Caspar (00:00:00):

Most illnesses seem to come out of nowhere and for no apparent reason. And while we know that's not exactly true, when the cause of ill health is a re the result of environmental toxins like mold, it changes your perspective and the responsibility to get well. Our guests today spent most of his early life suffering from toxic mold exposure. He's now an indoor air quality crusader and has reimagined mold testing. This is the story of Got Mold with Jason Earle. Jason, so happy for you to be here.

Jason (00:00:31):

So, so good to be here.

Caspar (00:00:32):

Tell us, because you know, it's your health. Your Story. You obviously have a story that led you to creating this, this company and being such a man on a mission. So could you start there because you had your whole own health problems that led you into this. What, what were they, what was your story?

Jason (00:00:50):

Sure. Well, first of all, thanks so much for, for having me on your show. I've been looking forward to this

Jason (00:00:56):

The, the mold industry, or I would say the, the career path that led me to where I am is not one that is essentially an academic track, right? There's no you know, there's lots of subspecialties, but this is a really, a multidisciplinary field because you have to really have a grasp of not only the biology of the body, but also the biology, the building, right? How buildings are built correctly, how they're built incorrectly. And so most of the people that are doing great work in this space are come from a very personal experience. You know, this, this is just, and so I'm, I'm no exception to that. So I initially became aware of this actually after a successful career on Wall Street. So so a little bit late in the game by some measures, but I was still pretty young at the time.

Jason (<u>00:01:44</u>):

I I had decided after the dotcom bubble burst, I wanted to do something meaningful with my life. And so I threw 20 pounds of stuff in a backpack and I went traveling. And it was just after September 11th. So I tried to stay, you know, pretty close to home. But I ended up in Hawaii, which is not a bad place to end up for a while. And and I was had a lot of time in my hand. So I was reading local newspapers and magazines and stuff. In fact, I was reading this one particular story while I was in in Oahu in the shadow of the, the Kalia Hilton Tower, which at the time was shut down for a major mold problem. And I had, I was completely unwitting to the historical significance of this particular thing.

Jason (00:02:24):

It turns out it was the biggest mold problem in, in history at the time. And the one, the one story that really popped out at me was, and by the way, this story was all over the news. It was, it was not isolated to, to one magazine. It was, it was very, it was big, big news cuz it was Hilton's CLE flagship building, Hilton's flagship building. And in any case, the story that really jumped out at me was about a 40 year old employee, former employee of the hotel who had been otherwise healthy, but had developed adult onset asthma, as well as all of these allergies and sensitivities to things he had never had a, a problem with before. And and it was like a deja vu moment, or, or like a time machine. I was immediately

brought back to my childhood where when I was about four years old, I suddenly lost a lot of weight in a three week period, about 30% of my body weight, according to my parents.

Jason (00:03:13):

And and I was having difficulty breathing. So they took me to the pediatrician who said, you know, you really need to take him to Children's Hospital. This looks serious. And so they did. And they took me to you know, chop, which is the world renowned respiratory clinic in Philadelphia. And based upon family history and the symptoms that I was presenting with the initial diagnosis was cystic fibrosis, which at the time was a death sentence, right? I'm 46. So that was, that was a, you know, a very short life that I was looking towards. My parents were, were devastated for obvious reasons. But my dad in particular, because he had lost four of his cousins to CF before the age of 14, so this was their worst nightmare you know, coming, coming true. So they cried for six weeks as as they describe.

Jason (00:03:54):

And while they waited for a second opinion, which fortunately contradicted the initial diagnosis actually, it turns out I didn't have CF, don't have CF but I did have asthma compounded by pneumonia which was my first big dose of antibiotics, by the way. So that's part of the, part of the whole story. And and I was also subjected to this allergy testing, which was, you know, it was one of my formative memories. You know, they put you in a papoose or like a straight jacket for toddlers and, and then with an open back and then drew a grid on your back and then exposed you to all these antigens and all these allergens. And so, so I, my dad said, look like a lady bug, just a big red, swollen back with dots all over it. And I essentially tested positive for every single thing that they tested me for.

Jason (00:04:37):

So, you know, in summary, grass, wheat, corn, eggs, dogs, cats, cotton. So my clothes were itchy soybeans. And I grew up on a little non-working farm, a hobby farm. I was surrounded by all those things in great abundance. And, and, and literally with soybean f fields to little to the right corn fields across the street, you know, and, and dogs and cats everywhere. And my parents had a very unique a concept around hygiene. So needless to say, they accumulated. And and so, and both of them smoked indoors as well as in the car with an asthmatic kid, cuz you know, that's what you did in the seventies and the eighties. And you know, these days, children I'm sure child services would've been had something to say about that. But that was the def facto standards. So, and, and it wasn't for lack of love, it was just a lack of awareness.

Jason (00:05:18):

And so but the bottom line is I live like that until I was about 12, at which point my folks split up. And I moved outta that, that that very damp house. And all my symptoms went away, as did my grandfather's, by the way. They call it spontaneous adolescent remission. Instead of looking at what might've actually been a root cause. And and so then I, you know, shortly thereafter my mother passed away suddenly she committed suicide, actually, which is relevant, believe it or not, to, to the mold story. And then a year later I was diagnosed with Lyme disease where I got my next big, you know, face full of antibiotics and that was, that was potent cuz that was before they ever really had a a an established regimen.

Jason (00:05:57):

So it was very experimental. And so it was like 30 pills of Biaxin and stuff like that per day for three days. And then it was off for three days, this pulse therapy thing that they were doing. And and then I ended

up dropping out a high school, long story short, and, and got actually working full-time in a gas station where I met a guy who recruited me to come work on Wall Street, which is a, a story for another podcast, I think. But in any case the, the, the story in Hawaii was this transporting thing where I immediately became fascinated with the concept cuz I called my father from a payphone and said, Hey, do you think we had a mold problem at Old Trenton Road and not knowing anything about mold? Right. I was a stockbroker and, and read this article that was the totality of my knowledge about mold. And he goes, of course we had mushrooms in the basement. Why do you ask?

Jason (00:06:46):

So, yeah, typical of my father, he's so flippant about these things. And I said, so do you think, do you think that was, you know, part of the reason why I was sick? And he goes, couldn't have helped. So it was, yeah, no. And so it was, it was literally from that moment on, I had the kind of like this epiphany or this light bulb moment where all the pieces of the puzzle kind of, you know, became clear to me, which was that I became fascinated with not mold per se, although it's fascinating. And the more I know about it, the more fascinating it is actually the impact of buildings, the buildings that we live and work in on our health. And this is a blind spot in, in, in the world. It's a blind spot, certainly in the medical community.

Jason (00:07:31):

But unfortunately it's also a blind spot with the people who live in these buildings that people that, you know, because, you know, we're like, you know, it reminds me of the, this, the, the the commencement address by David Foster Wallace. I don't know if you've ever seen this, but he talks about this is water. And he, and he talks about the two fish swimming along, two little fish, young fish rather. And they're swimming along our business. And the older fish passes in by and says, good morning boys, how's the water? And they go, fine, look at each other a couple minutes later. And I'm like, what the hell's water? You know, and that's what we are, you know that we're like fish and, and in, in the water that we call air. And and it is in anything but empty space and it is anything but it is, it is in fact the, the, the blind spot of all blind spots, you know?

Jason (00:08:19):

So so I became fascinated with that. I came back to New Jersey armed with curiosity and some time on my hands. I was looking for a new career anyway. And I took a job working for a mold remediation contractor. Actually, it was a basement waterproofing contractor that was doing mold treatments because there was no such thing as mold remediation or standards or best practices, or even government guidance for that matter at the time. And these guys were doing everything wrong. And I knew that intuitively they were using a lot of chemicals and they were ripping stuff out without proper controls. And, and so I, I quickly saw that there was an opportunity here to protect the consumer. So I started an inspection company at night and I was basically doing free inspections until somebody started saying, you know, I should really pay you for this.

