Introduction: Mold toxins are one of the reasons that there are so many mysterious conditions that baffle the medical community. This is a very important topic and well worth studying. This article gets a bit technical. If you find that there more details than you want to wade through, read down to the chart below and then skip to where it says "Treatment".

Mold toxins are found in foods such as grains and peanuts. Far more serious are the mold toxins found in buildings and vehicles with water leaks. Buildings with flat roofs and buildings that have a concrete basement or are on a concrete slab are ready-made for mold problems. Flat roofs leak and concrete wicks small amounts of water up into the walls. Almost all cars have enough mold to make people sick. Mold toxins are the most common of the biotoxins and are responsible for many if not most of the symptoms of many Lyme disease patients.

When a building has a water leak or water damage that is not immediately corrected, molds such as Stachybotrys, Aspergillus, Acremonium, Actiniomycetes, Penicillium and Chaetomium are likely to start colonies. The colonies may be visible or they may be hidden in places such as the tops of ceiling tiles or the bottoms of carpets. The molds send out spores which contain powerful biotoxins that are nerve toxins or neurotoxins. A study by Harvard University found that fully half of the homes studied had enough mold to cause symptoms. Typically it is homes with basements or attached garages that are high in mold spores even if there have not been any leaks. And we have found that almost all cars are contaminated even if they are nearly new and do not smell musty.

When these spores with their neurotoxins are inhaled, about 76% of the population can make antibodies to the toxins and quickly eliminate them. They may sneeze, have a sore throat or have other minor symptoms, but symptoms are temporary. If they spend several days in a moldy building, they may begin to feel sick, but when they are away for a few days they recover.

About 24% of the population have a genetic makeup that makes them unable to produce the needed antibodies for mold toxins. The body simply does not adequately tag the toxins as invaders and it does not eliminate them. The liver can send them to the digestive tract via the bile, but they are quickly reabsorbed back into the blood. The result is that continual or repeated exposures to mold toxins results in an ever increasing amount of these toxins in the body. Those who can actually smell musty odors where they live or work usually have the worst mold toxin problems. It is estimated that 10 million American children are being exposed to mold toxins (many are medicated with "Ritalin" as a result) and around 25 million Americans have some degree of mold toxin illness.

It is also common to have a genetic makeup that does not detoxify Lyme toxins and many cannot detoxify either mold or Lyme toxins. If they have Lyme disease, Lyme toxins also
build up in the body. These are the people that get very sick and stay sick when they do frequency treatments for Lyme. FOR THOSE WHO GET MAJOR PROLONGED DIE-OFF REACTIONS, FREQUENCY TREATMENTS FOR LYME ARE NOT RECOMMENDED UNTIL THE TOXIN ISSUE IS ADDRESSED.

These mold and Lyme toxins attach to fat cells and cause the fat cells to continually release inflammatory cytokines. The result is chronic inflammation with symptoms such as fatigue, pain, brain fog, out of control weight gain and loss of sex drive. When a person has the flu, symptoms are not caused directly by the viruses. The symptoms are caused by the resulting cytokines. Mold and Lyme toxins can cause symptoms similar to a permanent case of flu.

An inflammatory reaction is very useful to help deal with an infection. It is devastating when it goes on and on.

This chart from Abbas Qutab, M.D. illustrates what happens. The mold and Lyme toxins cause the fat cells to make a material called NF-kappaB. NF-kappaB causes all kinds of inflammatory chemicals to be released. And these chemicals have serious adverse effects if they are produced over a long period of time. You can see the listed results such as pain, inflammation, heart disease, blood sugar problems, autoimmune diseases, cancer and nerve damage.
Another thing that happens is that some of these chemicals actually cause another increase in NF-kappaB! It is like when they turn a PA system up too high and the mike and speaker feedback and you get a very loud and unpleasant squeal. So the body can get stuck in a feedback loop where NF-kappaB increases inflammatory chemicals which increase NF-kappaB which increases inflammatory chemicals….

Cytokines also cause the release of a material called MMP9 that makes people feel terrible.

