REALTIME
A US BIOTEK LABORATORY

Mycotoxin Panel

Company:
Patient:
Date of Birth:
Accession #:
Collected:
Received:

Sample Type: Urine

COLOR KEY: NOT PRESENT | EQUIVOCAL | PRESENT

(PPB: Parts Per Billion DL: Detectable Limit)

Ochratoxin

	Result	<1.8	1.8 - <2	2 - <70
Ochratoxin A	Present			6.605 PPB

Aflatoxin

	Result	<0.8	0.8 - <1	1 - <56
Aflatoxin Group:	Not Present			
Aflatoxin B1		<DL		
Aflatoxin B2				
Aflatoxin G1				
Aflatoxin G2				

Trichothecene

	Result	<0.07	0.07 - <0.09	0.09 - <2.4
Trichothecene Group (Macrocyclic):	Present			0.252 PPB
Roridin A				
Roridin E				
Roridin H				
Roridin L-2				
Verrucarin A				
Verrucarin J				
Satratoxin G				
Satratoxin H				
Isosatratoxin F				

Gliotoxin

	Result	<0.5	0.5 - <1	1 - <50
Gliotoxin Derivative	Present		1.597 PPB	

Zearalenone

	Result	<0.5	0.5 - <0.7	0.7 - <11.2
Zearalenone	Present			1.763 PPB

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Test	Result	Value (ppb)	Reference Range
Ochratoxin A	Present	6.605	Not Present <1.8 Equivocal 1.8 - <2 Present >=2
Aflatoxin Group: Aflatoxin B1 Aflatoxin B2 Aflatoxin G1 Aflatoxin G2	Not Present	0.632	Not Present <0.8 Equivocal 0.8 - <1 Present >=1
Trichothecene Group (Macrocyclic): Roridin A Roridin E Roridin H Roridin L-2 Verrucarin A Verrucarin J Satratoxin G Satratoxin H Isosatratoxin F	Present	0.252	Not Present <0.07 Equivocal 0.07 - <0.09 Present >=0.09
Gliotoxin Derivative	Present	1.597	Not Present <0.5 Equivocal 0.5 - <1 Present >=1
Zearalenone	Present	1.763	Not Present <0.5 Equivocal 0.5 - <0.7 Present >=0.7

About These Tests:

Test results should be evaluated in relation to patient symptoms, clinical history, and other laboratory findings. Individuals should review their results with a healthcare provider.

These tests were developed and the performance characteristics determined by RealTime Laboratories. They have not been cleared or approved by the U.S. Food and Drug Administration (FDA). This laboratory is certified under the Clinical Laboratory Improvement Amendments (CLIA) as qualified to perform high complexity clinical laboratory testing. The New York State (NYS) Department of Health (DOH) has allowed these tests to be offered in the NYS under the current RealTime Laboratories permit. The NYS DOH has not evaluated any test claims nor reviewed the accuracy of these tests.

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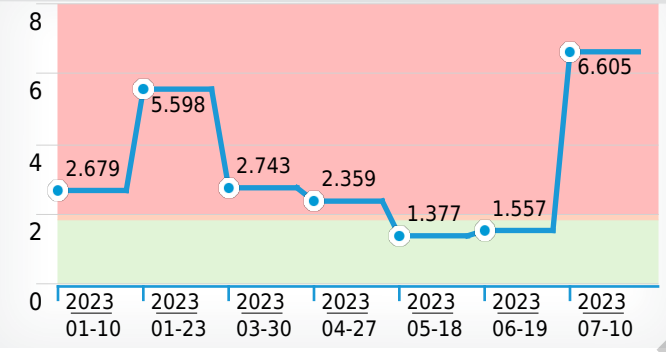
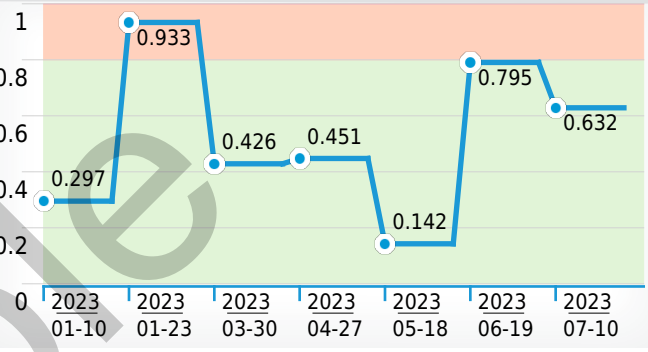
Historical Results

