of things to grow. Basically, it needs some sort of organic material, and it needs moisture. When I say "organic material," that could be anything from drywall to cardboard. In a house, a lot of times, it's drywall. And then, there's some sort of moisture that gets introduced through humidity or through a leak or other things that we talked about. And we know that whenever there's a mold issue, there's a moisture issue.

It's not enough to identify just that there's mold. We really want to figure out why is it there and how to prevent it from coming back.

These are some potential causes of moisture inside a home or a workplace. One important thing to look at is humidity. And really, you want that to be about less than 50%. That's something that's actually pretty easy to figure out on your own. You can buy something called *hydrometer* at Home Depot or other similar store. And you want to check all the rooms of your

home, the crawl space and the basement to make sure that the humidity is under that level.

Other potential sources of moisture include an HVAC system where mold can grow if it's not cleaned regularly. And a lot of us have a ducted system in our house where you have these ducts and bring heat and air-conditioning to different rooms in the home. And unfortunately, if there's a problem in one area, it can get to the other areas in the home because of the shared duct system.

There could of course be pipe leaks or roof leaks. There could be water in the basement. There's something called a vapor barrier that should be a in crawl space. And sometimes, if it's not intact, that can be an issue as well.

This is just a picture of condensation. And so we know if you're seeing condensation on your windows in your home, there's too much humidity. So again, we want to figure out where is that humidity coming from and how can we take care of that so we don't get mold growth. [10:08]

Dr. Ami Kapadia: Another thing I like to mention is just how quickly mold can grow if there is something like a leak in the home. And it can be as quickly as 24 to 48 hours. So you really want to get someone in there relatively quickly to dry out the area. In Portland, we have a company called *Oregon Restoration*. They're basically a company that comes in, sets up the dehumidifiers and really gets the area dried out as quickly as possible.

So next, I wanted to talk a little bit more about symptoms of mold-related illness. And specifically, since this is a SIBO-related symposium, I want to

mention some things related to SIBO and how you may know whether or not mold is potentially an issue in the symptoms that you're having.

When should we consider mold as far as if this is a factor in your health. So if you've had chronic health issues like SIBO and other digestive symptoms that have not responded to really good naturopathic or integrative medical treatment, especially if you know that you've had exposure to a water-damaged building or mold, this is definitely something that you want to think about with your physician.

If you have a chronic illness where you have symptoms in multiple different organ systems like you might have cognitive symptoms, digestive symptoms, different areas, that's another thing where you want to consider a possible environmental exposure like mold. The actual symptoms can vary. And we'll dig into that a little bit more coming up here.

I'm just going to list here some symptoms that were noted by a physician named Dr. Gray who's seen a lot of mold-related illness patients in Arizona. And I bolded the symptoms that we often see in patients with SIBO.

We talked about fatigue and headaches, memory problems, spaciness, bloating—I've seen a lot of my patients that find this a really frustrating symptom—rashes. So all of these symptoms as well as respiratory things like sinus symptoms and cough, neurologic symptoms.

As you can see, there's a whole host of things that you can have when you have mold exposure. And a lot of them do overlap with SIBO. So it's something that we want to keep in mind.

This is just some additional symptoms that Dr. Gray found were more common in his female patients. So, some cold and heat intolerance, skin flushing, palpitations which we see in a lot of patients. So again, you can get a whole host, a variety of symptoms when you have mold exposure. And it often does involve different organ systems like the GI tract, the nervous system and various other organ systems.

As far as symptoms of irritable bowel syndrome, SIBO, SIFO and water-damaged building exposure, I want to take a few minutes to talk about specifically how this may relate to patients who have irritable bowel syndrome or SIBO.

So, we know with irritable bowel syndrome that you could have small intestinal bacterial overgrowth and you can also have small intestine fungal overgrowth. We know from the work of Dr. Satish Rao that these symptoms can overlap. It can look very similar when someone has SIBO or SIFO or a combination of the two of them.

And if for anyone that's interested, feel free to google Dr. Satish Rao. He has a lot of great articles published online for free that you can look at. But he's really looked at this and how the symptom patterns overlap between SIBO and SIFO in patients with IBS.

So, I want to pull in to how this may relate to mold exposure. When we talk about SIFO or small intestine fungal overgrowth, we typically think of Candida issues. But one of the questions I've had is whether SIFO is just

from Candida or if there may be other mold species involved like environmental molds.

And just some theories about how that might work, we'll talk about that in a moment. First, I want to talk about how Candida and molds are related.

So, Candida and environmental molds are both in the kingdom fungi. So they are related to each other. Candida is a yeast. And environmental molds like aspergillus are classified as molds. But they're both, again, in the same kingdom so they are related.

And so, my question is, if Candida can cause SIFO, can other environmental molds do the same thing?

We need more research in this area, but some of the potential ways that I thought about are: "Can environmental molds colonize?" We know that they can suppress the immune system. So are they allowing overgrowth of bacteria and yeast?

"Is it another risk factor like dysmotility that's potentially making it more susceptible to continue to get SIBO?"