Cytokines also cause reduced circulation in small blood vessels with greatly reduced oxygen and nutrients to the cells. This acts similarly to advanced heart disease and any exercise can result in a crash that lasts for days.

Excess cytokines are also related to autoimmune problems. And autoimmune reactions are much more common in people with long arms – "wingspan" longer than their height.

Mold and Lyme toxin patients may make antibodies to myelin with resulting nerve damage. MS patients should be checked for mold and Lyme toxins.

The body may make antibodies to a material called cardiolipin. This causes blood to sludge. Hands and feet are often cold.

More commonly they make antibodies to gliadin which is a protein found in wheat. The result is an inability to tolerate gluten grains (wheat, spelt, rye, barley and possibly even oats).

A diet high in sugar and in the starch amylose (wheat, rye, oats barley, rice, root vegetables, bananas) causes rapid blood sugar and insulin spikes making things worse.

Some materials like dopamine and serotonin cannot cross the blood brain barrier (BBB). But the BBB does not slow down inflammatory cytokines at all, so they enter the brain and block various receptor sites. When the leptin receptor sites are blocked, leptin levels increase and leptin resistance is produced. The excess leptin packs fat into fat cells where it stays until the toxins are removed. People with high leptin can gain weight on 1000 calories or less.

When leptin receptors are blocked, the production of a chemical called MSH is blocked.

If MSH is low, melatonin production will be low, resulting in sleep problems.

If MSH is low, endorphins will be low resulting in excess chronic pain.

MSH also controls pituitary hormone production and if MSH is low, there will be a loss of hormonal control. If cortisol is low, treatment should be to remove the neurotoxins. If cortisol is given, that depresses ACTH production and this can make the person's health
much worse. Taking cortisol or steroid drugs while biotoxins levels are high can result in serious permanent injury.

Low MSH can also result in low androgens in both men and women. If androgens are low, symptoms will be much worse. That appears to be why most chronic fatigue patients are women.

Anti-diuretic hormone production by the pituitary is often disrupted resulting in excess urination even to the point of dehydration and excess thirst and excess salt remaining in the blood. There may also be a layer of salt on the skin. When that happens, the person is a good conductor of electricity and many patients have problems with static electricity shocks. They may damage electronic devices including watches by touching them.

People who are low in MSH often have leaky gut which lets in gliadin which causes more inflammation and further reduces MSH which causes more leaky gut which lets in more gliadin…. In any case of bowel disease, mold and Lyme toxins should be checked. Gliadin also interferes with the blood-brain barrier.

Eighty percent of low MSH patients have colonization in their sinuses by a variety of bacteria called "multiply antibiotic-resistant coagulase negative staph." (Yes, that is the correct spelling!) In most people, this organism is fairly benign, but in low MSH patients it must be taken care of before they can feel good. Colloidal silver nose drops are a possibility.

Dr. Ritchie Shoemaker, M.D. puts his patients on a low amylose diet and uses Cholestyramine to remove the toxins. Cholestyramine causes bloating, digestive discomfort and constipation in most patients.

**Treatment:** The most effective material that I have found for mold toxin removal is Cholestepure with a dose of 1-3 three times a day. You may need to start with just one a day. Cholestepure along with Peach Tree extract and Thuja extract is a great combination. Stay away from moldy places and moldy foods.

We have found two ways to speed up mold and Lyme toxin removal. At least one type of Japanese foot detox patch pulls out mold toxins very quickly with no apparent adverse effects. We are seeing amazing improvements in as little as a week.

Also, an "ionic foot detox" setup where the feet are in separate tubs is very effective and works quickly. This is most effective when the Harmonic Generator is used as the voltage source so pathogens can be removed during detox sessions. It is also possible to use a plain 9 volt battery. Please note that the feet must be in separate tubs with an electrode each side for best results. Those who have major die-off reactions should start with the 9 volt battery.

Here is a case where both kinds of foot detox were used:
In late March of 2008, KR reported that he had chronic fatigue along with severe joint and muscle pain. It was thought that he had rheumatoid arthritis and fibromyalgia for which he took "Prednisone" and "Vicodin" without much apparent relief. He also said that his muscles where so weak that he could not even open a vitamin bottle.