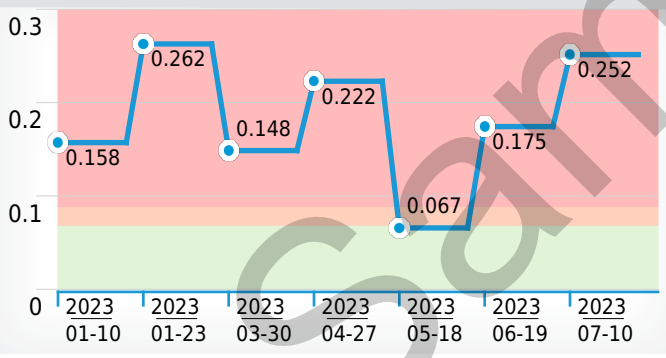
Ochratoxin



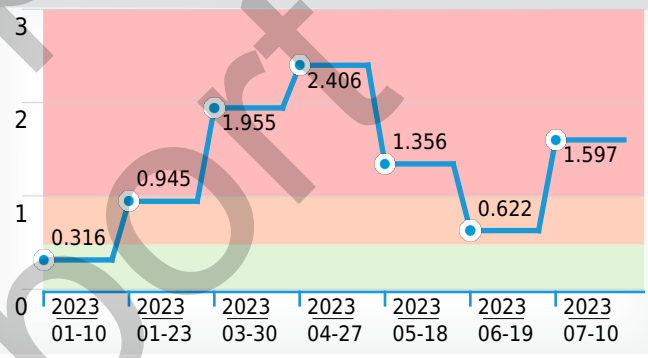
Aflatoxin



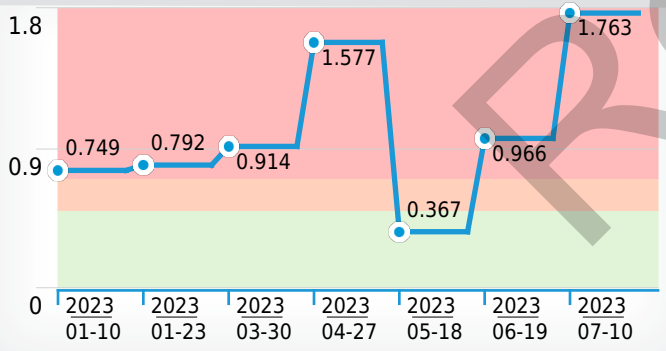
Trichothecene



Gliotoxin



Zearalenone



Accession	Collected	Ochratoxin	Aflatoxin	Trichothecene	Gliotoxin	Zearalenone
3023000352	2023-01-10	Present 2.679	Not Present 0.297	Present 0.158	Not Present 0.316	Present 0.749
3023001168	2023-01-23	Present 5.598	Equivocal 0.933	Present 0.262	Equivocal 0.945	Present 0.792
3023005462	2023-03-30	Present 2.743	Not Present 0.426	Present 0.148	Present 1.955	Present 0.914
3023007450	2023-04-27	Present 2.359	Not Present 0.451	Present 0.222	Present 2.406	Present 1.577
3023008859	2023-05-18	Not Present 1.377	Not Present 0.142	Not Present 0.067	Present 1.356	Not Present 0.367
3023010991	2023-06-19	Not Present 1.557	Not Present 0.795	Present 0.175	Equivocal 0.622	Present 0.966
3023012317	2023-07-10	Present 6.605	Not Present 0.632	Present 0.252	Present 1.597	Present 1.763