And just clinically, we have noted that practitioners have observed it's a lot more difficult to control intestinal yeast if someone's had mold exposure. [15:07]

Dr. Ami Kapadia: I wanted to also mention, we do have patients with SIBO that also have inflammatory bowel disease. And I've also wondered whether environmental mold can be a potential factor with IBD like Crohn's or colitis. We do know that there's a link between fungus and Crohn's. There

are studies that have shown higher levels of particular species of Candida in patients with Crohn's disease.

So, the role of what we call the *microbiome* or yeast and fungi in the GI tract is still being explored. But that's another potential factor that we might want to look at with patients who have inflammatory bowel disease and SIBO in the GI tract.

One thing I did want to mention is if you have IBS or SIBO or a combination of those diagnoses, and you suspect that you may have mold exposure, we're going to talk a lot more about how you can figure that out. But as far as addressing symptoms, one aspect that we found to be helpful is to look at histamine.

We know that mold exposure can trigger excess histamine. Some of the symptoms that can cause are bloating, diarrhea, constipation. All of those can be histamine related in some patients.

So, one avenue that we found that got some symptom improvement while we're trying to get to the bottom of things is to use antihistamines. And I've just listed some of the natural ones as well as the prescription ones that we've used.

I really like using quercetin as well as Aller-C and vitamin C. They're all really great options for natural antihistamines that can help with some of your symptoms as we figure out these underlying issues.

Okay…

Shivan Sarna: Dr. Kapadia, what is the other C, so vitamin C and Aller-C?

Dr. Ami Kapadia: Yeah. So, Aller-C, it's a product by Vital Nutrients. And it's a combination of quercetin and vitamin C together.

Shivan Sarna: Hmmm…

Dr. Ami Kapadia: And that's worked really well for patients.

And then, the last one I listed there, Camu Supreme, that's a product that contains a berry called camu that's naturally really high in vitamin C. And that can also be really helpful.

Shivan Sarna: Is that like Indian gooseberry like amla?

Dr. Ami Kapadia: That's different. That also has antihistamine and vitamin C properties. But this is a different type of berry.

Shivan Sarna: We love those berries. Okay, thank you.

Dr. Ami Kapadia: Yeah! One of the prescription options I'm mentioning here is Ketofilen [17:32]. In the US, it has to be compounded. In other countries, it's actually a routine medication used for asthma and other allergic issues. And it's been described as kind of an antihistamines specifically for the gut. So, that may also be something to talk about with your doctor.

So next, I wanted to talk about how does mold actually make us sick. We talked about the environment and how we potentially can be exposed. But how is it making us sick?

The main three effects that we know about, the most well-recognized, is allergy. And that's recognized by regular physicians. There are other forms such as infection and colonization. Molds also produce mycotoxins.

So those are other potential ways that they could be affecting us and affecting our immune system.

And the picture in the corner is just a really bad-looking ceiling with a lot of mold. And definitely, if you see anything like that, you don't want to stay in that environment.

Okay! Just to talk a little bit more about mycotoxins, the World Health Organization actually has a definition for mycotoxins. They discuss it as "natural products produced by fungi that evoke a toxic response when introduced in low concentrations to higher vertebrates like humans by a natural route."

We'll talk more about the routes of exposure. But these are basically toxins that are produced by molds that can affect our various organ systems in our bodies.

So, how do we get exposed to molds? When we talk about environmental molds, the main route of exposure is inhalation. There's also a potential for ingestion. Things like coffee, if it's not organic, can be high in mycotoxins. So I just always recommend getting organic coffee. There are other foods like grains that have been contaminated (usually, in pretty low quantities in the US, so I don't worry too much about that here. But there has been particular instances where it's been a problem in particular batches of foods like grains).

There's transdermal routes through the skin. And then, maternal fetal transmission is also possible.

Next, I wanted to talk about testing options. So let's say you have SIBO, you have other chronic health issues, and you're wondering, "Is mold an issue for me?" I'm going to talk about some testing options. And this is pulling from the work of a couple of physicians that I've listed here just to give you some background information.

Dr. Vincent Marinkovich was a well-known pediatric allergist and immunologist. He's no longer with us, but he did a lot of work in this area. [20:08]

Dr. Ami Kapadia: Dr. Joseph Brewer and Dr. Ritchie Shoemaker are names that you'll see a lot in the mold world. And if you google them, there are some great articles that they have for free online as well for more learning.

So, we talk about testing. It's really important to test your environment. I actually prioritize that over testing yourself if you have to pick. Ideally, we do both. But it's really important to figure out if you're having an environmental exposure.

And how to test your environment? So, I really advocate using an environmental consultant for this. I use a consultant.

If you're looking basically to see if someone is accredited, there are two organizations that I'm listing there.

You want to make sure you check your home, your work and your car.

I wanted to talk a little bit more about how we wanted the testing to be done. Unfortunately, a lot of environmental consultants, also called *industrial hygienists*, do air sampling. And we found that just is not sufficient for our purposes of what we're looking for with indoor mold exposure. I've listed here what we do want to look for.