Muscle testing indicated that he had very high levels of mold toxins and even higher levels of Lyme toxins. The source of the mold appeared to be their home and his wife's car. His truck was also moldy but that did not matter much as he could no longer drive.

KR decided not to get a Harmonic Generator (zapper that makes 4 frequencies at the same time) and the ionic foot detox tub assembly that it plugs into. This unit has separate tubs for each foot so it could have helped with infections and toxins at the same time. Instead he would try to eliminate the toxins from his body with 10 foot detox pads, just enough for 5 treatments.

He also decided to not get the diffuser and Detox Oil that could have eliminated the mold from his home and the car.

In just a week he was feeling much better so day he mowed the church lawn and fertilized it and then mowed the lawn at home. Quite a change from having a very hard time walking at all!

In the middle of April, his wife called to say that he was in extreme pain and he had been in the emergency room to get medications again. For him to stand up at all required great effort. He had run out of the foot pads and he was still living in a mold contaminated house where he inhaled mold spores daily. He had also been driving his moldy truck.

This time KR decided to use the diffuser and detox oil to kill mold in his home. For rapid detox he decided on the foot tub assembly. Instead of the Harmonic Generator he would use alligator test leads from Radio Shack to attach a 9 volt battery. The positive went to the side with the left foot and the negative side went to the right foot. Each side would have a pinch of Celtic or Real Salt and 3 inches of warm water. The salt amount should be just enough so the current could just barely be felt. Treatment time would be 30 minutes a day. It was possible that this setup would kill some pathogens in addition to helping with detox, though not as many as if using the zapper.

I called him a week later to see if he had been able to make any progress. "Sure," he said, "I used the treadmill for an hour yesterday and used it again today." He reported that he was symptom free except for slight dizziness left over from a previous stroke. So in his case, he was able to get good results in just a week. Twice.

We are finding foot detox with the feet in separate containers works much faster than with both feet in the same tub. Any fully DC offset frequency source (pulsed DC) can be used for this. Frequency generators like the F-Scan, F165 or any function generator can be used. The GB-4000, Astropulse, BioSolutions, Global Wellness and other equipment that produces alternating current require a diode in the circuit for foot detox purposes.
The voltage should be just high enough to be felt. Most any frequency can be used, but it should be low enough that it can be felt. This generally means around 2000 Hz or below.

Dr. Shoemaker reports that about 1-2% of the population do not get adequate improvement just by reducing mold and Lyme toxins. Reducing Lyme toxins with Cholestyramine can even cause an increase of symptoms. In these cases he uses Actos to lower inflammatory cytokines, leptin and MMP9. On the other hand, Actos will make patients who are underweight with low leptin worse.

We have found that anti-inflammatory products are generally not needed as toxin and infection loads come down.

Precision Herbs makes a product that increases MSH and another product that balances Leptin.

If the molds are actually causing infection, Nano M or Immune Yeast and Fungus along with a good flora product can be used. We find that people cannot easily tolerate killing parasites or fungi while mold toxins are high.

To remove mold from buildings and vehicles, you can use a cold air diffuser with "Thieves" oil or Detox Oil (a cheaper version). This is Dr. Edward Close's method. Treat cars for at least 48 hours. Treat a basement or a garage for up to a week. In general, treat cars and buildings every two weeks. If the diffuser is running at an effective rate, it will use about ¼ ounce of oil in 24 hours.
MMS and citric acid can also be used. To treat a car, put about 2 teaspoon of MMS and the same amount of 50% citric acid in a bowl and leave it in the car overnight. Do not breathe the fumes. If there is a trunk treat it with another bowl of the mix. Air the car out before using it. Treat the car every night for a week and then every two weeks.

To treat a room, use a bowl with 3 teaspoons of MMS and the same amount of 50% citric acid for each 10-12 foot square (100-144 square feet) of space. Do not breathe the fumes. Again, it is often necessary to treat the area every two weeks.

To treat a basement, it is necessary to turn off the furnace if it is there and block off any vents or any ways that the fumes could escape.

For more information about mold toxins, see the book *Mold Warriors* by Dr. Shoemaker.