INTERPRETING TEST RESULTS

MYCOTOXIN ANTIBODIES ANALYSIS

”THE GREAT MASQUARADER OF THE 21ST CENTURY”:

WORLD HEALTH ORGANIZATION

ANDREW W. CAMPBELL, M.D.

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- Editor in Chief, Alternative Therapies in Health and Medicine; Advances in Mind-Body Medicine; Microbiology Research.
  Co-Editor, Journal: Microbes
  Medical Advisor: Mymycolab LLC
  Reviewer: Journal of Immunology Research; Journal of Pharmaceutical Research International.
  Editorial Boards:
  Integrative Medicine, A Clinician's Journal.
  Biomedical Journal of Scientific and Technical Research.
  Research in Medical and Engineering Sciences.
- International Journal of Complementary and Alternative Medicine.

THE KEY TO SOLVING MEDICAL PROBLEMS CAUSED BY TOXINS:

1. DETECT
2. REMOVE
3. REPAIR

UNDERSTANDING ANTIBODIES

There are 4 categories of pathogens:

1. Bacteria
2. Viruses
3. Pathogenic Fungi
4. Parasites

- We develop antibodies to these after an infection/exposure

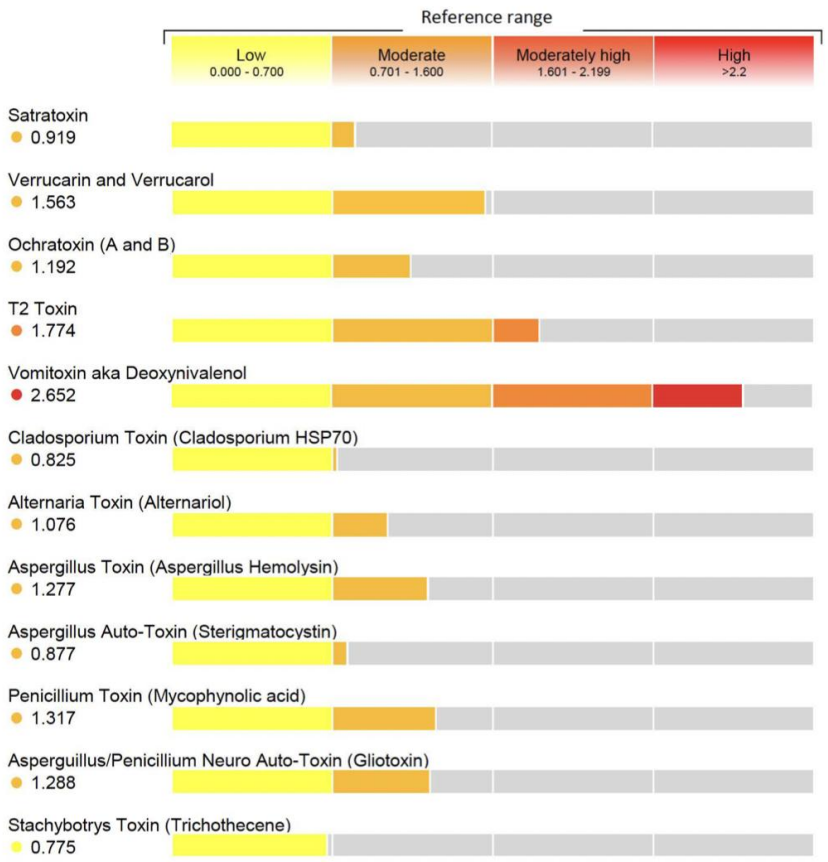
UNDERSTANDING ANTIBODIES

1. These 4 pathogens are living organisms, have cell walls, etc.
2. Antibodies to these mean past exposure.
3. Toxins are not alive, do not have cell walls, etc.
4. Antibodies to toxins indicate current immune reaction and/or colonization, not exposure sometime in the past.
5. Once the toxins are gone from the body, the antibody reaction fades away.

myMycoLab

Serum Antibody Testing for Mycotoxins

Test results for IgG antibodies



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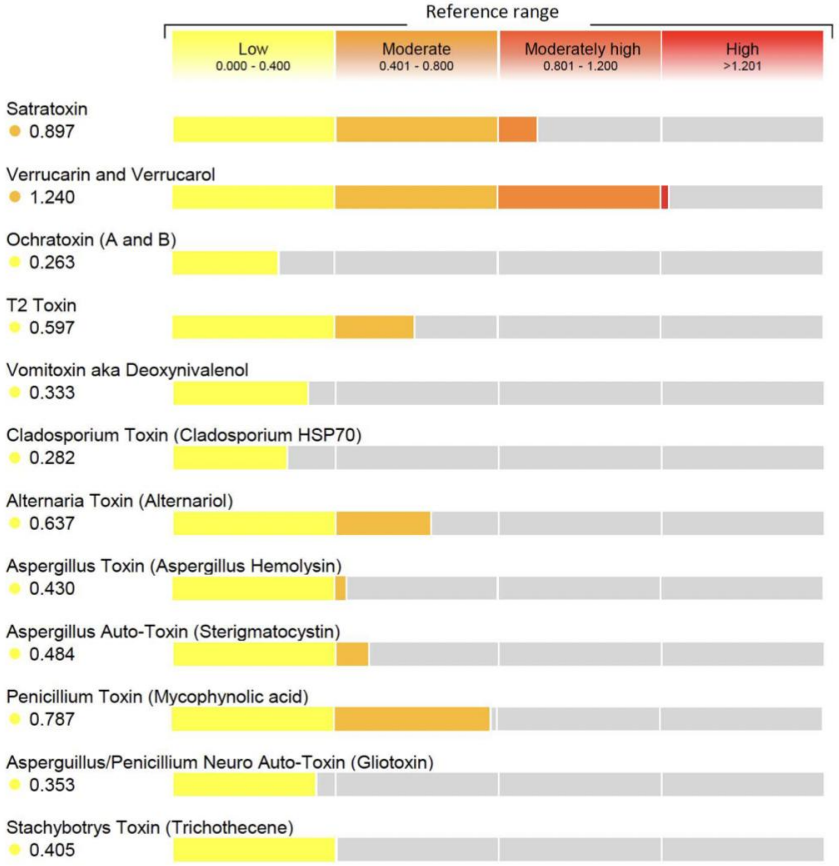
Serum Antibody Testing for Mycotoxins