And so the consultant that you want, you want to ask them about these things, whether they're going to be doing this. We want a detailed visual inspection. We want moisture and humidity readings. And we want them to take dust and bulk samples which we'll talk about.

They can do air sampling as well, but you don't want to do that instead of these other samples.

Okay. So a little bit more testing. So when I say swab samples, that's basically a dust sample. And a bulk sample is basically literally cutting out a piece of your furnace filter as far as sending in a sample for further testing.

The labs that we tend to use that the environmental consultant will use, one is Realtime Labs. They have a test called the EMMA. MycoMetrics has a test called ERMI. And so those are the two that we want to use. I'm

not going to go into a lot of detail about them except to say that they look for DNA specimens for different molds in the sample that you send in. The EMMA, in addition, looks for mycotoxins.

Next, I wanted to talk a little bit about mold plates. So we just talked about we want an environmental consultant to come in. We want them to do a detailed inspection and send in some DNA sampling of the dust in our home to see if there's an issue. I wanted to touch on mold plates as well.

So, these are those simple plates that you would see if you went to Home Depot or you can order online. There's good and bad with this. I don't use them. I don't rely on them to see if a home has a problem, but I use them in certain instances.

So, the good things about the mold plates is that they're cheap. You can do them at home yourself. The lab that we use when we use them is really friendly. They'll review your results with you. We use Immunolytics as the main lab that we send these into. And they also sell the plates.

The cons is that we've had issues where there's just too much variability with this method. We've had patients where the plates are negative, and there actually is a problem in the home. And it just won't show certain heavy molds like stachybotrys because they're not airborne very often.

So, overall, I kind of summarize at the bottom how I use the plates. I use them to do something called tap testing which you have a handout on. It's a very simple way to check furniture to see if there's a problem with the upholstered that you have as far as mold goes.

I also use it in a car to check if there's a problem in the car.

Outside of that, I don't rely on it for routine screening.

I did put some companies at the bottom there where you can order the plates. I really like both of those websites. They have a lot of good information about mold. And they have great support staff where they'll talk to you more about the mold plates and how to do them as well.

Shivan Sarna: Dr. Kapadia? Ami, we're just getting a request that you slow down just a little bit.

Dr. Ami Kapadia: Oh, great. Thank you for the feedback.

Shivan Sarna: Yeah. Just breathe, we're all good. If we go over an hour, no one's going to be complaining about it because we want to soak all of these up.

Dr. Ami Kapadia: Okay, great. Please keep me posted on any other feedback. That's great.

Shivan Sarna: Sure! No, it's so brilliant. We don't want to miss a word.

Dr. Ami Kapadia: Sounds good.

Shivan Sarna: Feel free to linger on your slides as well.

Dr. Ami Kapadia: Okay, sounds good. [25:15]

Dr. Ami Kapadia: So, next, I want to talk about testing yourself. So we just kind of covered how we're going to test the environment. Now we're going to talk about testing yourself. And again, let's say you have digestive issues, IBS, headaches, various complaints, and you're wondering again, "Is mold

potentially an issue for me?"

I'm going to go through a questionnaire to go over with you that can you do on your own to see if you may have possible exposure. We're going to talk about something called the Visual Contrast Sensitivity Test. And we're going to talk about urine mycotoxin testing. So these are a couple of ways to get an idea if mold is a potential issue for you.

So, this is a really busy slide, but I did include in the handouts that you'll receive a copy of this questionnaire. So just to kind of go through it, it's a series of questions that I ask all of my patients. And it gives me a general idea of whether or not mold may be part of what's going on with their health picture.

One of the questions I ask is how old their home is. Older homes can have more years to accumulate problems. That being said, newer homes tend to not be built as well as older homes, so there's not a perfect way to advice on what to get. But I do like to ask both of those questions as well as if they know of any potential issues in the home.

I ask about musty smells or visible mold. That's not always present. But if it's there, there's definitely an issue somewhere.

I talk about crawl spaces and basements a lot. If there is a crawl space, I want to know is it covered by something called a vapor barrier. And that's a plastic sheet that's going to cover the soil in the crawl space to prevent mold and other organisms from coming up in the air and into the living space.

And you want that vapor barrier to be completely taped together and brought up the side walls of the foundation which isn't necessarily routinely done.

You want to know if the area around the home slopes toward the home or away from it. Ideally, you want the slope to be away from the home so that any water would drain away.

You want to ask about downspouts and whether those are all connected around the home. So you want to check that on your own as well.

And make sure your gutters are cleaned out regularly to avoid clogging and dumping water directly on the home.
You want to find out about any potential leaks that had been in the home. And then, as far as basements go, I always prefer that patients not have a finished basement. If they do, I don't have them rip it up, but it's just more potential for problems because of organic material down there.

So, I want to know if it's finished. I want to know if there's carpet. I want to know if there's any water pooling.

Some more questions here on the next page. So again, we're talking about humidity because it's something that we really want to pay attention to.

We looked at that slide with condensation. We want to know if there's any condensation in the windows. We want to know about carpets in the home, any water [00:28:19]. We want to know if there's any floor sagging.