Jason (00:08:53):

And then I heard about a guy trained mold sniffing dogs who trained mold sniffing dogs and thought that was just brilliant enough to be crazy enough to be brilliant and got one of those, and, and that began a cascade of press you know, it became a, a Channel 6 Action News, thought they were gonna debunk us by hiding mold in the house. And instead they endorsed us, cuz we found it in like three minutes. And then we got in a bunch of doctors started referring patients to us. And then we, that some

of those patients their healing became, it was so profound that it became Good Morning America episodes, and then Extreme Makeover Edition and on and on and on. And that company became 1-800-GOT-MOLD our mold inspection business. And and then over the years, just quickly to, so where I am right now is that we over the years, it was difficult for me to stomach the fact that most of the people who needed mold inspections needed mold testing, couldn't afford it.

Jason (00:09:41):

And so including my own parents, right? So to bring this full circle to actually really build something that could, that would've solved the problem that my parents went through, I had to come up with a, an affordable solution. And so it took years to develop what we launched last March. The Got Mold test kit which is the first and most, well, it's the most affordable, reliable, scientifically valid, do-it-yourself test kit on the market. And so it's been a, it's been a long road, you know, it's been 20 years I've been doing this, learning every single day. Because this is just a, it is a, it's an environment. It's a, it's a, it's a area where there's tremendous research emerging. And there's also, it is just riddled with myths and misconceptions and all of these wives tales and all of these things that, that the average consumer or even the average physician is, is so mired in that it, you know, it feels like almost every interaction is an education session. You know? And, and that's okay. That's what I signed up for. But at the end of the day, you know, this has been an accidental, I'm an accidental expert, right? It was, it was one of those things where, you know, it's just the way, sometimes life gives you a path and you follow it and next thing you know, you're, you know, where I sit right here, you

Caspar (<u>00:10:46</u>):

Know? Yeah. I find accidental experts to be the most proficient ones, you know, they don't have the ego that goes with, I've been doing this my whole life. It's more of a, I went through this and had to, for my own life, become an expert and do it for a bene benevolent way, of course, for yourself first, but then to pass it along and, and pay it forward. Now, I, I find this whole concept really, really intriguing. Cuz I even know a lot of people live in Florida and in swampy areas, let's say, and move a lot nowadays people rent instead of buy. And you don't know much about where you're moving into a renting from what the person before had. And they do get caught up. Yes, I acknowledge that many places I've been in have molds, but the testing is what is difficult. When I jump from one year, one year, retest, do a, you know, ERMI or something like that. It's expensive. Yes. And here you have this kind of, you know, this solution that is affordable. How, how did you get it from, from something that is expensive to make it become affordable and still accurate?

Jason (00:11:50):

Well, so we did, did a hard analysis on what were the problems with mold testing, right? Yeah. What, what is the primary problem? There's a lot of 'em. Number one is in the do-it-yourself side of things, just to take that out, most of the time you have to hire a professional. Yeah. and, and so that means that there's a huge cost structure associated with that, right? The, you know, you've gotta put the human and the vehicle and they've gotta have advertising to, to, they gotta pay their rent and the electricity, oh, that's just a huge cost structure. So as a result, the, the testing and the lab fees have to be marked up extraordinarily high and for it to be sustainable. And then and then there's also lots of problems within that model when it comes to conflicts of interest.

Jason (00:12:33):

Because there are there's a, a great propensity in this industry for people who are taking samples to be doing it with an ulterior motive, you know, to, to, to gather data that can be used as a sales tool as opposed to a tool for healing as opposed to a tool as opposed to an a as opposed to an an investigative tool. And so as a result, it's used as leverage unwittingly you know, to, to the unwitting public. And then they're often forced into, you know into fear-based decisions. And, and also these, there's, there's also a, a, a heavy slant. We can talk more about this, and I would really like to talk more about this, that everyone's focused on mycotoxins and mycotoxins are only part of the story. Mycotoxins are actually, as it turns out, a disproportionately smaller part of the story than, than than most people think when it comes to mold and mold related illness.

Jason (00:13:20):

And, we'll, we'll dig into that. But the, the people who love to manipulate this, especially the ERMI purveyors of ERMI they, they're, they're always high. They're always high. And so, so it's a, it's a mold remediator's dream because you can't pass those. And so the more, the more you fail, the more they work, the more they work, the more they get paid. It's a conflict of interest. And so, so essentially we started looking at, you know, what, what is out there? And, and basically that's why we created what we created. Cuz you looked at the DI DIY market, and all I saw was junk science. Stuff that confirms the presence of mold. Be it be tape lift or swab. By the way, mold is ubiquitous in our environment. So confirming the presence of mold doesn't do you much good.

Jason (00:14:03):

Great. You, it's mold molds all over your skin. It's all over your, it's your, take a deep breath right now. If in a healthy home you'll breeded in hundreds of species, potentially. Yeah. And so, so that is normal and I would argue healthy. And, and, and the opposite is also true, by the way. If you breathe in and you only breathe in a small number of them, you're probably in an unhealthy building with a low biodiversity. It's very counterintuitive, right? And so, so what we tried to do, first thing we had to do is get rid of the human. To make testing affordable, you gotta get rid of the human. And then also to make testing valid, you have to have the best lab possible too. So we were fortunate enough to partner with MLab P & K number one lab in the country, which got acquired recently by Eurofins, which is arguably the, the number one environmental microbiome lab in the world.

Jason (00:14:50):

And so that, that was a very powerful partnership. And then to use professional devices, actually to do, to actually not reinvent the wheel, right? So, so to actually use what's already the standard of care or the, or I should say the go-to sampling method, which is aerosol cassettes or spore traps, which is the most cost effective way to, to quickly take a look at what's going on in your air. So if you wanna have your house tested right now, and you were to hire a professional, they would come over with an air sampling pump. Well, lots of other tools and equipment. But when they're ready to take, take air samples and do the testing, they'll typically bring out a tripod and an air sampling pump, which is an expensive calibrated device, a thousand bucks or so. And that will pull air through cassettes that are designed to capture the airborne particulate matter.

Jason (<u>00:15:37</u>):

And, and we focus on mold spores, but it captures pollen and household dust and, and, and various other airborne, primarily bio aerosols, in other words biological particulate. So so in order for, for us to be able to get that kind of test, we had to have a device that could actually mimic that professional

pump. And so that's one of the innovations that we brought to the table is we created one that's battery operated, pulls exactly the same flow rate as a professional pump, but it's a fraction of the cost. And so when people buy our kit, they can then keep the pump after they've tested the first time, and then they can reuse it. And, and each time they, they, they they reuse it, they, it the refills are \$50 less per configuration. So it's a, it's a good value for them.

Jason (<u>00:16:28</u>):

So, so in essence, what we did was we took out inefficiencies, replaced 'em, the technology, and then the other piece of it is in order to make the, the the report not a, not a bottleneck for us on the customer service side, we had to make it really easy to understand. We had to make a technical report really accessible to the consumer and not give them so much information. Libraries of mold definitions and all the stuff that you see with a lot of these reports, nobody needs to know all the different aspergillis and penicillin types and what they do, they don't need that. They can go on Google for that. If they wanna know what's in their air, we tell them. And so we, we, our, our report is is a color coded interpret. There's a color coded interpretation cover page, green, yellow, orange, or red, depending upon what we find as well as the lab data.

Jason (00:17:13):

But it's formatted the way I always wanted my lab reports to be formatted. You know, it's just, it's, it's, it's got, you know, it's, it's easy on the eyes, it's color coded. And it's, and it's arranged so that you know, the different spores and, and types and whether they're water damage indicators or not. And, and then the third page is the final page. And that includes next steps, resources, free resources, low cost resources links to the tra trade associations, the train qualified professionals, both on the inspection side and the remediation side. And what we have found is that out, out of the you know, the several thousand kits that we've sold we've had a grand total of two people that have called and said, can you explain my report? And it wasn't that they were, they needed help, it's that they just wanted to know, they wanted to talk to a human about what to do next.