Test results for IgE antibodies



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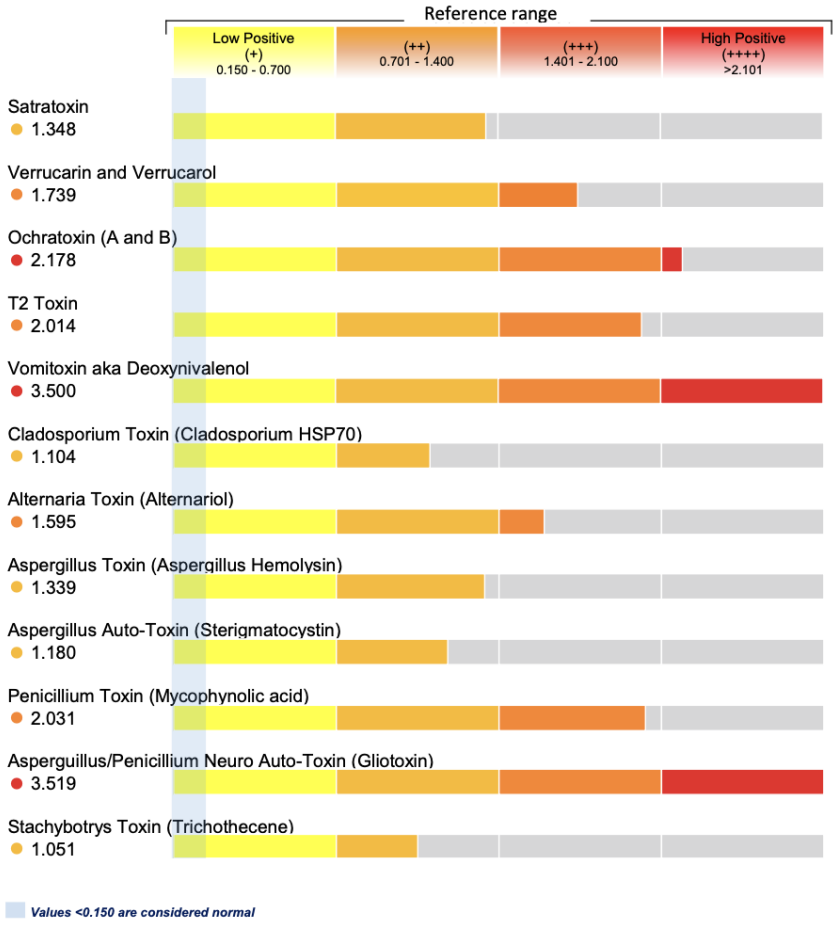

Values <0.150 are considered normal

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Test results for IgE antibodies

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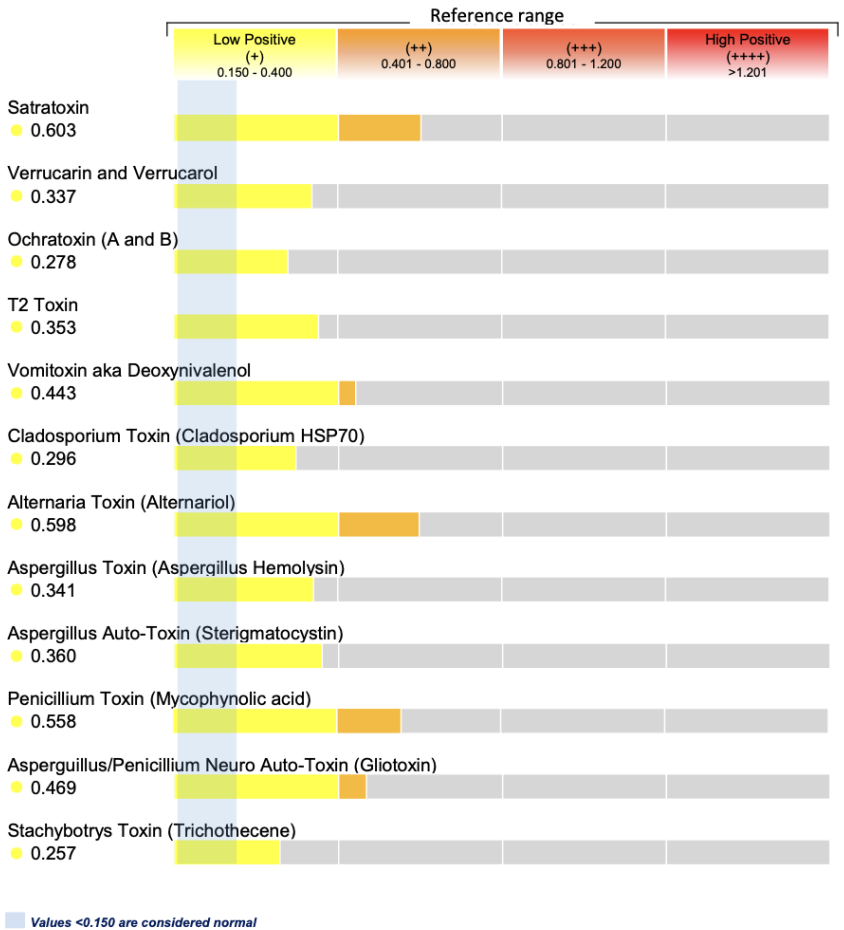

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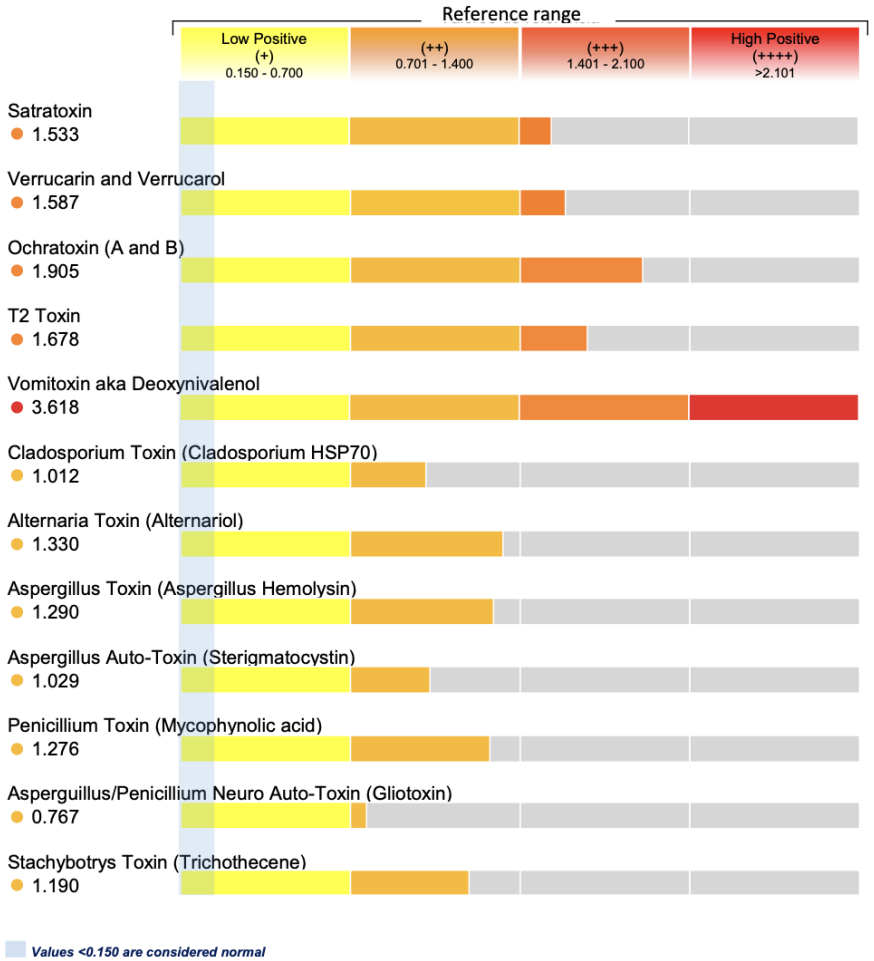