And these other things are things that will take a little bit more time to figure out. But you want to make sure your dryer vent is venting to the outdoors. You want to know if anyone else in the home is sick. And you want to know if there's ever been a past exposure.

I always ask if they've ever lived in a home or apartment that was concerning as it can be a past exposure that we're concerned with.

Finally, mini-splits are those little units on the wall that do heating and air-conditioning. And those can grow mold as well. So you just want to find out if those are part of what they have in their home.

Shivan Sarna: What do you mean by a mini-split, you mean like a wall unit?

Dr. Ami Kapadia: Yeah, it's a wall unit. And I have a picture at the end. It's basically a heating and cooling unit. It's basically like a wall unit. And we'll show you the picture. I think I have it at the end of my slides.

So, next, I wanted to talk a little bit more about something called *Visual Contrast Sensitivity*.This is a test that can be done online for $15. And it's a general test to see if you've had potential biotoxin exposure. It's not specific for just mold, but I do find it to be a helpful test. I'm going to show you here in a minute what it looks like.

So, if you do this test online—which I'd recommend anyone do if they are considering if mold may be an issue for them—it's kind of a questionnaire online where you'll look at these different pictures, and it'll ask you

whether the contrast is going a certain direction and whether you can tell a difference in contrast. [30:12]

Dr. Ami Kapadia: And this has been linked to potential biotoxin exposure. So it's a really cheap, inexpensive, easy way to see if this potentially could be an issue for you.

I send patients to SurvivingMold.com. And they have the test online for $15.

Okay. Next, I wanted to talk about the urine mycotoxin test. So this is a relatively new test for the last few years. And it's a simple measure that you can do at home with a urine sample. It's offered by two labs—Real Time Lab and Great Plains. In some states, you can self-order it. I do recommend working with a doc because it can be a little bit confusing to interpret. But it is available.

Just kind of a caveat with the urine mycotoxin test, I don't like to rely on any one test as far as a yes/no if there's a problem. The reason is that there's molds that can affect us in other ways besides mycotoxins. So we don't want to rule it out just because this test is negative.

Okay.

Shivan Sarna: Dr. Kapadia, I just want to show you guys something since it's so relevant. This is what it looks like, right? Is that it? That's it, right?

Dr. Ami Kapadia: Yeah. Should I zoom out, Shivan?

Shivan Sarna: No, no. I can show it to them later. It's just your typical—I used to like to have a visual aid and I happened to have one here. Do you remember how much they are?

Dr. Ami Kapadia: Yeah. So the typical price—so Great Plains is $699. It's an expensive test. Or I'm sorry, Realtime Labs is $699 although they're working with us on potentially maybe changing that at some point. Great Plains Lab is $299. They're a little bit newer in offering it. But I've heard good things about both. And we use both.

So, other labs that you may have heard of or that I think are useful, but you need a doctor to order them for you, one is called *Mold Antibody Testing*. And Alletess Labs offers this. I like it because it's inexpensive. And it gives us some idea of your exposure.

Again, it's not a yes/no test. But I think of it kind of like food antibody testing when we do IgG testing for foods where it can potentially show us if you've had an exposure within the last few months to something that's affecting your immune system.

We also use Dr. Shoemaker's inflammatory markers. They're quite complicated to even do the blood draws and to interpret. So again, I use them as part of the whole picture with the patient, but not by themselves.

This is kind of summary flowchart that I made just to kind of help think about how you can approach whether mold is a part of what's going on for you. At the top, again, you'll see—so if you have lots of symptoms in different organ systems including SIBO and GI symptoms, you can do that questionnaire that we talked about (that'll be in your handouts).

You can also do the Visual Contrast Sensitivity Test.

If either of those seem like you got a hit on those, or you and your doctor are just still suspicious, I would highly recommend doing an environmental evaluation. Remember, I did have a list of some environmental consultants in different parts of the country on a previous slides. And you can also look into these labs that we talked about as far as testing yourself.

So that's a summary of testing so far.

Next, I wanted to dive into treatment. So let's say you did some testing with your doctor, you're suspicious that there's a problem, and you did send testing of your home. The next step is how do we treat all of these?

There are a couple of steps in treatment. You first want to do everything you can to eliminate any ongoing exposure or source of mold. You want to then work on detoxification as far as treating any internal colonization and then diet (which we can talk about. There's obviously tons of different diets that patients and doctors use. But we'll give you some ideas about how I address it from a mold standpoint).

Okay, so part one in treatment. We definitely want to determine if there's any current exposure. I really think of this as the most important part. And so when I'm trying to prioritize things with patients, I highly emphasize getting this home evaluation done to start with.

For the car like we talked about, you can use mold plates as a start. And again, feel free to refer to the handout on how to do that. It's pretty simple. You leave the plate out for an hour in your car, you close it up, and then you incubate it for a couple of days. And the handout will go into details on that. [35:09]

Dr. Ami Kapadia: The next part, to dig into a little bit more about eliminating the exposure. So some simple things that I have patients do and that you can do if you think you may have exposure, washing clothing in borax. So I just have people use that routinely if we think there's a problem. It helps to get down molds and mycotoxins in any clothing.