Jason (00:17:58):

Yeah. so, so somehow or another, you know, we, we figured out how to do it. And and, and the results have been great. It's really empowering when you read the reviews, you know? Yeah. When you, when you see what people are, the kind of relief that this provides people cuz they can get their testing done without having to get permission from their husband or wife or from their boss or, and then they can keep the results themselves or they can use it to leverage getting you know, the landlord to do something. There's a, there's real power in data. There's real power empowerment in giving people the tools and knowledge they need to make better decisions. And so from from that perspective, it's been it's been incredibly gratifying.

Caspar (00:18:32):

Yeah. No, it sounds like an amazing journey to get this in the hands of more people, which is so, so necessary and, and break down those barriers to entry for many of those. Now you, you mentioned something there they have to go back to. Cause I believe this is probably part of the myths and I'd like you to expunge on it what other myths there are, but mycotoxins are necessary and they're not the only thing you should be caring about. Right. That, that's kind of what you said. So go into that, cuz that's gonna blow some people's minds of what the hell are you talking about, man? Oh, yeah. It's all about the mycotoxin. That's all you test for

Jason (00:19:06):

ep. Yep. I just gave a talk at the Biohacking Conference. Dave Asprey's Biohacking Conference. Yeah, yeah. The title of it was More Than Mycotoxins. Okay. And so it, you know, I I unpacked that for about an hour, so I'll do a very short version of that please. But, you know, when mold is when mold is growing, it produces three things. This is a hyper simplification, it produces a lot of things. But in, in, in essence, you've got spores, which are the reproductive seeds, and these are typically airborne when they're disturbed, and they can cause upper respiratory irritation, allergic reactions, these kinds of things. They also happen to carry with them the spores themselves, some degree of microtoxins if it's a toxin producing mold. But but spores by themselves are a, are a natural, normal part of our environment, and you're breathing in them in every day.

Jason (00:19:50):

And so this, the spores are not to be feared. In fact, by the way, fun fact the kingdom fungi produces 500 megatons of, I'm sorry, 50 megatons of of spores every year. 50 megatons is the equivalent of 500,000 blue whales. Wow. And that's every year. So, so mold part of Kingdom fungi is the largest producer of biological particulate on the planet. And so you're not gonna get away from that. 30% of the Earth's biomass is fungi. And so we live on a fungal planet, make no mistake. We are the guests here, not the other way around. And and, and mold and fungi are the reason that everything works, quite frankly. And so we, we need to embrace them, embrace these, these critters instead of reject them. Yeah. And so, so spores and then, so you've got spores.

Jason (00:20:39):

You've got the, the microbial gases, the, the musty odor, what they call what are known as microbial, volatile organic compounds, MVOCs for short. Everyone's, most people listening to this show are probably familiar with VOCs. These are generally regarded as manmade chemicals. The formaldehyde is a common one, but the most popular one is alcohol. And many people like that for lots of different reasons. And, and so that's a, that's a very popular VOC. And and it's also a microbial VOC because in fact, alcohol is made through the fermentation of microbes. And then you've also got microtoxins and microtoxins are the, are the, the poisons that fungi use to fight with each other and other microbes. It, it is chemical warfare on a microscopic level. We get caught in the crosshairs. And because we are more, we are genetically more closely related to fungi than we are bacteria we end up we're, we're, we're kind of on the winning side of that for the most part.

Jason (00:21:39):

So anyway so, and by the way, the most common mycotoxins that most people are familiar with is penicillin. And so, so there's a, this is a semantic discussion in many ways. How do you define a chemical by its use? So if it's a mycotoxin, it kills the things you don't want. And if it's an antibiotic, it kills the things you do want. Same chemical. And so, so how you classify that is, is more, more a matter of, of, of a personal preference or, or the, or the target that you're looking for. So, so the bottom line is what's been, what's been happening with mycotoxins is that people focus on the mycotoxins. But most the evidence is very clear that most mycotoxin exposure does not come from air. And I can tell you how I know that, because when Alexander Fleming discovered mycotoxins penicillin, when he discovered antibiotics penicillium, penicillium a spore had landed.

Jason (00:22:28):

When he went out to lunch, he forgot to put the cover on the dish. He was, he was cultivating streptococcus strep throat, right? So he had a bacterial culture and he left. And he was notoriously sloppy scientist. So he left without the cover, cover on top of the the dish. He came back and he saw that there was a colony in the middle of the dish that had a little clear moat around it. And that clear moat was what he referred to as mold juice. That was his, his highly scientific, very technical, very technical. And he literally called it mold juice. And, and that mold juice was clearly keeping the bacteria at bay, killing it but also keeping it at bay. Now, if there's a, there's a misconception that if you've got mycotoxins in your house and the dust in the corner of your, of your, of your living room, that you're now, that it's radioactive, that it's gonna get, it's gonna get to you.

Jason (00:23:20):

But the stuff has to become airborne. And it doesn't become airborne by its own. Because in fact, these mycotoxins are, they ooze, they're more like an oily substance. And so they tend to, they, they do collect on the outside of dust and spores, which is to say the same thing in, in some ways because, you know, they, they all kind of hang out together. And if that becomes airborne, you can get about the amount of exposure that you would if it were on the outside of one of those cells or one of those particulates. But they're not flying around by themselves. And I can tell you how I know that's true. Cuz if you look at the dish that Alexander Fleming had, if they were flying around, the whole dish would be clear. Instead, they ooze out. Because mold cares about one thing, competition on the surface that's growing on mold, doesn't eat air, it eats the sheetrock or the paper on your sheetrock, it eats the dust that's on the surface of whatever it's growing on.

Jason (<u>00:24:07</u>):

And so it releases this very, this this mat, this substance, which stays on the surface to provide a competitive advantage. This, it is not designed to be airborne. This is a factual, this is, this is abl, this is a, this is a grand misperception in, in the healthcare field especially in the functional field, ho honestly where if you've got mycotoxins or if you've got a mycotoxigenic species, oh, forget about it. You know, leave with the shirts on your back. This is a, this is, this is a dangerous philosophy. And it's an inaccurate one. It's scientifically invalid. But the thing that's interesting is the actual, the thing that's probably the underlying cause of most mold related illness is the thing that is the most ubiquitous. See, only mycotoxin species produce mycotoxins, but, and only they produce them intermittently. So they only produce 'em generally when they're threatened or when they're having a, they're, they're threatened by competition or threatened by drying out.

Jason (00:25:00):

So lot, lots of times they'll produce them quickly when they're, you know, when they're starting to sort of like die off, you know, becoming dormant. And so so, so it's not a reliable way. It's kind of like the tiger versus the tail. The mycotoxins are like the tail. You know, you wanna know the tiger, the tiger's dampness. Okay. That's the enemy. Now, what happens when mold grows? You, the spore, the detects this, this combination lock, you know, the right temperature, the nutrition that it's looking for, or the food source, the, the right the, the oxygen has to be present. Cuz these are aerobic, by the way. This is how you know, they don't grow in your gut. Most most of these are highly or aerobic. So they, they're not anaerobic. They cannot colonize inside your gut.

Jason (00:25:43):

90, 90% of these microbes. And and so when that combination lock, you know, that combination kicks in, boom. That spore will then, like a seed will be begin, will, will release a hyphy, which is like a feeler, and it will release enzymes. This brilliant little single celled organism will release enzymes based upon this catalog of enzymes that it has to eat exactly what it wants. And while it does that, it digests outside of the cell. We digest inside produce, gases, flatulence, and all that, which by the way, are microbial gases. And they're not human gases. Those are microbial gas. Those are microbial VOCs. Yep. And they, they do it on the outside. And, and so what you, and it extracts the nutrition at once, and then it releases mold burps. And that mold burp, if you will, is the musty smell.