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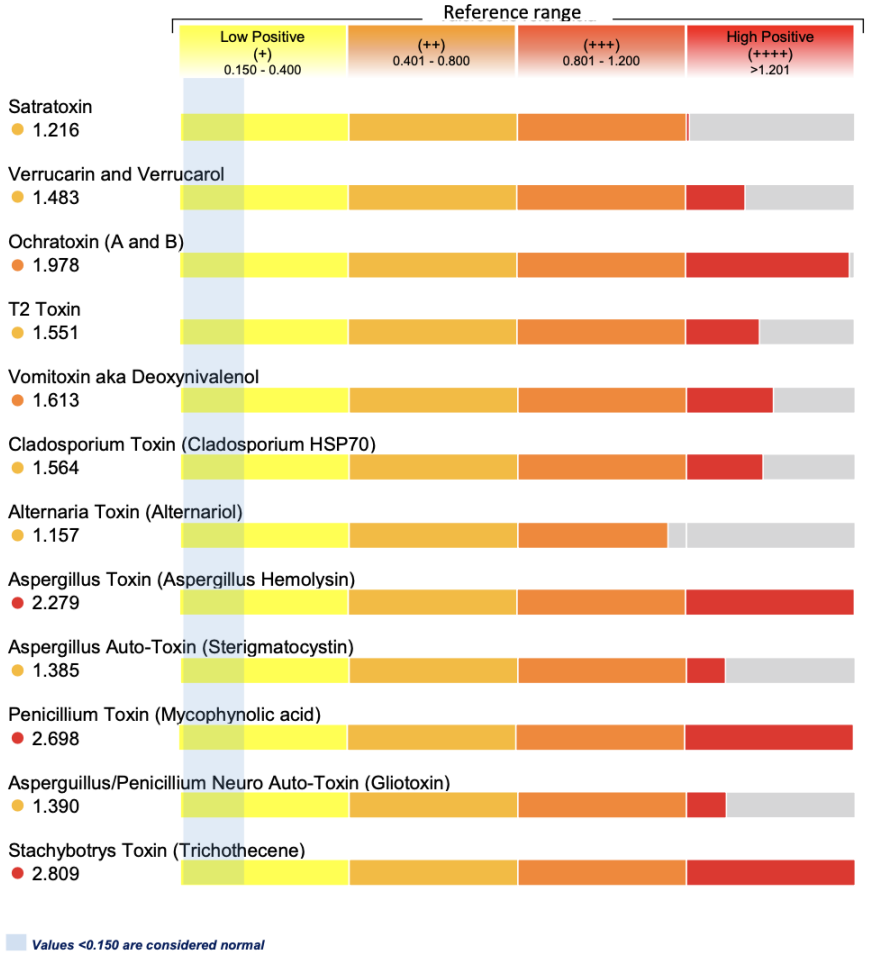

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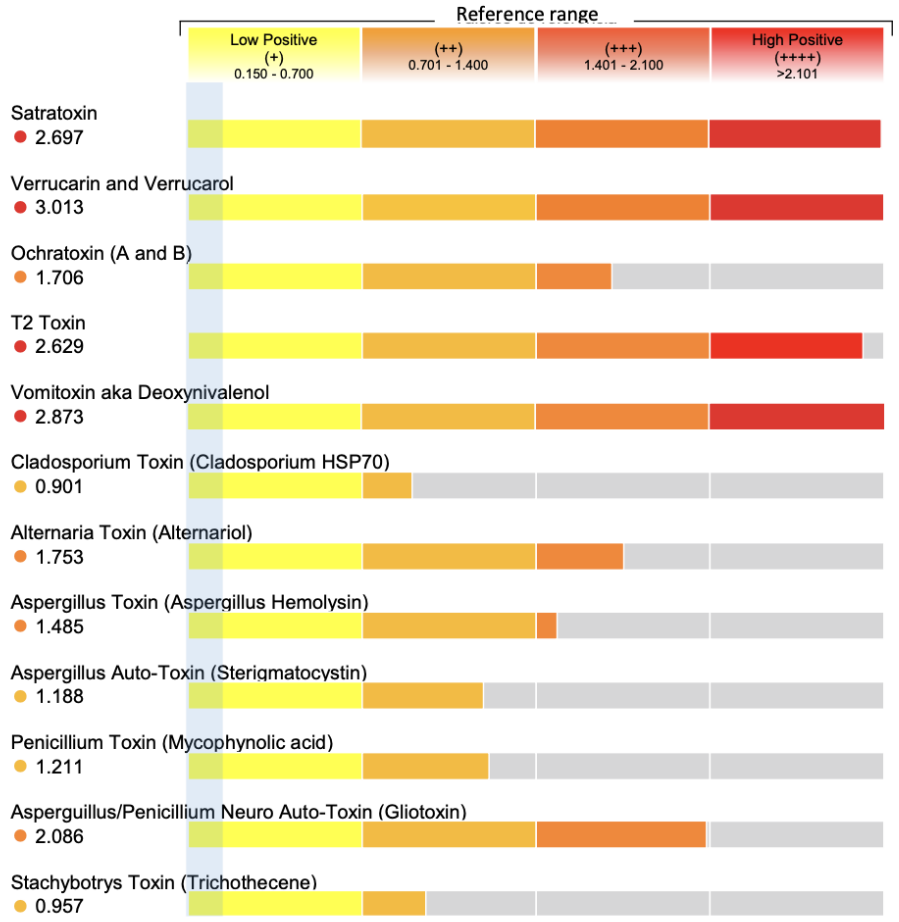