Remediation of course is going to be under the guidance of an environmental consultant if they find anything in the home.

You want to try to, ideally, either box up into plastic bins or get rid of any upholstered items that can be contaminated. That would be couches and things like that. If you're not sure, you can do that testing. But ideally, you want to get that out of your living space if you think it's been contaminated.

You can wipe down surfaces with hydrogen peroxide or ammonia if you're not super sensitive to that. It's not a great thing to use, but it can neutralize molds.

Baking soda and hydrogen peroxide are other options.

And then, some people use ozone machines. I don't recommend doing that unless you're under the guidance of a practitioner because it can be

harmful to the lungs. And then, you want to of course get a post-remediation evaluation done by your consultant to make sure you've taken care of any potential problems in the home.

So basically, it's working on sorting out what can you keep, what can be washed and any actual remediation that needs to be done for damaged building materials in the home.

Shivan Sarna: Dr. Kapadia, before you move on…

Dr. Ami Kapadia: Yeah, of course…

Shivan Sarna: That H^2O^2, what is that?

Dr. Ami Kapadia: Sorry, that's hydrogen peroxide. And one of the consultants I had worked with told me there are higher grade hydrogen peroxides you can get online from places like Jon Don that work even better than food grade.

Shivan Sarna: And do they take care of all of the different mold spores and mycotoxin-type things?

Dr. Ami Kapadia: So, what he told me was that for her hard surfaces, you can wipe down with baking soda and then hydrogen peroxide. And actually, with the baking soda, you're helping to physically remove it. The hydrogen peroxide is neutralizing molds and mycotoxins from what he told me if the actual source of the issue has been taken care of.

Shivan Sarna: I'm sorry to interrupt one more time.

Dr. Ami Kapadia: Yeah…

Shivan Sarna: Bleach is out?

Dr. Ami Kapadia: Bleach is out. So bleach actually creates more harmful compounds when combined with mycotoxins.

Shivan Sarna: Okay.

Dr. Ami Kapadia: So you don't want to use bleach under any circumstances.

Shivan Sarna: I just wanted to interject. And I'm sorry I'm interrupting. I don't usually interrupt.

Dr. Ami Kapadia: No, no…

Shivan Sarna: Thank you so much, but you are talking really fast because you have so much to get to and I love you for that. So I'm also afraid I'm going to forget to ask.

Dr. Ami Kapadia: No problem, you can interrupt any time.

Shivan Sarna: I hope it's okay for those of you who are listening.

Dr. Kapadia met me in Portland, and we were staying at this AirBnB where we were doing the taping for the documentaries. And I didn't feel well. I don't feel well a lot, right. But I was like, "Hmmm… I really don't feel well." And I attributed it to the trip and the airplane and all that.

But I had opened the window to breathe some fresh Portland air, and I didn't realize that there was like a strip of mold that every single bit of air that would've come into the room, we had to pass by.

And I was thinking about bleaching it, but Dr. Kapadia graciously came into the bedroom where I was staying and looked at it and she said that wouldn't be a good idea. And you just gave us a couple of tips for wiping it down. But you weren't overly worried about it, right, because it just looked like kind of—

Is there a difference between new mold and old mold? Or is it just the person?

Dr. Ami Kapadia: I think the main issue is whether there has been soaked building materials or if it's something that could just be wiped off. And what we were seeing in that window was just kind of what I consider more surface mold that could be wiped off and there wasn't an ongoing moisture issue like a leak or anything like that that we could tell was contributing to it.

And when I say don't use bleach, it's not the end of the world if you used it. You don't want to use it when there's been gross contamination. We avoid it anyway because of the chemicals, the fumes that come out. But it's not like you're going to do a terrible harm to yourself if you used bleach once in a while to wipe out mold. It's just there are better things that you can use that won't create those other compounds.

But getting back to your question, there's these surface molds that can be pretty easily to take care of that we want to just wipe down. Something that just require a regular cleaning or because, in a window sill, you're getting some moisture from outside, that's okay. [40:03]

Dr. Ami Kapadia: Again, we want to make sure that the humidity inside the house is okay and isn't contributing and that there's no leaks around the window that are contributing to that mold. Does that makes sense?

Shivan Sarna: Yeah, totally. If let's say I'm susceptible to mold, would even a little bit—like you were saying, just clean your shower, everybody. Would a little bit of black mold, if you're already a susceptible person, trigger you?

Dr. Ami Kapadia: Yeah. Definitely, it can. And so what I recommend is wearing a mask. There's a website called Needs.com, N-E-E-D-S dot-com. And it's an environmentally friendly website that was made by Sheri Rogers I believe. They sell these really nice cotton dust masks and cotton carbon filter masks, the whole variety, so that you won't be allergic to the mask material. And you could wear that while you're doing cleaning if you're really sensitive.

Shivan Sarna: Thank you very much. We'll move on. I appreciate it.