Jason (00:26:31):

And that musty smell is a potpourri of industrial solvents, for lack of, for, I mean, really, truly, if you look at them chemically, it's, it's benzene is commonly found coming off of actively growing mold. This is a group one carcinogen, right? Yep. Alcohols, ketones, aldehydes. It's really truly, I mean, if you, the industrial solvents and these become airborne and and you, this is where you get, this is where you'll see common, common commonly with mold with mold sufferers, that they also tend to be chemically sensitive. Oftentimes they'll become chemically sensitive. Why? Well, that's why, because the body picks up that chem, that that chemical, it, it's, it's, it's a predictive mechanism, right? I smell that, oh, bad, bad news shut down, fight or flight. The whole, the whole inflammation cycle, that whole cascade kicks in because of a smell they picked up at the grocery store.

Jason (00:27:25):

But it's actually because of the chronic exposure to the musty smell in a building that they spent too much time in. And so and the evidence is pretty clear on this, and it's emerging ra rather rapidly, but my friend Joan Bennett at Rutgers University is doing fascinating work with fruit flies because of her own awakening, having a, a, a building that she owned down in New Orleans that got flooded during Hurricane Katrina, and she's a mycotoxin expert. She walked into the building with a respirator, respirator on and got very sick, and she realized the only thing that was making it through the respirator was the musty smell. So she came back to the lab and began testing fruit flies with the musty smell, with one component of the musty smell. And she found that they stopped flying to the light.

Jason (00:28:03):

They fed, flew down. They, they they stopped producing dopamine. They had, there were special fruit flies, they fluoresce when they produced dopamine. So pretty cool what you can order online these days. And, and and then they also began re stopped reproducing. And then and then they also developed what she called Parkinsonian like symptoms. And then left, left on her subsequent studies showed that it causes mitochondrial damage and locomotor dysfunction. This is just one component within the musty smell. And so the, the, the evidence is, is, is compounding. Brown University did a study in 2008 and concluded that there was a direct correlation between mold and dampness indoors and depression. Hmm. And so what was the, that's why I brought up my mother's early demise is because she was also an alcoholic. But the question is, what is, you know, what's come first, the chicken or the egg?

Jason (<u>00:28:50</u>):

You know, if you're living in, if you're depressed and you're living in a damp building, and then you're more depressed and you're doing more to self-medicate, and then you're spending more time in the building, which is very common. Anyone who's listening to this, this, a mold sufferer who's in a moldy

building, is probably spending a lot of time on Facebook sitting in the middle of the thing that this making them sick because they're sick. So they're staying where they are because they're sick and they're getting sicker because they're staying where they are. Right? and so this is a negative cycle. It's a vicious circle. And so the musty smell is in fact according to the emerging medical research the it, first of all, all molds produce it. So when they're growing. So, so you don't have to find agen species in your house.

Jason (00:29:30):

It doesn't matter if molds growing in your house, it's producing these gases. And if it's producing these gases in very tight structures that we currently live in, you're breathing them. And by the way, I might remind everyone who's here, you breathe 13 to 15 times a minute. And if you do the math on that 20,000 times a day, so look at every breath as a dose. Imagine taking 20,000 doses, even small doses of a toxic chemical and that, that can't end well. Right? and so, so, so this, this whole thing about mycotoxins and, and, and even dust, quite frankly needs to be separated out. The main thing here is dampness in buildings is the enemy. The problem is not mold. The problem is dampness. Mold is a symptom. And actually, you could argue that mold signals mole is actually telling you something's wrong with the building.

Jason (00:30:23):

You could actually argue there's a benevolence to it because it releases the smell. If it really wanted to hurt you, it would do it silently. Yeah. It would do it without any indication whatsoever. Instead, it tells you there's a musty smell. Okay, there's a moisture problem here. Now fix this. Now, if you don't answer that the same way, if you don't answer inflammation in your body, it becomes chronic inflammation. That's its own disease. Same thing goes with the building. If you leave that by itself, it will continue to compound and ultimately it becomes cancer in the building. And so, so this is the, I look at the building in the body as very, you know, there's a, there's a metaphor here. There's a symbiosis, if you will. So anyway, that mycotoxins, this is a, this is a major issue because it's, it's, it's got, it's got most of the medical community completely blinded.

Caspar (<u>00:31:01</u>):

Yeah. It's, it's a real wild way to look at it. That your home is the living organism or, or the organism, you could say in the living organism within it is the symptom. So that if you have the mold, that that's not, it's ringing the bell as to something else is the true problem to it. Yes. Yes. Which, which kind shifts your whole perspective on mold problems. Remediation of just going after mold does not work. Dampness is is really what you have to go after. So let's now go into that case of, okay, let's go with the one that you find mold. You get got molds, goes right on you, you have the smell there and everything. What is someone's next step? Because as I know, most remediation is about just cutting it out, spraying it with chemicals, airing it out for a little bit, and leaving, saying you're remediated. When in truth, what, well, what was causing the damages?

Jason (00:31:56):

Exactly. So remediation, the root word is remedy. And so I I love etymology, right? You, you, if you dig into words, they will, they're so self-revealing. So to what is, what do we need to remedy here? Well, we need to remedy the WA water problem. So remediation always begins with fixing the water. Always. And if you don't, then don't bother. Yeah. Really, because, because 24 to 48 hours is how long you've got from the time something gets wet. And, and, and it becomes moldy. So, so if you have a water

damage event or a leak or any, any, any sort of excess dampness, including high humidity, 24 to 48 hours is the, is the zone in which you need to take action. According to the EPA. The industry standard, which is the called the IICRCS520. ISCRC is the organization, the S520 is the document that they, they state that at 72 hours, something that has gotten wet.

Jason (00:32:48):

Excuse me, especially something that's porous and absorptive. So anything like carpet, carpet padding Sheetrock of course is, is is the, is the number one mold food anything upholstered. These things at 72 hours of dampness not properly dried, need to be treated as if they're moldy. Whether they're whether they're moldy or not, whether they're visible visibly moldy or not. So fixing the water problem is first. And then you have to set up environmental controls around. So, so you asked me what, what's someone's first action? Find the water problem. And then determine from there, because the water problem seems, the mold will tell you how to find the water. This is the thing about mold is that everyone thinks it's the enemy. The mold gives you all the clues you need. It gives you the musty smell, which is the alarm bell.

Jason (<u>00:33:33</u>):

And then if you track that back and you, you can find where the source of the moisture is and fix it. And there's a whole trail cuz you've got growth. And then you need to address that. Now, if that's beyond the scope of your experience and capabilities, that's when you involve a professional, right? So in other words, diagnosing the moisture problem. If that's beyond your scope and experience, then you need to bring in a professional, unfortunately, and that's where it's expensive, and that's where it's also difficult to find out. It's find somebody who's qualified, because the number one rule is no conflicts of interest, right? Number two rule is no ERMI because it, that it lends itself to conflicts of interest and also an endless rabbit hole of huge expenses. Anyone who's pushing that by the way really pushing that had be had better have some really good justification.

Jason (00:34:14):

By the way, I can share with you a link to an article we just wrote about called The Truth about ERMI, which was which was a, a, a collaboration between some of the brightest science minds that I know and humbly us. And so I would love to to share that with you so that you can share that with your, with your audience because it's a, it's a real problem, causes a lot of panic and fear that test. Yeah, it really does. People, it just, it is so much confusion and so much heartache. So so fig figuring out the world of water problem is fixing that and then determining the extent of the, of the, the mold. And then the remediation, the, the physical part of the remediation is removing the building materials that cannot be cleaned. And again, this is under, under special control.

Jason (<u>00:34:53</u>):

So you'll establish, you know, almost like ET right? You're gonna tent off the, the area, the work area. So the dust you create in that work area stays in that work area. You're gonna isolate H V A C in, in other words, block your vents. You're gonna ventilate the space with a special, with what they call negative air pressure. So you're gonna blow air out of the window or out of any, any, any penetration you can to create a sort of a suction within that workspace so that anything that you produce in the space, in the space, and then you remove these building materials, carpet, carpet padding, sheetrock insulation, ceiling tiles, anything upholstered and absorptive, that was, that was wet and stayed wet too long. And

then, and then there's a micro fine cleaning. And that cleaning utilizes HEPA filtered vacuum cleaners and damp wipes.