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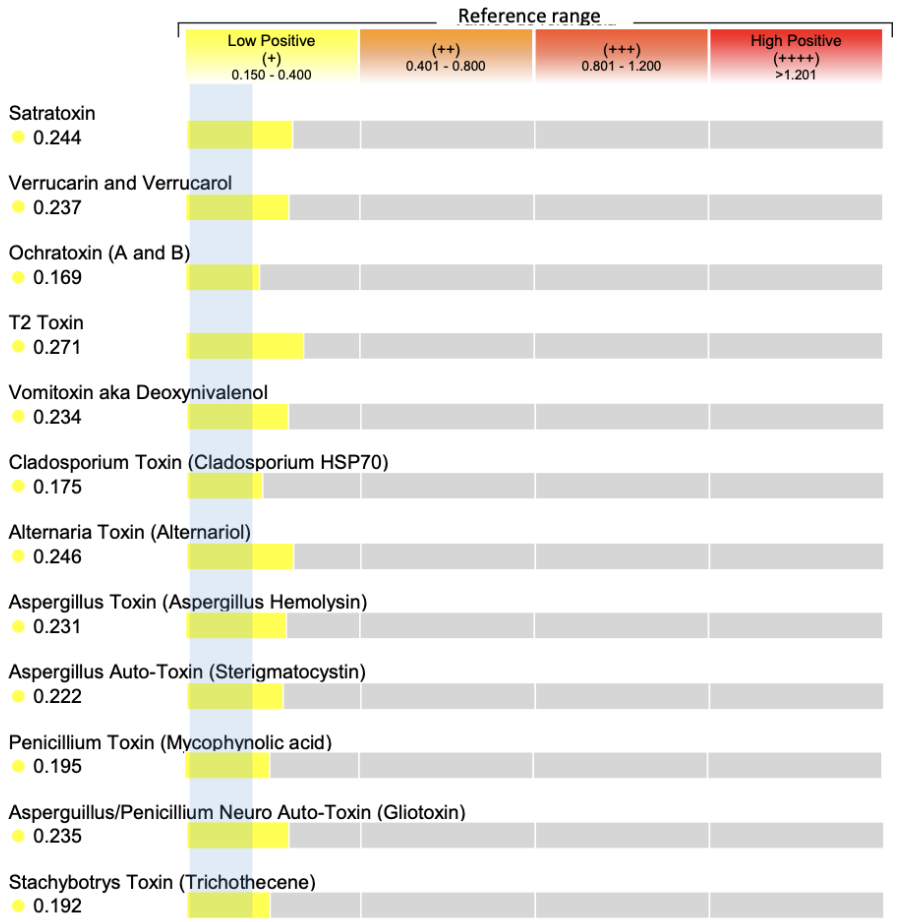

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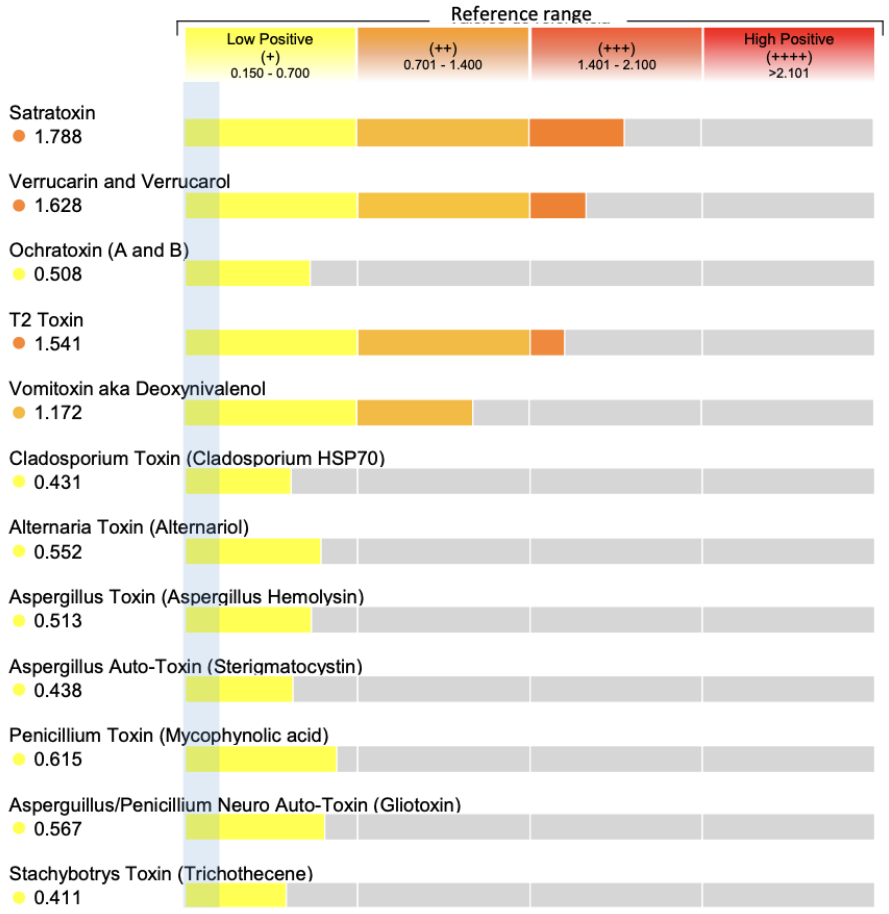

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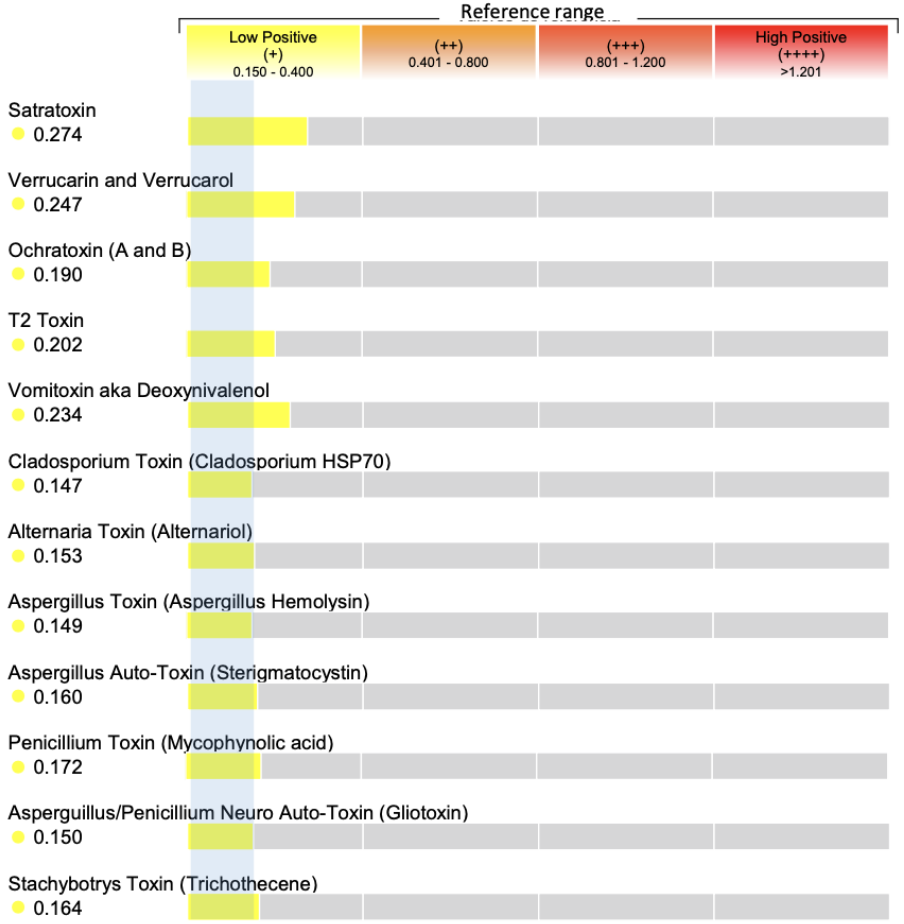