Dr. Ami Kapadia: Yeah. Okay…

Oh, and I just mention down here you either want to clean out your vacuum cleaner once in a while or get a new one if there's been mold issues because that can get contaminated as well. But it's pretty easy to take them apart and wipe them down if it's a simple [00:41:17] vacuum.

So, a little bit more about porous items. So when we talk about things like mattresses, curtains, carpets, couches, traditionally, we've had people get rid of these items because we thought they were contaminated with molds—and they can be. Currently, we have some environmental consultants that are using safe environmentally friendly enzyme products

to help salvage these items.

So, that's an option. You can talk to your consultant about it. If it's something that you can wash—I still recommend washing it with borax. But if it's something like a couch, feel free to talk to them about this enzyme treatment because I think, in some instances, it could work. If the upholstered item hasn't itself been water-damaged, just being affected by other sources in the house.
So, that can be something to look into so you don't have to get rid of all of your stuff.

You don't want to bring anything contDr. Ami Kapadianated into your new living environment unless it's in these clothes. You can get these $6 plastic bins and just put stuff in there like papers and stuff like that that you're not sure about. And you can figure out later if they're a trigger for you.

Things that aren't porous, you can definitely just wipe down like plates, glasses, kitchenware, stuff like that. Same with electronic appliances, you can just wipe those down. There's not one right answer for all of these stuff. So it really has to be individualized. But those are just some general guidelines that are hopefully helpful.

Next, I wanted to talk about detoxification. Let's say we're working on eliminating the exposure in our environment, now we want to work on getting the potential internal issues under control.

There are things called binders that we use to remove mycotoxins. And

there's prescription ones as well as natural ones. I tend to lean towards the natural ones. I find they work quite well. And they're better tolerated for my patients. So I'm just listing some of those here.

I use Takesumi Supreme which is a carbonized bamboo product. It's similar to charcoal, but different.

I use chlorella, ZeoBind. I do use plain old charcoal. It's cheap and can work well as well as a couple of other products that we listed there. They can all work well depending on the patient.

Just a caveat to keep in mind with binders, you always want to get those away from food and other supplements as well as your other medications so it doesn't absorb them.

I usually have patients take binders once a day just because it's hard to get them in otherwise. But you can use them twice a day if there's a way for you to get them in. Again, you definitely want to keep them away from other medications.

They can cause constipation. So we can use our usual remedies for that—magnesium citrate, vitamin C—or you can lower the dose of the binder. And for some patients, we use really tiny doses. And that can still be helpful if they don't tolerate the routine doses that we're using.

The next part of the treatment—so we're going to treat those mycotoxins with binders. The next part is treating any colonization that might be there. And I break this up into treatment for the gut and for the sinuses.

So, for the gut, again, I use mostly natural agents. SF722 by Thorne Research is a great one that's been around for a long time. I use a lot of products from Supreme Nutrition. I'm not affiliated with them. But they have a lot of great herbs that have antifungal properties like coptis and neem, olive leaf. [45:02]

Dr. Ami Kapadia: And then, a couple of others that I listed there like propolis, AgroMax which is a citrus-C blend and Micro Region from Beyond Balance are other ones that we've used.

There's of course prescription options. I again don't use those as much. I use more of the natural ones that we listed there.

When we're talking about colonization, we just talked about the gut. I also like to treat the sinuses. And we learned about this from the work of Dr. Joseph Brewer who has published on this. And he's found a lot of improvement in patients by treating potential mold colonization in the sinuses.

For this, I do use prescription options. And they're very safe, very minimal if any systemic absorption. So I feel really comfortable using them.

The main ones that we use are compounded nasal Itraconazole, nasal Amphotericin or nasal Nystatin. And we combine that with EDTA which works on biofilms.

There are some natural options. I'll use these for patients if they don't

tolerate the prescriptions or while traveling. I keep this Super Good Stuff Nasal Wash with me when I'm traveling if I'm potentially going to stay in a moldy hotel or something. I just like to keep something on hand for prevention. So those are great for traveling and those sorts of uses.
So other ones that we use are grapefruit seed extract which is a natural one by NutriBiotic, AgroMax and Argentyn 23.

Alright! And then, I just wanted to talk briefly about diet. So we do find that a lot of patients cross-react to molds in foods. We're not sure if this is an allergy type of issue or because moldy foods are high in histamines. But I do remove these foods from the diet at least initially.

So, you can see, in the appendix, you'll have a handout of the diet that I use for most of my patients as a starting point. And it does avoid all of these fermented foods. So fermented and mold-related foods would be yeast, vinegar, dried fruit, alcohol, sugar and fermented foods (which takes out a lot of the really healthy fermented vegetables, but I do find that they can be a trigger for some patients).

I do a simple 5-day elimination of these fermented foods. And then, I have patients eat a bunch of them and see how they feel. For this type of a reaction, you can tell pretty quickly. You don't have to avoid it for weeks on end usually to know if it's an issue for you. You can do a 5-day elimination, introduce it again, and see how you feel.