Jason (00:35:35):

Now you'll notice that I didn't say anything about spraying anything about fogging, anything about killing, because that is counter to actual remediation, in, in the standard. They specifically advocate against using chemicals unless there was concern about a bacterial issue. So in other words, if the source of water was sewageor river water or ocean water, which is loaded with nutrients, then you need to sanitize it. But they're not saying to kill the mold because you don't need to kill the mold. Killing the mold doesn't actually help. Actually, what you've just done if you come in and start spraying stuff, is you've added a chemical that you can't get back out of the house. Whereas you can get the mold out, but you've added a chemical that you cannot remove. You are also in many cases using that chemical in lieu of cleaning because contractors like to do less work and get paid more money.

Jason (00:36:22):

So they like chemicals because that's less work, more money and they're leaving behind dead mold. Well, the purpose of mold remediation is to reduce the fungal load to an acceptable level, which means you have to clean it out, you have to remove it. Mold remediation is about cleaning and removal. It's not about killing. And also when you use chemicals to, to, to kill mold as with bacteria, as you're seeing in hospitals with resistant organisms like Mirsa and C Dif and stuff like that, when you're widespread killing stuff, what happens is you leave behind the really strong stuff. And this is called competitive release, where you kill off all the would be competitors that would, that would normally keep that stuff in check in the, in a, in a biodiverse environment where you've got lots of different microbes competing for the, the, the, the resources that are there.

Jason (00:37:01):

Instead you kill 'em all off and you leave the dead mold behind and the really tough ones come out and eat the dead mold. Dead mold loves to eat mold. And so the really tough one comes out and eats the rest of the stuff. And by the way, if you've used bleach, it looks clean, but it's not. And by the way, if you use bleach, it's really funny. The bleach evaporates leaving behind what water, right? So bleach is primarily water, 97% water. And so you get this, this hallucination that you've cleaned because it smells clean and cuz it looks clean because you've, but you're actually leaving behind dead mold and water, you just added water to a water problem. And so all that stuff is very counterintuitive and it, and it runs right in the face of all the wives tales and, and, and and the stuff that we, we've considered to be sort of fact. A bucket of bleach and some paint and you know, you're good to go.

Jason (<u>00:37:45</u>):

Not true. And so so it's, it's a, it's a real, it's it's, it's difficult for the consumer because there's not a lot they can do on their own unless the problem is very small, which again goes back to acting quickly because 24 to 48 hours, if something gets wet, you can rip it out yourself as long as there's not a preexisting mold problem there. And you can dry it out. But at 72 hour, and by the way, insurance will cover most mu water damage insurance if you have a water damage issue, most insurance, and even if you've got a landlord, that that will be covered if you act quickly, that's like free or cheap. At the 72 hour mark, mold remediators have to come in. These guys come in in Moonsuits, they've got different insurance, they've got different trucks, they've got different expenses.

Jason (00:38:28):

And your cost just went 10 x And by the way, insurance doesn't cover it. That's the big kicker right now. It's a cash pay. So you have three days of opportunity to take advantage of the, of insurance and, and a and a DIY solution. At the 72 hour mark. You are now in cash land and you are now in professional land and insurance companies will turn their back on you. And in fact, if you, if you file a claim, they'll drop you on, on renewal if you do it twice. So it's a real problem. So, so this is my message, right? If you see it, if you see something, smell something or feel something, do something and do it quickly because you have two to three days maximum.

Caspar (00:39:06):

Yeah. And most, the unfortunate part is I feel like most people don't even realize the problem until it's very down. Meaning it's weeks, months, years, you know, and that, that becomes problematic cuz you don't even know where the source is. So let's say it's not from a flood or anything, maybe leaky pipe somewhere, right? You have sheetrock that's dampening molds there, then you start to get the scent. You may not even see where it is yet cuz the wetness is on the other side of the wall, and yet you still have that. So when you have something like that, what would be the advice there? Because of course in a flood, you know, it, you see the water, you know the damage you start to do dampening. You could see even, you know, on the little readouts where it's damper in the sheetrocker here and there. But if you didn't have that, if you got your test and it came back positive and you don't even know where, you know, what, what do you advise there? Because some homes are very large and could be just one little area that you're just not able to see.

Jason (00:40:03):

Yeah. And, and this is, this is the, the, this is the hardest part about this especially from the perspective of, of what we offer now as a DIY testing solution, is that oftentimes the next best step is to engage a professional. And finding a qualified professional, by the way, and it's a big expense, is very difficult. We're working on a, on an exhaustive piece on how to select an a qualified inspector that I would so we talked about the building as a body as a metaphor, or building as an organism. Let me, let me kick that around around for a second because I think you'll appreciate this. So I look at the, the building as an exoskin or an exoskeleton, okay? As an extension of your immune system. You know, we're a lot like hermit crabs.

Jason (00:40:50):

We wouldn't do too well without our shell, you know? And, and there's the four basic human needs, air, water, food, shelter, food, you know, shelter. We can live with that for a while, but not too long depending on the climate. And then you got, you know food, which you need every, you know, for you can't go for much more than a few weeks and then water a few days and then air a few minutes. And yet we think about air last which is amazing to me. You know, it's typical of humans that we, we have these fascinating cognitive blocks or kind of blind spots. So wi within this, this metaphor of the building as a body, I look at the system of systems that we have here that are life sustaining. You know, the building's got a respiratory system and you could argue that the plumbing is circulatory and the, the electrical system is a nervous system.

Jason (00:41:34):

And then where's the immune system? We are the immune system. You could even argue that we're the mitochondria within the building, you know, that we're the, we're the energy cell, we're, we're

making sure everything works. And, you know and that's what's ironic about that musty smell doing the mitochondrial damage, right? Is that the musty smell causes it, right? Yeah. So it plays all the way through. And and again, when a, when a body, when a building develops aches and pains, the first thing usually manifests a moisture problem. And moisture problems manifest first as a mold problem. And then the mold problem sends you a signal, which is the building's form of pain. And then that, that pain molecule or molecules. And and then whether you respond to that or not, determines how, how prova, how, how, how much of a problem this pain becomes if this becomes its own disease.

Jason (00:42:17):

So when, when you have a, a problem with a building, the, you know, you want to get some testing done, you could look at this as, as like a DIY test. You do some testing done. If you had a problem, if you, if you decided to use one of these DIY tests for your own body, and let's say it was cholesterol, you wanna do a cholesterol test if you had high cholesterol readings you wouldn't immediately schedule heart surgery. You know, you wouldn't say, I gotta get a stent. You know, you wouldn't immediately schedule an intervention. You would schedule an appointment with your doctor or with a specialist who would then say, let's take a closer look, see what's going on in your body, see if there's some family history we need to be aware of, see if there's maybe some other variables.

Jason (00:42:58):

Maybe you just ate a cheeseburger and a and a and french fries in a, in a milkshake before you came, before you took that test. Maybe you did. So the same logic should be, should be used with a DIY building test, right? We test buildings and we test bodies. And, and I look at the DIY test a lot like that, that DIY cholesterol test, it's not truly actionable. No single test is actionable by itself. You need the actual context of what's going on in the body or the building in order for you to build a next step, right? And so you would, you would go to a doctor. In other words, you'd, you'd hire a professional inspector, which is like a building doctor. You get a physical of the building, you know? Right? And then that develop, the, the byproduct of that physical of the building is a scope of work, which is like a referral to a remediation contractor or a referral to a surgeon where it's a team approach.