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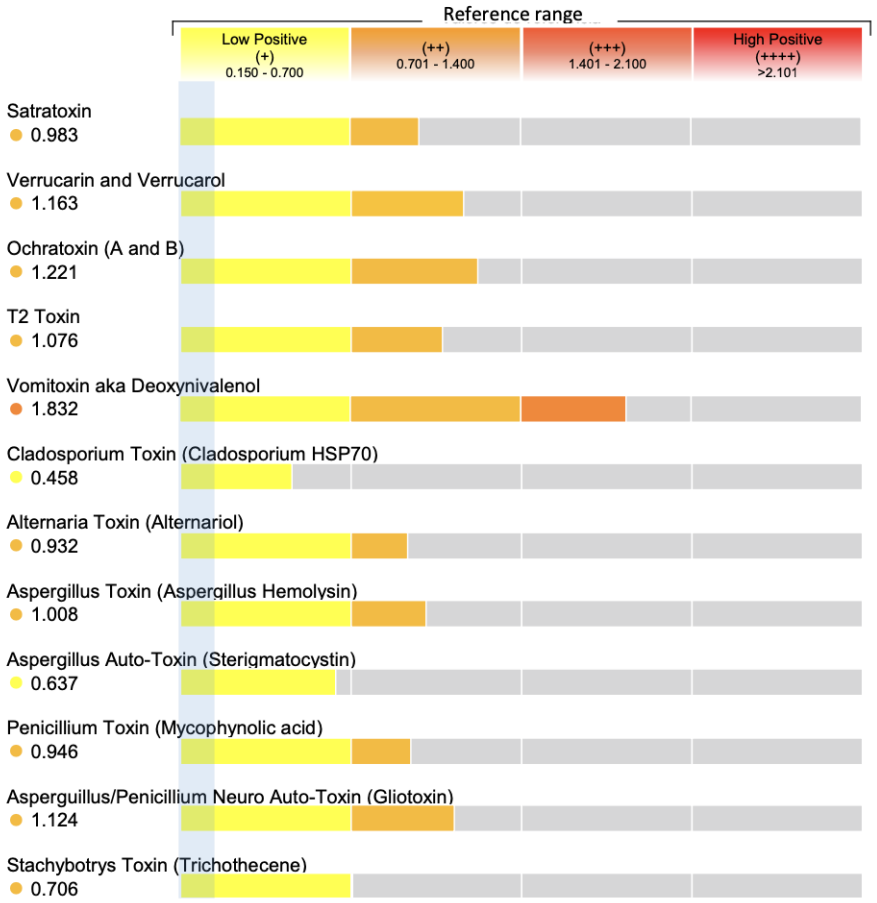

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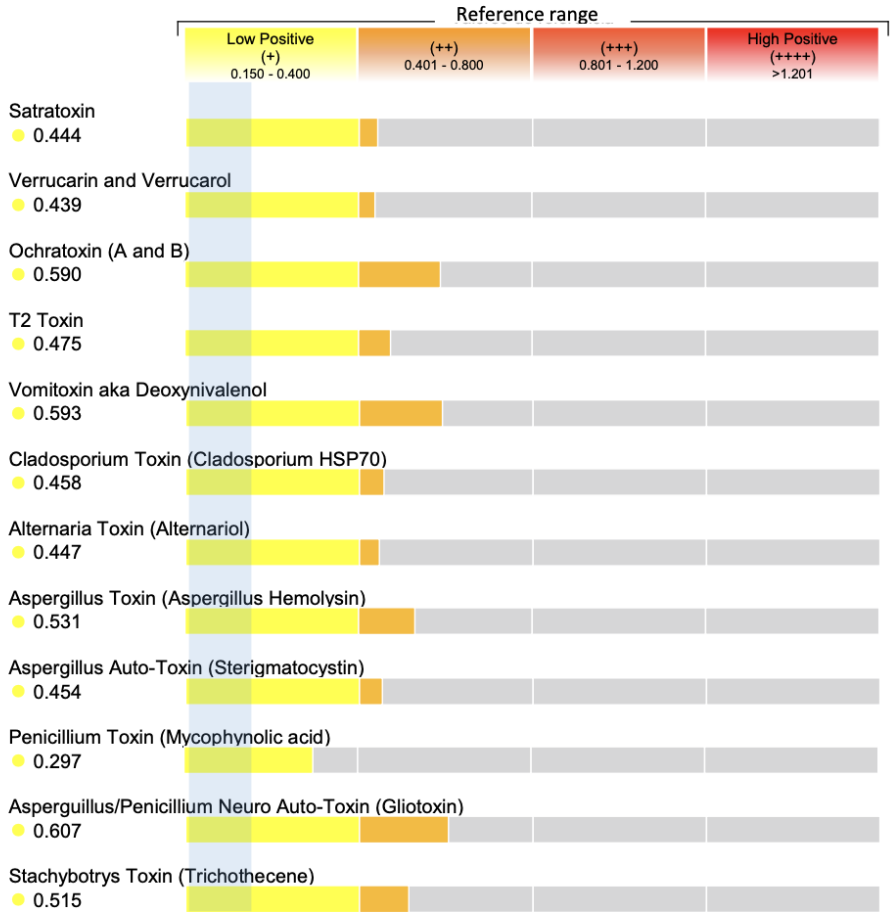

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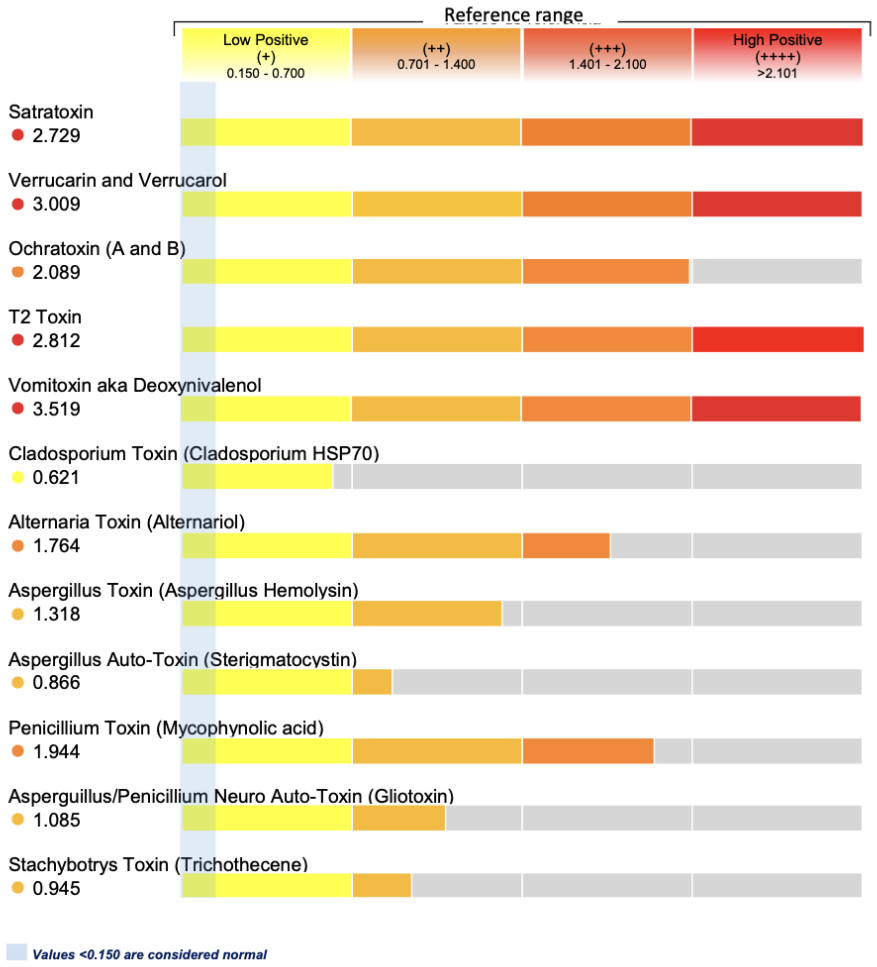