	Mycotoxin	Cellular Activity of Mycotoxin	Symptoms/Other	Association with a "Disease State"
AFLATOXIN FAMILY **Organisms: *Aspergillus flavus, Aspergillus oryzae, Aspergillus fumigatus, Aspergillus parasiticus*** **Aflatoxins have been associated with liver cancer [2,3], cirrhosis [4,5], and other health issues**				
1	Aflatoxin B1	Binds DNA and proteins [6,7]	Shortness of breath [8], weight loss [10], most potent and highly carcinogenic.	Primarily attacks the liver, other organs include kidneys and lungs [11]
2	Aflatoxin B2	Inhibits DNA and RNA replication [12]	Impaired fetal growth [13,14]	Affects the liver and kidneys [11]
3	Aflatoxin G1	Cytotoxic, induces apoptosis in cells, DNA damage [1]	A flavus is a leading cause of invasive aspergillus in immunocompromised patients [15]	Cancer, neonatal jaundice [2,3,16]
4	Aflatoxin G2	Cancer, neonatal jaundice [2,3,16]	Aflatoxicosis in humans and animals [15]	Malnutrition, lung cancer [2,3,16]
OCHRATOXIN A **Organisms: *Aspergillus ochraceus, Aspergillus niger, Penicillium species***				
5	Ochratoxin A	Inhibits mitochondrial ATP, potent teratogen, and immune suppressor [17-19]	Fatigue, dermatitis, irritated bowel [20-22]	Kidney disease and cancer [23,24]
MACROCYCLIC TRICHOTHECENES (Group D) **Organism: *Stachybotrys chartarum***				
6	Satratoxin G	DNA, RNA, and protein synthesis inhibition [25]	Fatigue [26]	Bleeding disorders, nervous system disorders [27,28]
7	Satratoxin H	Inhibits protein synthesis [25]	Fatigue [26]	Breathing issues [29]
8	Isosatratoxin F	Immunosuppression [30]	Weakened immune system [30]	
9	Roridin A	Immunosuppression [30]	Weakened immune system [30]	
10	Roridin E	DNA, RNA, and protein synthesis disruption [25,32]	Weakened immune system [30]	Lung and nasal olfactory problems [31]
11	Roridin H	Inhibits protein synthesis [25]	Weakened immune system [30]	
12	Roridin L-2	Immunosuppression [30]	Weakened immune system [30]	
13	Verrucarin A	Immunosuppression [30]		
14	Verrucarin J	Immunosuppression [30]		
GLIOTOXIN DERIVATIVE **Organisms: *Aspergillus fumigatus, Aspergillus terreus, Aspergillus niger, Aspergillus flavus***				
15	Gliotoxin	Attacks intracellular function in immune system [34]	Memory and breathing issues [35,36]	Immune dysfunction disorders [34]
ZEARALENONE **Organisms: *Fusarium species***				
16	Zearalenone	Estrogen mimic [37,38]	Early puberty, low sperm counts, cancer [39-42]	Cancer [39,40]