Jason (00:43:47):

You don't skip over from a DIY cholesterol test to a stent. You know, you don't skip over from a DIY test to remediation because there are, there are controls that are put in place, but if you follow that process well, and it's not, it's not obligatory except for in a few states, there's a couple states where there's laws that state that you can't have an inspector and a mediator be the same guy. And that you have to have an inspector do an inspection and develop a scope of work. And that scope of work is, you know, that there, New York state is one of them. Texas is another, you know, there's a handful of states that have regulations around this. And they're poorly, they're poorly executed, quite frankly, but they at least do keep a, a Chinese wall between the inspectors and the remediators.

Jason (00:44:25):

And so, so it is important to be able to find a qualified inspector in your area. Now, here's the key. You need to have somebody who's does this full-time. This is all they do. They don't do anything else. They're not a home inspector, by the way. Home inspectors are not qualified to do this. They need to be an environmental consultant with specialized experience in doing sick building diagnosis. They do not have a remediation business on the side, nor does their brother or their cousin or their uncle. And if

they do, they disclose it to you and there's no financial relationships within them. And this is, at this point, completely you know it's something that they have to disclose voluntarily.

Caspar (<u>00:44:58</u>):

It's an honor system.

Jason (00:44:59):

It's an honor system, and that's very difficult, right? And then you wanna make sure that they're not also using tools like erm, which are slanted towards, against the consumer. They're slanted towards driving people towards huge remediation costs. You also wanna watch out for people that are, that are charging huge sums for, for, for inspections. Some people are getting away with six or \$8,000, calling them medical mold inspections. You also wanna stay away from the guys who doing it for 250 bucks. You know, like there's, there's, it's kind of a common sense thing. You don't want the highest and you don't want the lowest. And you want, and, and you know, what's really helpful is you find people that are working that, that have, that have a, a good number of references, consumers who've really been helped, you know, people who, who have been through it.

Jason (<u>00:45:38</u>):

You want real life stories and you wanna talk to these people. And by the way, I also advocate the use of molt sniffing dogs. I really do. They, they're so powerful. If you can find an inspector in your area that is not conflicted that has real experience in this, and I'm not talking about a guy just got a dog yesterday, cuz they're even more dangerous than, than, than a human by himself. But someone who's got some experience in this, and they're hard to find, quite frankly, they are. But that's, that's the path that you need to go on. And that's, it's unfortunate. There is no, there is no silver bullet. There is no, there is no you know, solution in a box, so to speak. It is, it is caveat emptor to a large degree, you know?

Caspar (<u>00:46:14</u>):

Yeah. And, and the whole thing is that we're talking about health. We're talking about, you know, the quality of life and everything. So you, you're gonna want to go the extra mile on this. You're not going to want to skimp out or just jump into a quick solution that doesn't sound very well. You wanna do your research, you want to feel good about it. Just like I always say, when you choose a doctor, go around, you know, really understand what you're going to ask them, how they relate to you and how you feel about it. And see among a number of doctors, and don't put cost is the only thing, but of course, keep that in your range, all these things. So it's, it's a big decision as always. And it should be, because again, it's about your health. You know, I want to talk a little bit beyond mold because you, you talked about indoor air quality, you're an indoor air quality crusader.

Caspar (00:47:00):

I feel like we're in this kind of spot where we've built our homes to be of terrible indoor air quality, meaning we've sealed them in right. To make 'em very energy efficient. But that means nothing gets out. And then we put a bunch of just terrible ingredients, whether it's even from scented candles, Febreeze, our carpet is, you know, fire retardants and, you know, VOCs, as you said before, they're, they're just, it's just basically we're sitting in a, a chemical stew that's in our air and we're breathing it, and then we don't even open windows anymore, which I find strange. You know, I know new apartments that don't even have a window that you can open to get fresh air, and they just say they, they filter it. You know, with all of that said, what does one need to look out for? Number one, I would

say part of that question is there's certain things that you don't want to introduce into your environment in your home. And number two, how can we best filter those things that obviously we're not gonna get away from everything.

Jason (<u>00:48:01</u>):

Yeah. So you, you hit on a very important point. So mold is only one piece of, of, of the, of the whole thing, right? If you were to look at air it looks a lot like weather, right? You've got plumes of chemicals and particles, and they are, you know, if, if you, if you could see microscopically, you'd be amazed that we're in like more, more like a stew than we are in like this, this clear liquid that's, you know, this clear fluid I should say. And so, you know, in fact, there's a, there's a, there's the statistics around this are fascinating. And, and, and, and I'll get into the filtration in a minute, but you know, the, from 1965 until 2014, respiratory illnesses up 165% in in the United States. And also during that same period, roughly the same period, death related to respiratory illness is up 30%.

Jason (00:48:49):

Now, this is during a time when smoking has gone down precipitously by some measures, about 80%. And so you'd think, well, geez, if we got rid of smoking, which is the, the big cause of lung cancer and respiratory illness, then why are the numbers going up so high? And you know, you can quickly point, if you just do a little bit of a rewind, you'll see that we closed up our buildings really tight for energy efficiency in the seventies, right? During the, the the fuel crisis. We also started building out of essentially petrochemicals and, and very cheap quick building materials in order to meet the demands of the baby boomers. And and then and then you know, the buildings now, when they get wet, they, the water gets into the walls. It used to be we build out of stone plaster old growth timber, things like that.

Jason (00:49:33):

Concrete. And when water got in the walls, it, it, it went away. So it, it dry out, you know, the wind would whistle, wind would blow, and it would whistle and it would dry out. Now stuff gets in and it stays in. We build up, we build paper mache and plastic bags, you know, it's really crazy. And, and the materials are, you know, we're doing a lot of imports from, obviously from overseas. And so in order to make those things quick, quickly, and cheaply, they, they're made with solvents and, and, and adhesives and things that have to dry quickly, which means if they dry, those chemicals are becoming airborne, you know, things don't dry and then go nowhere that comes out and goes into the air. And so, but we lock ourselves in, in these boxes. And, and the new house smell is, is, is one of those funny things.

Jason (00:50:07):

A new car smell is very alluring. It's a, it's a, again, a very counterintuitive thing. People think of this is like the badge of like the, they, they won, they've arrived. And when I walk into a house like that, I smell cancer, you know you know, and, and that's the reality of it. And I used to be all lured by that. I remember moving into my first apartment, it was freshly painted. I, I thought, oh my God, this is great. It's fresh, its new, it's clean. And I look back at that now, and I'm like, I wouldn't let my kids spend 10 minutes in there, right? And I went and was like, cool, let's move in. And so it's just a, so the, the first thing you wanna do is stop the first step to detoxing. And again, buildings and bodies detox the body detox, the, the building.

Jason (00:50:46):

First step, the detoxing is stop toing. So stop bringing that stuff in the building. That means if you're gonna paint, use no vo c paints. If you're gonna get carpet or, or have any installations at all, go to green guard.org. And it's a, it's a resource where, where builders can find low emission materials, low and no emission materials. And, and, and before you buy even so much as a, as a, as a, a tube of caulk, you can go there and, and, and verify that what you're getting actually is low or no emissions, very important. Also no chemicals there. You don't need to kill anything. You don't need to use any antimicrobials. By the way, even with Covid, that the study that they did on Covid where they, they, they used the surrogate virus and they spread it out on, on hard surfaces.

Jason (<u>00:51:31</u>):

And they used an anti wide spectrum antimicrobial and also hot water. And they, they use same exact cleaning mechanism on both sides, and they couldn't tell the difference between the, the outcomes. There was no difference. So you don't need to kill, stop the killing. So that's number two. And if you stop the killing and recognize that we need to cooperate with our environment, and that there's, there's direct correlation between a high biodiversity, lots of microbes in your building, okay? And there's a great book called Never Home Alone by Rob Dunn. Anyone who's interested in this should read Rob Dunn's fascinating and hilarious and eye-opening book. He's a, he's a, he's a r he's a riot. And you'll be shocked and surprised by what's in your house, but also you'll stop wanting to kill stuff. And so there's a direct correlation between a high biodiversity and low incidence of asthma, allergies and autoimmune disease.