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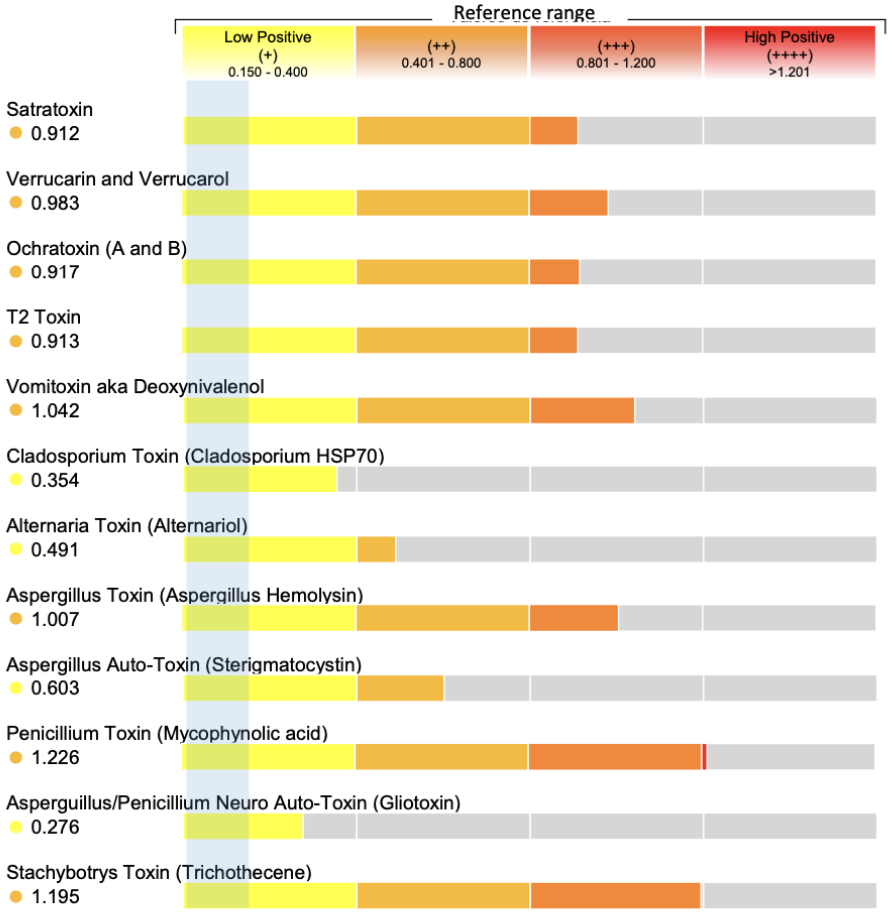

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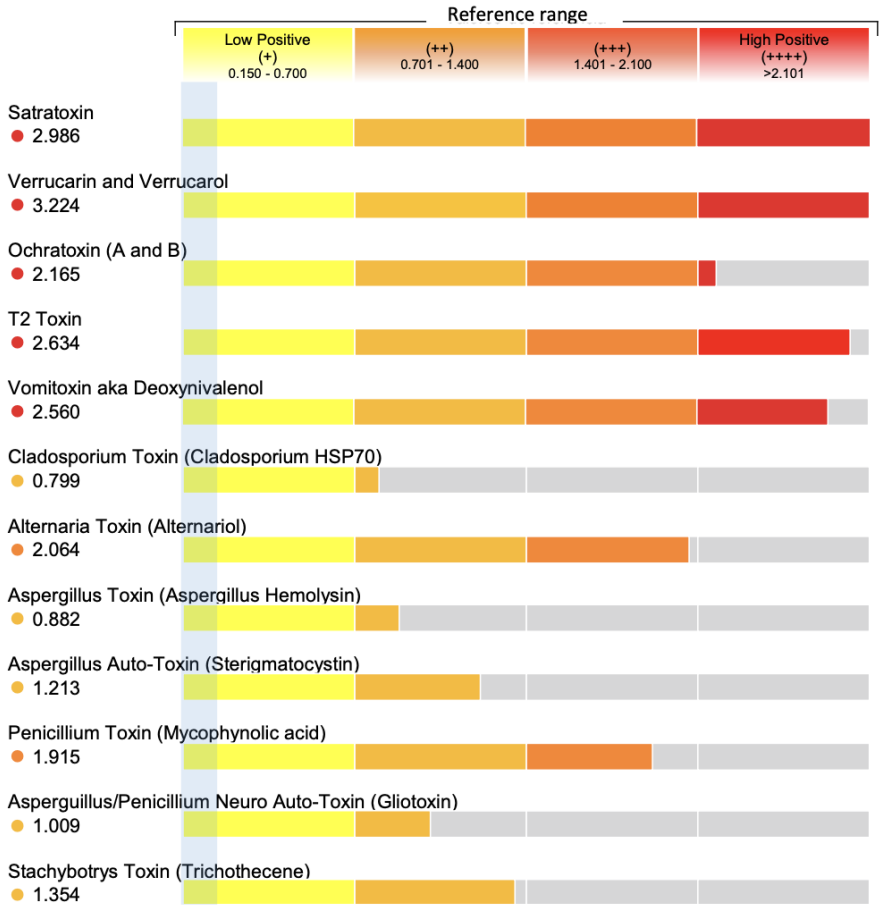