Some patients do react to grains because of mold contamination. I try not to be too strict with the diet because it just becomes too difficult. I don't remove all grains besides gluten and corn unless someone is really

sensitive. And as a lot of you probably know, white Jasmine rice is often really well-tolerate. It's not moldy as far as we can tell.

So, this is a summary of treatment approach. If you have potential mold illness, you're on a pretty good diet, having daily bowel movements, you can start this treatment process. You want to eliminate the source here on the left with that environmental consultant treating your personal belongings. You want to work on detoxification with the natural binders that we talked about. And then, you want to treat the internal reservoir in the sinus and the GI tract. So, that's kind of an overall breakdown of the way that we approach it.

Just to go over some final tips of how to approach mold-related illness, this is a great website at the top that just gives you some tips on mold exposure. In general, I prefer to not have carpet in the home if you have a choice. If you're changing your flooring, I'd always opt for no carpet just because it holds on to mold spores and other allergens.

For ventilation, ideally, the more you can dilute the air in your home, the better. So you want to open the windows whenever you can. There's something that newer homes are getting installed automatically called an HRV or a heat recovery ventilator which brings fresh air into the home. That's a great option if you have that to add on to your home.

You want to change your furnace filters regularly in the house, change your car carbon filters regularly. Keep humidity low. And [00:49:24] regularly if it's parked on the street. And again, I have a handout on how you can do that relatively easily.

A note on air filters. So they won't solve the problem, but they can be helpful with symptoms. I listed a couple here. I'm not affiliated with any of them, but I really like the Austin Air HealthMate or HealthMate Plus which also works on chemicals. They've done a lot of research and they've been around for a long time.

These other two—the Molecule and the Air Oasis, I have less experience with. And they're newer. But some of the mold doctors are having good success with them.

There's Propolis Vaporizers. And I listed a website there that sells those. [50:07]

Dr. Ami Kapadia: Something else simple that I have people do that I learned from Dr. Lebowitz is to just have them do an essential diffuser with cedar wood and tea tree oils which are both antifungals and can kind of get the lowdown in the air.

Finally, you want to make sure that humidity is less than 50% and use a dehumidifier if you need to.

Some final thoughts, this can be…

Oh, go ahead, Shivan. Are we good? Okay.

Shivan Sarna: Sorry, can you go back to the previous for just a second.

Dr. Ami Kapadia: Oh, of course, sure.

Shivan Sarna: Don't let the hour cut-off time freak you out. You're fine.

Dr. Ami Kapadia: Okay, sounds good.

Shivan Sarna: So, the Propolis Vaporizer, what is that exactly?

Dr. Ami Kapadia: Yes, good question.

So, basically, the Propolis Vaporizer, there's something called B Propolis. And it's an extract from—I'm not going to be able to give you exactly the right terminology. But it's an extract that's made from the propolis which is made by B's. And they have made into sort of a vaporizer where you can put these little cartridges in of propolis. And that also has antifungal properties.

They did some studies in Europe that showed asthma rates went down when people with asthma used this Propolis Vaporizer in their bedroom. So that does have a little bit of research as well. And it's another way to get the counts down in the air.

Shivan Sarna: Thank you.

Dr. Ami Kapadia: You're welcome.

So, just some final thoughts. Addressing environmental molds can be overwhelming. It's a lot to do. And it can just seem like it's not even worth addressing it at all. But I encourage everyone to just view it as a process. That's how I do it with my patients—just one step at a time. We're going to be working on it for a while. It doesn't mean you won't make progress while we're working on it. But we just need to keep

following through to get to the end.

So, do what you can when you can. Don't try to do it all at once. And ideally, see if you can find someone to work with that knows about mold-related illness. The American Academy of Environmental Medicine, the Institute for Functional Medicine and Naturopathic Physicians are usually your best bet.

This is just a list of some of the appendices that you'll have that we discussed. So feel free to take more of a look at those as well afterwards.

Again, lots of references if you want to learn more. I want to get to a couple of pictures here, and then we'll be about done.

So, this is a picture of before and after was a vapor barrier was installed. So again, this is a piece of plastic that's covering the crawl space in the home. And you ideally want that to be completely taped together at the seams. So it's kind of like a bunch of plastic squares that are laid out on the crawl space. That's how it's normally done, but you can ask them to tape them at the seams and they'll do that for you. And you can ask them to bring them up the walls of the foundation which you can see in this picture.

And that's the best way that I've learned from one of the consultants that I worked with as far as how to keep moisture from the crawl space from entering your home.

So, you can get this installed by a crawl space basement waterproofing

company.

This is a picture of one of those mini-splits that we talked about. And this is a picture from a place that I worked that I don't work anymore where there was mold in the mini-split actually in the blower of the mini-split. It took them a while to figure—actually, they never figured it out. We figured it out. But you could easily shine a light in there and just take a look. You'll be able to tell pretty easily whether or not there's an issue.

Usually, it's only going to be an issue if there were no filters on the mini-split. And they routinely come with filters so it shouldn't be a problem. But if it's emitting a smell or a musty odor, just take a look in there and make sure.