Jason (<u>00:52:20</u>):

And there, and the data is very strong. And, and also a very low biodiversity, very high degree of, of a high incidence of asthma, allergies, and autoimmune disease. So we need these microbes, right? And, and so what we don't need is all these chemicals. So so the first thing you wanna do is stop getting, stop, stop getting these chemicals in the house and stop, stop stop trying to kill everything. And don't use air fresheners. These are bad news. Don't use essential oils except for very occasionally as a way to, because by the way, those are VOCs too. And, and oftentimes they can cause problems with people that are sensitive, and they may not even know it. A lot of people rely on those. They think they airing airly think that they're gonna do something for mold, and they don't.

Jason (00:53:03):

This is a wife's tale. You know, there are applications for that. They're outside of my area of expertise. But I, as a general rule, you know, using anything to freshen air actually is not freshening the air. If you want a freshen, air open your windows. That's fresh air, presuming that your outside air is, is, is acceptable. And that's, that's the other thing is we don't open our windows enough. You know, the word human comes from humus, which means earth, soil. And in fact, most of the microbes that are very friendly, that are in our gut are from soil, right? And so we are from soil, and theoretically we go back to the soil but we've disconnected ourselves such that we even bear ourselves in boxes so the soil can't get in, right? So we are, we are so disconnected from the earth that we are now wondering why the earth is now a threat to us.

Jason (00:53:50):

Mold. Mold, the most ubiquitous biological particulates in the world are now a threat to us, because we've been so distanced from them. So I always say, use a lot of HEPA filters. Use HEPA vacuums, but not to remove the particles that are produced by biological materials. You wanna use those to remove

the man-made stuff. Your building is shedding paint particles and, and the, the polyurethane flooring that you're walking across to, why do you have to refinish your floor? Because it, those particles are coming off, they're going into the dust. You wanna worry about your dust, worry about that stuff. That's a chemical, that's a chemical concentrated amount of chemicals that that your babies and your puppies and your kittens are licking. They're, it's called incidental ingestion. And by some measures, we, we take in about a hundred milligrams a day of these kinds of chemicals via dust through, through, through just hand to mouth, especially like I said, babies and puppies and, and kittens, and the people who we really care and love for the most.

Jason (<u>00:54:45</u>):

So we want to clean that stuff up, but not to get rid of all the particles, not to sterilize the air. We want to get rid of that stuff because of the chemicals, more so than anything else. And also the chemical, if you want to filter out VOCs, you have to use filters to have a lot of carbon in them. And most of the filters are not HEPA filters are, are, are for particles only. So you need chemical, you need activated carbon. And most filters, even with activated carbon, have very little, they have a thin layer of it. There are a few units out there. The IQ Air makes a, makes, you know, the, the, probably the best VOC filters out there the HealthPRO plus. But and then in some cases where you have a VOC problem in the house, you sometimes need to install dilutive mechanisms.

Jason (00:55:29):

So in other words, where you'd actually have like a energy recovery ventilator or heat recovery ventilator, which actually brings fresh air from outside and then expels stale air and transfers the heat. So using an air a heat exchanger, those are very effective in buildings where there's a lot of uscs. But the bottom line is that, that we are now facing I, I would argue a, a real threat with our health, mold is always what people call us about. But I actually really do think that the the, the predominant cause of most chronic illness is poor air quality and food follows very close second. And VOCs are the primary violator in my screen. Yeah. This is what the data is showing. And this is, you know, especially as we spend more time indoors, especially as we stay in one building in particular, 20,000 doses of just one building is poisoned. Right? It's not just multiple buildings. Right?

Caspar (00:56:17):

Well that was the wild part of the pandemic where lockdowns were suddenly, you were stuck inside your house were much longer than you've ever been. You weren't outside at all, and you were stuck in a house most likely that that wasn't doing you any favors, cuz of what's going on in the air. And people don't know this. And like you said, it's air quality, it's food. People like to, you know, just stick on food all the time. What are you eating? How are you eating? How clean is it? This, that, everything. But don't ever discuss air quality, the thing you breathe, like you said, 20,000 times every single day, over and over. And that's where, you know, the discussion needs to go to. And I'm, I'm really having happy we're having this discussion. Now, there is something I gotta ask you cuz a lot of our patients are, and people that listen to this are dealing with chronic diseases.

Caspar (00:57:05):

And something that you've dealt with at a large par portion of our population deals with is Lyme disease. And somehow Lyme and mold go hand in hand. You see it over and over. Patients sometimes get mold diagnosis, get Lyme diagnosis, get, you know, it's a back and forth and you're treating one or the other Schumaker protocol, and then you're going on high doses of antibiotics and you just go in

circles and get worse. Oftentimes. What is it about that connection that you find that you actually do have mold patients, Lyme patients, Lyme patients, mold patients?

Jason (00:57:36):

You know, I mean, it's, it, it is to some degree a mystery. It, it's, it's clear that biotoxins are, are the, are the, are the issue and the inability for the, for the body to naturally process them and detoxify naturally. And, and, and that seems to be the Venn diagram. It seems to be that that's, that's largely where, so, so, you know, the Schumacher, I've got a lot of issues, the Schumacher and, and he and I have had many public debates about a lot of things. But, and, but what he did act, what he did do well was that, was he honed in on that, was that it's biotoxin related. What he did not do well was say there's a one size fits all approach mm-hmm. Because that's not true. There's, that's never been true in medicine.

Jason (00:58:22):

It's not true in almost anything. And so he's got a very didactic approach with that kind of stuff. And so, so that's where, you know, the beginning in the end. The other thing, he actually by the way also said recently, which I really agree with, is Actinomyces, which are a, a kind of bacteria, rod-shaped bacteria that grows alongside of water damage, a mold and water damage buildings, but isn't often tested for. And also is a producer of major major chemical producer. In fact, two thirds of the antibiotics that we produce in our, in, in the world are produced from actinomyces, not from mold. So this is, this is a blind spot also in the testing protocols that are, that are that are commonplace. And so we're actually working on a DNA-based test to, to, to knock ERMI out of the box.

Jason (00:59:03):

It it, it, it looks at all known microbes including Actinomyces for the same cost as an ERMI, which looks for 36. So orders of magnitude not even it's logarithmic. It's just all way out. So so the, the, the lime thing and the mold thing tends to be, I think the biotoxin overlap. What's also fascinating is that, you know, you end up with the chronic fatigue, the fibromyalgia all of these other sort of nebulous illnesses that fall. What I, what I see and Lyme is, is different because Lyme is clearly an infection. These other diseases, what I see the mold does, or even poor indoor air quality does, is it brings out the latent symptoms that are already there. In other words, the latent diseases that you may already have under the, under the surface. And it happened to me. Right? So all that stuff came up, and then as soon as I got the environment under control and I went on a no sugar, no grains diet, by the way, cuz a lot of most mycotoxin exposures food, food-based. And, and so people don't wanna hear about that. You talk about don't talk about religion, politics, or my food, right? Like those, that's, that's don't tell me I gotta change my diet because especially

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Caspar (01:00:12):
When it's the coffee, right. That, that

Jason (01:00:14):
Is like totally off you know

Caspar (01:00:16):
Don't ever tell me not to drink my coffee
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Jason (01:00:18):

Or my carbs don't get all, don't tell me I gotta drop my carbs because what am I gonna do? It's the only thing I've got in this world is I got my, well, my, my booze, my coffee, and my carbs. That's it. Right? Exactly. Don't, don't me, I, I can't have my wine, you know. And so you, what I, what I see happen consistently is that this, this is, this is the, this is the, the, the problem that most people face. And I also think that a lot of times with Lyme, what happens is lime people end up spending a lot of time indoors. If they've got a mo mold or a moisture problem, they're hyper exposed. And so, you know, this comes down to get out of the house. This comes down to 20,000 doses a day. What are you dosing? Are you dosing 20,000, 20,000 sips of, of outdoor highly biodiverse air with, you know, lots and lots of exposure to wide variety of microbes where you're getting maybe a little bit of musty smell here.