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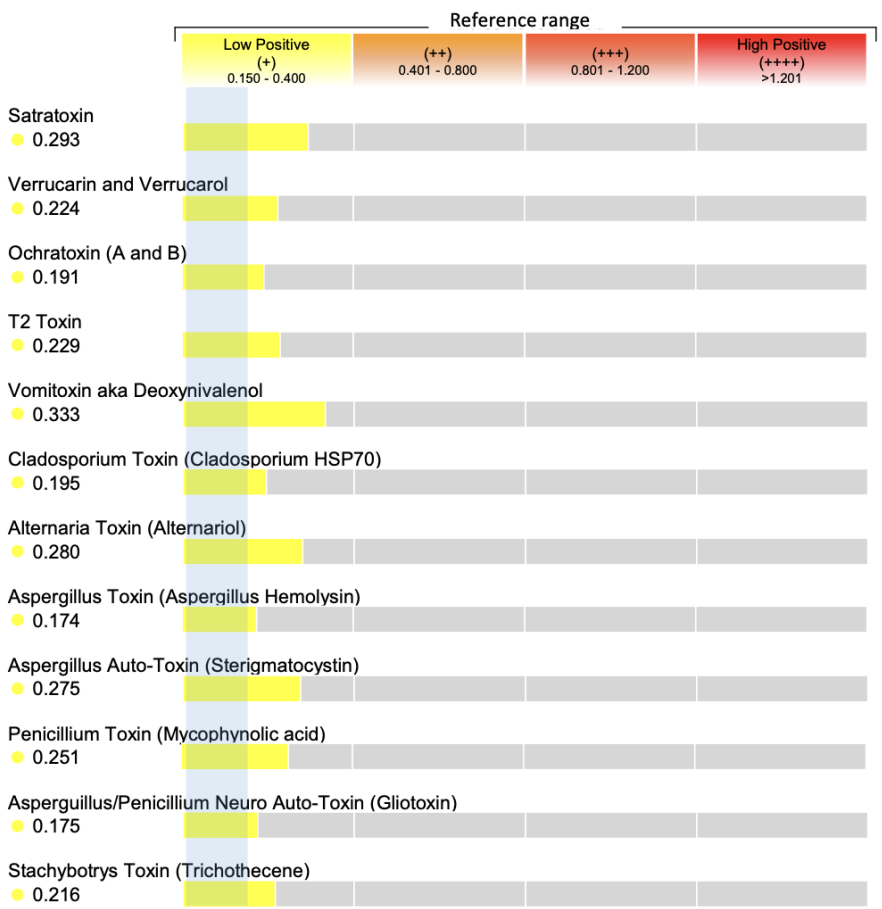

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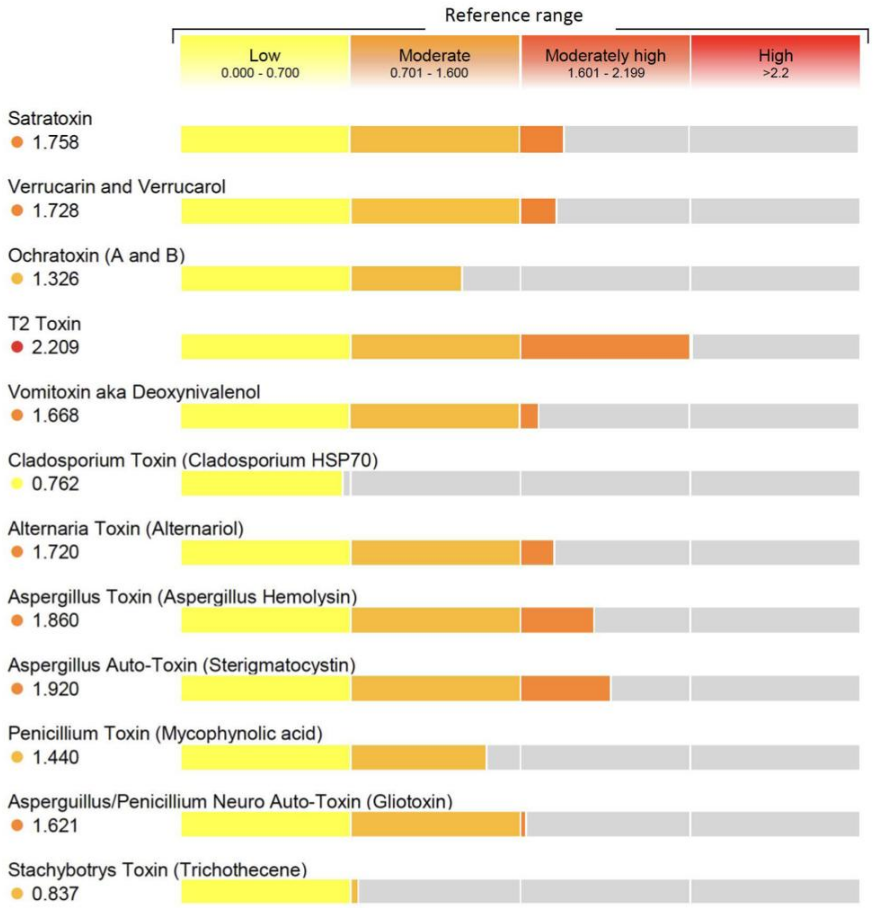

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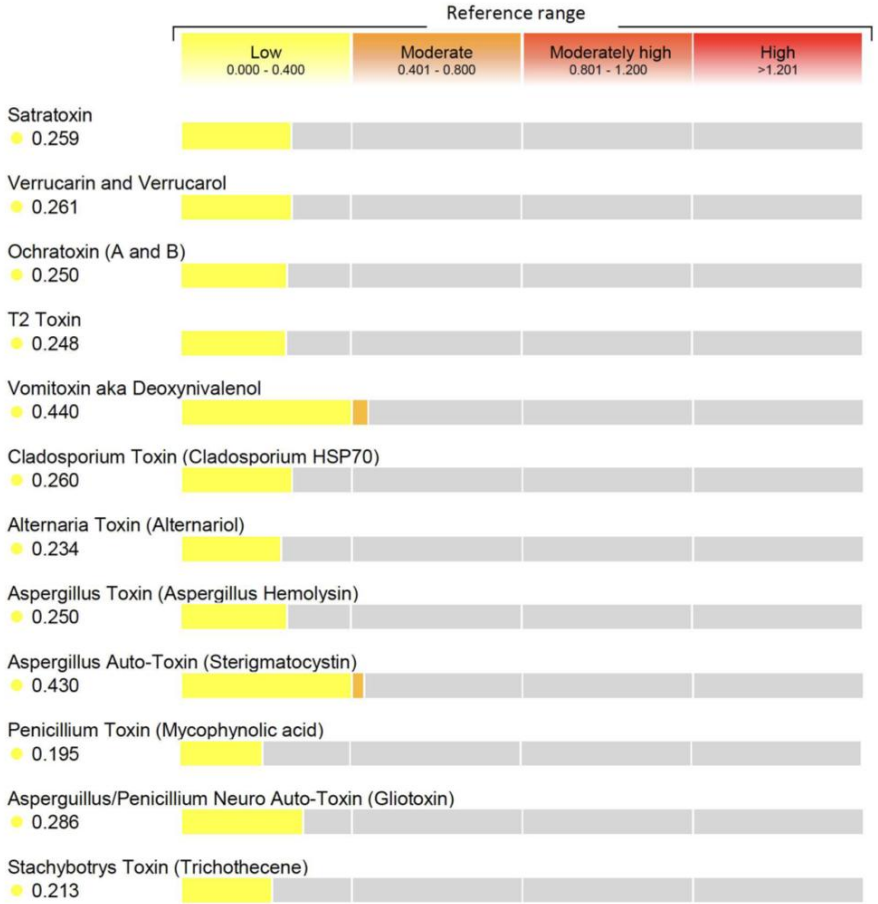

