



2022 | 21ST GLOBAL LABORATORY DIVISION

AMEA vs EMMA

WHY AMEA AIRBORNE MYCOTOXIN TESTING METHOD IS THE REAL WINNER

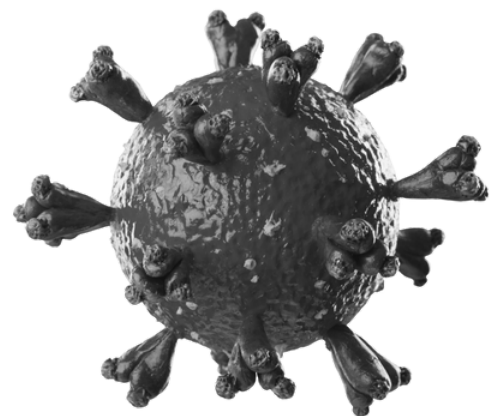
Introduction

Currently, there are two different ways to determine whether or not you have toxigenic mycotoxins present in your indoor environment. The first is utilizing air samples, the second is utilizing a dust sample. Now, you may be thinking, “why would you test dust when determining the air quality of a home, building, or other structure? Sounds a bit counterintuitive right? Well, that’s exactly the problem. How can you accurately say that the air within an indoor environment is mycotoxin free when you’re not even testing the air? 21st Global just introduced the first airborne mycotoxin analysis by an air sample. This is a patented testing process. It’s called **AMEA, (Airborne Mycotoxin Environmental Analysis)**. In this article, we will be comparing 21st Global’s **AMEA** to RealTimeLabs EMMA (Environmental Mould and Mycotoxin Assessment)

It is important to note that 21st Global specializes in indoor airborne mycotoxins analysis, not mould speciation. Moulds can produce more than one mycotoxin and more than one species of mould can produce the same mycotoxin. This means that knowing the species of a mould will offer little to no information about the mycotoxins that may be present inside the structure.

**AMEA: THE FUTURE
OF AIRBORNE
MYCOTOXIN TESTING**

21st Global Laboratory



AMEA TEST OVERVIEW

AMEA: (Airborne Mycotoxin Environmental Assessment)

AMEA, testing by 21st Global: Until now, mould testing has been limited to air sampling for mould spores (an allergen) and not mycotoxins. Mycotoxins can cause a variety of adverse health effects and pose a serious health threat to humans. The adverse health effects of mycotoxins can include acute poisoning right through to long-term effects such as immune deficiency and cancer. The **AMEA** sampling process and analysis is designed to identify the 8 most prevalent airborne mycotoxins (if present) and aid the occupants in both environmental and health investigations. Air sampling is considered the **strongest strategy for the detection of airborne contaminants**, especially when conducted for health concerns as it provides a better understanding of inhalation exposure than tests using dust.

STANDARDIZED and CONSISTENT

AMEA testing follows standardized industry air sampling guidelines to ensure consistent results and eliminate human error. **AMEA** is performed under active sampling, meaning the air in the room is conditioned to simulate normal activity. One of the cornerstones for **AMEA** is the research that has been undertaken to determine normal background levels within our indoor environment. **AMEA** will provide your results against these background levels for indoor airborne mycotoxins. 21st Global uses a patented extraction process to prepare the sample for industry-standard **ELISA tests**.

A standardized 1-hour sample time at a standardized rate provides meaningful information whereby risk assessments can be conducted to determine an individual's potential exposure within their indoor environment.



POST REMEDIATION CLEARANCE

It is essential that mycotoxin testing is performed after mould remediation. A scientific study has shown current remediation protocols for mould can often increase mycotoxin levels. It is important the remediation scope of work includes mycotoxin removal. An **AMEA** test needs to be performed after mould remediation to ensure mycotoxin levels are not elevated and the structure is safe to occupy.



COLLECTING DUST IS FOR SWIFFERS, NOT AIR QUALITY TESTING

EMMA: (Environmental Mould and Mycotoxin Assessment)

EMMA is a dust collection method for mycotoxin testing in indoor environments. EMMA's primary collection method utilizes cotton swabs to gather the recommended dust to sample. The problem here is that you have no idea how much dust is on each sample, causing each sample to be different quantities. This is extremely inconsistent.

EMMA's testing protocols are also insufficient and lack strict protocols. Due to the lack of a testing standard, dust samples are collected in areas that have not been cleaned in months or years. Testing dust behind refrigerators that have accumulated for years does not present a real-time exposure to mycotoxins being inhaled. Keep in mind this is settled dust, not airborne. Settled dust does not become significantly airborne through daily activity and dust that has not been cleaned in years rarely is activated. It also does not pinpoint which room the exposure is located in. Furthermore, EMMA lacks a standard to ensure the mycotoxins have been adequately remediated from the structure. The lab states to just send in additional dust samples. If the remediation was performed correctly, where do you get the dust to sample? How long do you wait to ensure it is safe to occupy the structure?



WHAT'S THE DIFFERENCE?

At 21st Global, we specialize in testing and analysis of indoor airborne mycotoxins, the ones you are currently and readily breathing in.

An interesting article by Dr Sharol Marie Tilgner on her website www.youarethehealer.org offers her opinion on EMMA testing. In part, it states “....this is antibodies and they are **not** testing for actual mycotoxins.” We encourage you to read more of Dr Sharol's opinions by following the link to her website.

Our **AMEA** (Airborne Mycotoxin Environmental Analysis) tests for the specifically targeted mycotoxins, in a specific quantity of sample, in the air that you are breathing, independent of dust and other debris.

SIDE-BY-SIDE COMPARISON

Airborne Mycotoxin Testing	1 21st Global Labs AMEA	2 Real Time Labs EMMA
Known Quantity of Sample	Yes	No
Specimen Type	Air	Dust
Method of Sampling	Specialized Pump and Myco-Cassette	Cotton Swabs
Established Background Levels	Yes	No
Standardized Process	Yes	No
Active Sampling	Yes	No

CONCLUSION

Here at 21st Global, our **AMEA** mycotoxin testing approach is far superior. 21st Global **DOES NOT** test for mycotoxins from sources such as dust on A/C or heater filters. 21st Global tests the air you breathe, in the rooms you breathe in.

AMEA analysis will provide information that can be useful to assist those suffering from ill-health, their healthcare professionals, and to identify any potential contribution by mycotoxins found in their indoor environments.

AMEA vs EMMA comparison should help improve your understanding of the two tests. Collecting dust is for swiffers, not for air quality testing. 21st Global tests for mycotoxins directly drawing from the indoor air you are breathing. We have the science that nobody else has. 21st Global's technique is unmatched, striving to be the leader in indoor air quality mycotoxin testing so people can spend time indoors safely and comfortably. It's time to stop putting your health in the hands of unreliable, inconsistent, dust in your building or home's air filters. Rather, it's time to put it in the hands of a company that samples the air you breathe in.

AMEA

TESTING THE AIR THAT YOU BREATHE

BROUGHT TO YOU BY RESPIRARE LABS