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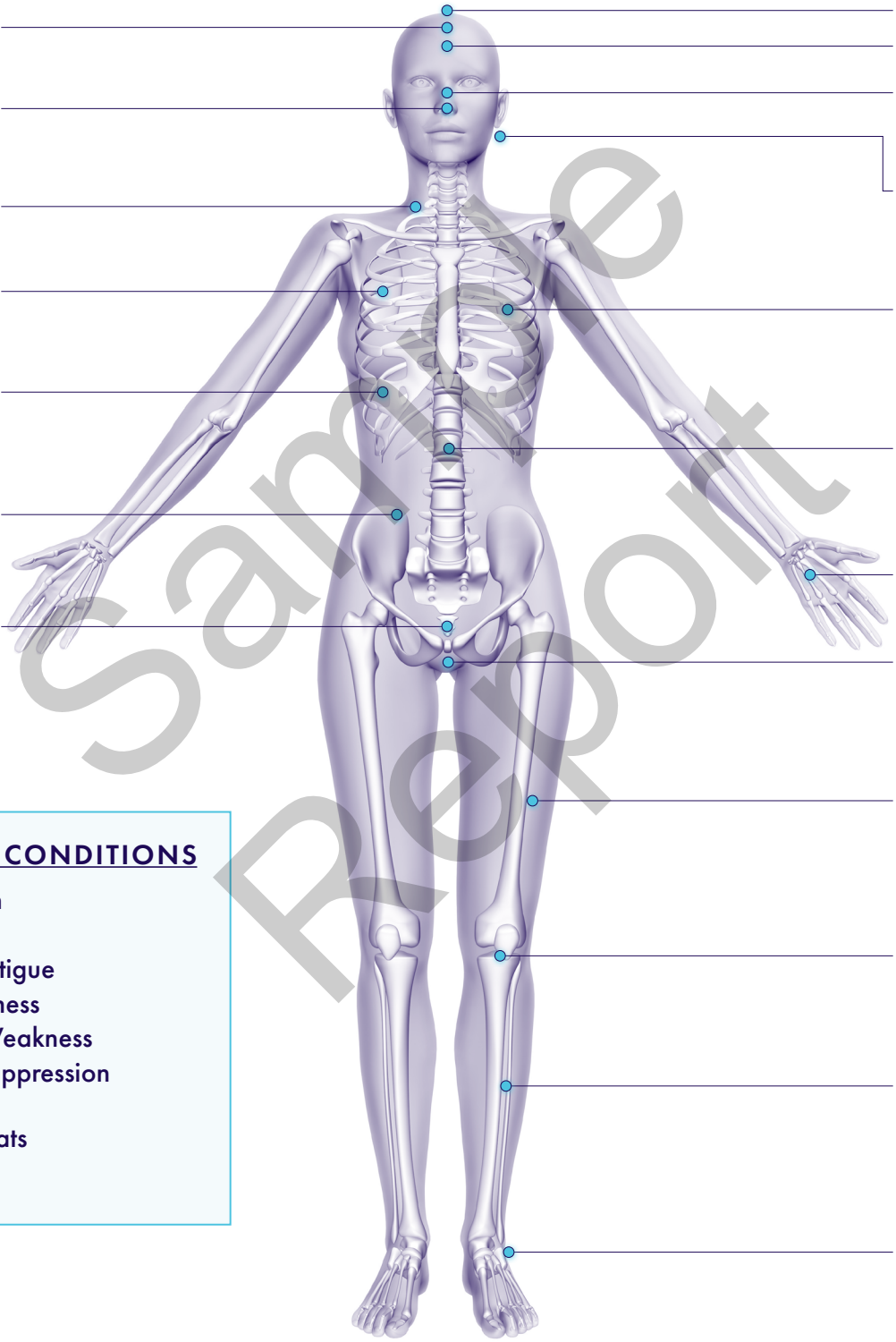
SYMPTOMS OF
Mycotoxins



- Headaches & Dizziness
- Nosebleeds
- Painful Lymph Nodes
- Asthma
- Shortness Of Breath
- Gastrointestinal distress *(such as: IBS, nausea, diarrhea, cramps, etc.)*
- Decreased Libido
- Hair Loss
- Brain Fog
- Sinusitis & Sinus Issues
- Hearing Problems
- Cardiac Arrhythmias
- Abdominal Pain and Discomfort
- Numbness and Tingling In Hands
- Uncomfortable or Frequent Unination
- Rashes & Hives
- Muscles and Joint Aches and Pains
- Fluid Retention
- Numbness and Tingling In Feet

SYSTEMIC CONDITIONS

- Depression
- Anxiety
- Chronic Fatigue
- Chronic Illness
- General Weakness
- Immune Suppression
- Anemia
- Night Sweats