This is a picture of downspouts. So you don't want this one on the right. You don't want the downspout dumping water next to your home. You want to connected to go either underground and far away from the home or connected to a spout here where it's going to take it at least 6 to 10 ft. away.

And that's everything, Shivan.

Shivan Sarna: So, those additional references, guys, these—

Thank you! That was amazing. That was amazing.

Dr. Ami Kapadia: Yeah, sure.

Shivan Sarna: I just want to point out that the deck from Dr. Kapadia and her references and resources are loaded into the membership site area. If you have

purchased this through our platform here at SIBOSOS.com, you will be able to download them right now.

And just a word about the other classes in our conference, those notes are also in the portal. So you can go ahead and print them out in advance if you would like to. Or if you have a split screen or two screens, you could be watching the slides yourself. But you might want to do that just for following along.

Okay! That was amazing. We have lots and lots of questions for you, Dr. Kapadia. [55:20]

Dr. Ami Kapadia: Am I back on?

Shivan Sarna: You are back on, yeah.

Dr. Ami Kapadia: Okay. Okay, great.

Shivan Sarna: Let me just do one thing. Oopsie! Hi guys. Take a breath everyone. I'm so proud of you for drinking all that water, Dr. Kapadia. I'm totally dehydrated.

Dr. Ami Kapadia: Yeah, I can't talk for that long without drinking a ton of water.

Shivan Sarna: I need to do that too. Thank you. Yeah, that's a good reminder.

Hold on for a second. I have to ask my husband something.

Remember that enzyme cleaner we got for mold from that wonderful building biologist, I think that's in the garage.

David: [00:55:55]

Shivan Sarna: Would you look at it for me please? It's a big bottle. It's a big gallon thing.

David: Like that or…

Shivan Sarna: It's like that, but it's not.

Okay! The reason why I'm asking my gorgeous husband—my darling, supportive husband—to do that is because I wanted to show it to you.

Dr. Ami Kapadia: Yeah!

Shivan Sarna: And I also wanted to do one other thing while I have you guys. Don't judge me by how many things I have on my computer screen. I'm going to share my screen for a second.

Dr. Ami Kapadia: Sure!

Shivan Sarna: I pulled up the—hold on… I pulled Needs.

Dr. Ami Kapadia: Oh, great.

Shivan Sarna: …so you guys could see it. Is that's the site?

Dr. Ami Kapadia: That's the one. They're great! They have a lot of really health-friendly, environmental products.

Shivan Sarna: It looks great. Water filters—I've never heard of them before, so it's not like they're sponsoring. But we should get them to. They've got cleaners and vitamins and all kinds of fun stuff.

Dr. Ami Kapadia: Yeah. And actually, Shivan, I have my mask that I've gotten from them. It's just a simple cotton mask that I can show you if it comes up here.

Shivan Sarna: Okay, here, let's just do this. You know, I'm very practical…

Dr. Ami Kapadia: Oh, yeah.

Shivan Sarna: Okay! So here's the particulate respirator.

David: I have no idea.

Shivan Sarna: And there's your cotton allergy mask with the carbon insert. Is that it?

Dr. Ami Kapadia: Yup! Then there's the simple *I Can Breathe.* There's a cotton one instead of the silk comfort mask. There's a cotton one. I have that one as well.

Shivan Sarna: Is that *Dixie's Cotton Allergy Mask with Carbon Insert?*

Dr. Ami Kapadia: No, the one at the bottom. The one at the bottom. The *I Can Breathe Comfort Mask.*They have that in cotton.

Shivan Sarna: Okay, here you go. *Organic Cotton Mask,* there it is!

Dr. Ami Kapadia: Yeah, that's it.

Shivan Sarna: Okay. So do you suggest the carbon filter or not necessarily?

Dr. Ami Kapadia: So the carbon filter is more if you're exposed to chemicals and VOCs. I don't recommend doing major mold stuff on your own. If you're just wiping down a little area, I think the simple cotton mask is fine.

Shivan Sarna: Okay.

Dr. Ami Kapadia: The carbon one, I have. I haven't used it very often. But I had patients use that like if they're going to be exposed to chemicals and VOCs.

Shivan Sarna: Okay, let me get out of here. And I will stop sharing my screen. I hope you guys are really enjoying all these. Let's see… I'll do that.

Okay! I just wanted you to see that.

And then, the other thing is my husband, David, just got this. Have you ever seen this before, *Benefect Botanical Disinfectant?*

Dr. Ami Kapadia: I haven't seen that one. I'll look it up. Is that what the building biologist recommended?

Shivan Sarna: That is what the building biologist recommended that came to my house.

Dr. Ami Kapadia: Okay, great. Yeah, I haven't heard of that one. But those guys are very well-trained, so I would trust what they told you.

Shivan Sarna: Here you go! One more time, you can see, it's called *Benefect Botanical Disinfectant*. And man, you think, "Oh, it's natural." I think it has just as many warnings on it as other—not as bad, but it definitely is like vinegar and water.

Dr. Ami Kapadia: Got it, okay. Yeah. [59:21]