Jason (01:01:15):

These micro microbial acid is here and there because that's the way a forest smells. But you're not literally inhaling constantly as if you're living over a compost. He, right. There's these, this is the difference, right? I mean, think about mold growth as compost. You are living in a compost bin. If you just continue to let it go and, and, and you're inhaling that, how is that gonna, how is that gonna end? Well, right? Your immune system is gonna say, Hey man, I'm gonna shut down for a little while here. My sinuses are gonna close. Right. Sinusitis, my rest, my, my, my lungs are gonna close at asthma. Right? Everything goes, this is, this is the body protecting itself. So, so the, the, I think that a lot of what we see when, when it comes to the exacerbation of illnesses is that mold tends to make people fatigued and they tend to not leave the house.

Jason (01:02:02):

And then that just amplifies everything. And Lyme is no exception. People are bedridden. Yeah. And if they don't have their air quality straight in their home, and by the way, a lot of times these people are also met. They've, they've lost their cog, a lot of their decision making. They're not maintaining the building. Well, yeah. Right. There's a socioeconomic component to this. There's a, there's a psychiatric component to this. In fact, I'm working with a psychiatric clinic that has like 400 new patients a month, and they're finding inflammation in every single intake. And so they believe that mold or air quality is a, is an underlying cause in many of these psychiatric cases such that some of these doctors I'm talking to in that world are now referring to depression as a, as a, as an inflammatory disease.

Caspar (01:02:44):

Rightly so.

Jason (01:02:47):

Fascinating stuff. And it's, and it, what's what's gratifying is that it's emerge. The the conversations we're having here today are the conversations that need to be had at scale. Right. because, because this is, this is not it. It should be, it should be out there. This is the one thing, you know that all people do, right? We all breathe there, we all live in buildings. Yeah. You know, and so like, this is, this is like the, the basics. This is foundational. This is table stakes. You're born into this planet. You should, you should be able to understand how to navigate living in buildings and breathing air. Yeah. And then what it takes to optimize that. And so that's the mission that we're on.

Caspar (01:03:27):

Yeah. No, this conversation, and I hope that this is doing it for others, really change your perspective. You know, you, your home is an extension of you in some ways as the home. So the body as above, so below sort of thing goes, goes hand in hand here. That's right. And you, we seem to hyper focus singularly on the body, you know, as if it doesn't take things in and give things off itself. Just as the house will give off VOCs, this and that. And then at the end of the day, also, you, you make this great case for, you know, you're, you're gonna take these 20,000 or so breaths, why not take some in the greatest type of environment, which is outdoors, reconnect with nature. Yes. Optimize your home, no doubt about it, but still know that nature is the ultimate healer in all of this.

Caspar (01:04:12):

And nature is mycotoxins, mold, all of this. So let's not just demonize that and say, that's your problem. That's right. So it really does shift the perspective on everything. And I, I think this has been a really, really enlightening one as far as just understanding that you do have power to do things about things you just gotta do 'em. Right. Whether it's the testing, whether it's how you address it, the dampness versus the mold, you know, kind of which one and, and address all these things. Is there anything you could leave us with as far as, you know, people who are concerned about mold? You know, any tips or advice that you could leave with people so that we feel a little bit more confident addressing what is bound to be a growing issue?

Jason (01:04:55):

Well, I think the first thing that I, I like to encourage people to do is, is trust your intuition. So use your senses. You know, you're the best mold detector there is. You know, people tend to say that they may not see it. They can often smell it, but more often than not, if they're willing to, to, to trust themselves, they can feel it. You know, you walk into a building and it's not right, right. Whether it be a hotel that you're staying, cuz everyone's had the, most people have had the experience of walking into a vacation home or a hotel and going, ooh. You know, and, you know, those will often be restless nights difficult to sleep because it'll cause sleep disturbances. And, but more than that, right? You're just getting 20,000 doses again, of, of, of a, of, of a chemical potpouri.

Jason (01:05:37):

So, so you, you need to trust your intuition, but in addition to that, get the facts right. So in other words, trust your intuition and then use data to support the next steps. That's why we encourage people to test, don't guess, right? So whether it be the air or their body, don't just assume, in fact assume nothing. You know, greet this with humility and an open mind and get the, get the facts. And then be judicious as treat, treat mold inspectors the same way you treat as you brought the same way. Treat finding a mold professional the same way you treat finding a physician. In fact, there, there, in many cases, the, your mold inspector will have a greater impact on your health than the physician that you're under than, than you're working with. And so, so take the time to interview and, and really follow, again, your intuition on that stuff.

Jason (01:06:31):

Cuz your, your, your gut is gonna tell you a lot more than, than you think. And and then, you know, be patient and recognize that this is a long road in some cases, you know, properly done, a remote remediation project will take a month between the selection and the co of the, the inspector and the testing and the scope of work development, and then finding the contractors and then doing the project, and then getting the testing done. It's a long process. But, but, and then, then lastly, be vigilant

in your in your prevention spend the money and the time to maintain the building from the outside in. So that moisture does not become a problem again. And, and make that investment not just in your building, but in your health. Because it is these, you know, we, you, you, you talked about the, the, the I look at the house and the, and the, the microbiomes that we, the building and then us, these are what, what some people call nesting ecologies.

Jason (01:07:29):

Right? Like a Matryoshka doll, as above, so below. And so, so we are all part of a unified hole. You know, this is this, that's the reality. You can't separate this out. And, and we are part of nature whether you like it or not. And so I say embrace it, and and at the end of the day, you know the quality of the air you breathe is the quality of your life. And, and, and it's a very low investment relative to food and all these other things that you that the cost associated with improving your air quality. It pays dividends, huge dividends huge ROI and it can improve, improve the quality of your life and the longevity of you and your family, and your failure to do that can cause early dis disease and early demise. It's it, and by the way, there's no, there's only healthier and unhealthy. There's no neutral.

Caspar (<u>01:08:16</u>):

Yep.

Jason (01:08:17):

You're, it's either life-giving or disease-causing. And so the, that's, that's how binary it is. There is no neutral. And so, so, so strive to, to make your air quality as, as good as you can because and as and as clean as you can and then get outside.

Caspar (01:08:33):

Amazing stuff. Thank you so much, Jason. Really appreciate this conversation. I know it's probably opened some eyes here. Where can people learn more about you and the company?

Jason (01:08:45):

Sure. Well so we created a welcome page for your listeners specifically at got mold.com/innnomed. That's I N N O M E D. And then on that page, we, we have a couple of couple things there. One of them is an ebook that we produced. There's about 46 page pages of FAQs and, you know, common, common myths and misconceptions. Some of the stuff we addressed here today as well as checklists. Basically it's, it's a way for you to do an inspection of your own home. And and so people give us a lot of great feedback about that. There's also a a link to the website to, to the to the test kits where there's a 10% discount offer also for your audience. And just quickly, verbally, it's in INNOMED10 in case anyone's interested N N O M E D 10, which is a 10% discount.

Jason (01:09:39):

I am you know, for better or for worse, I I see every message that comes in from the website. So if anybody has any questions about this about mold, about air quality best thing to do is just go to the homepage and drop inquiry in there, in the, in the Contact Us section. And if you address it to me, there's a few Jasons here, actually, believe it or not. But but they, I, I see them all. So I'm more than willing to, to answer any questions anybody has there too.

Caspar (01:10:06):

Awesome. Amazing stuff. Thank you so much, Jason. Really appreciate it.

Jason (01:10:10):

Thank you for having me.

Caspar (<u>01:10:12</u>):

As you've heard today, it's always inspiring to see people like Jason who have turned a health setback into a successful business that's now paying it forward and helping others. So check out got mold.com/innomed. And until next time, continue writing your own healing story.