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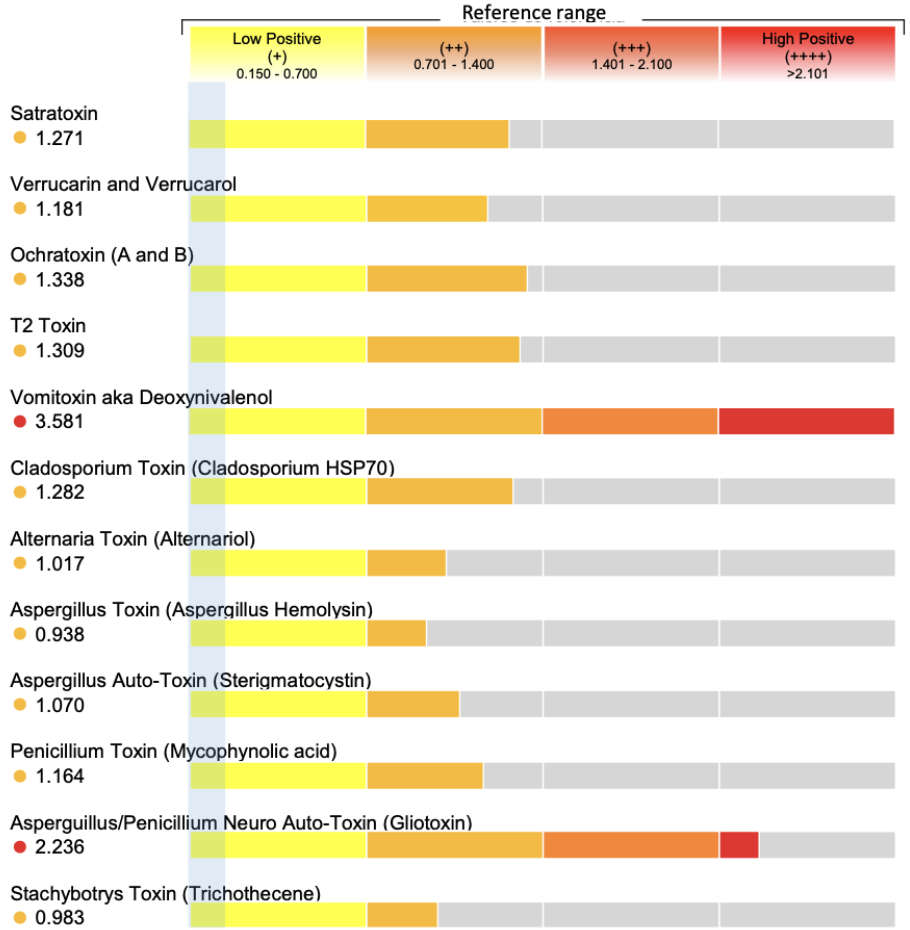

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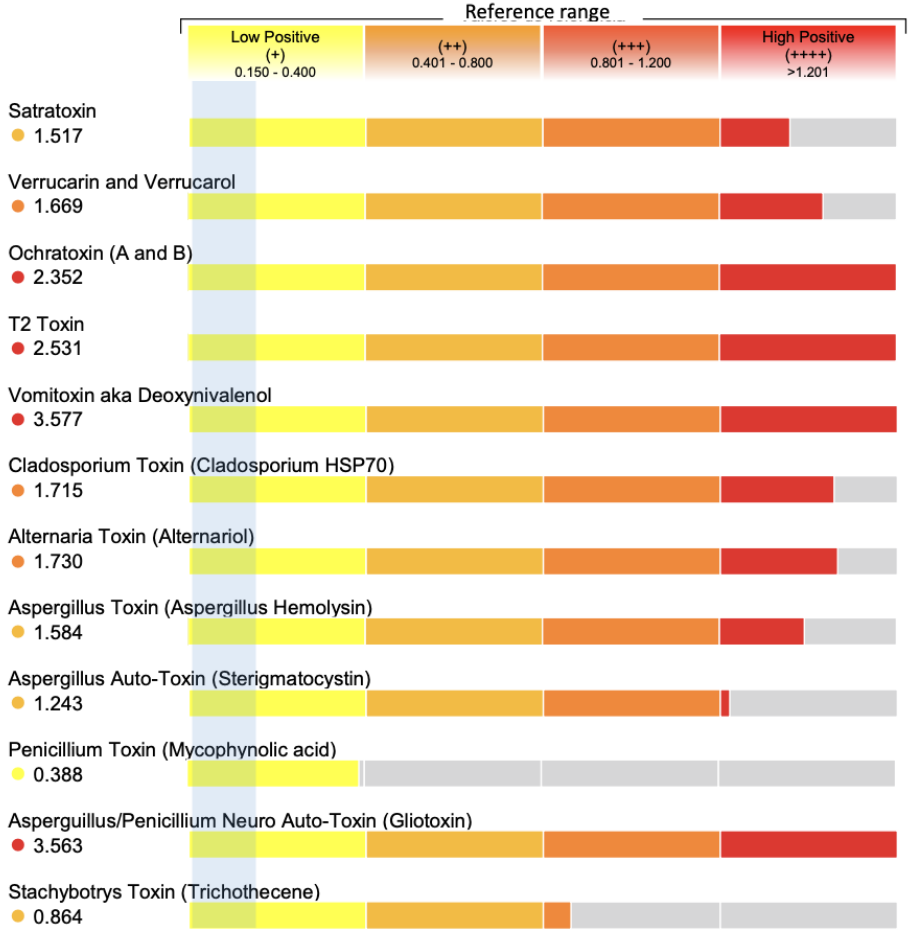

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Mycotoxin Research (2022) 38:205–220
https://doi.org/10.1007/s12550-022-00461-3

ORIGINAL ARTICLE

Analysis of mold and mycotoxins in naturally infested indoor building materials

Viktoria Lindemann[1] · Tim Schleiner[2] · Ulrich Maier[2] · Hubert Fels[2] · Benedikt Cramer[1] · Hans-Ulrich Humpf[1]

Received: 15 March 2022 / Revised: 15 June 2022 / Accepted: 27 June 2022 / Published online: 28 July 2022

"As molds are ubiquitously distributed in the environment and the presence of certain species has even been documented on the International Space Station (Vesper et al. 2008), the same may be assumed for mycotoxins.

Mycotoxin Research (2022) 38:205–220
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Check for updates

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"In order to provide a secure identification and characterization of indoor mold exposure, directly contaminated building materials, swab samples, and sampling of air on different media (object slides, petri dishes with filter material/agar) with subsequent microscopic or morphologic differentiation are more reliable alternatives applied in routine analysis"

Mycotoxin Research (2022) 38:205–220
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Check for updates

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"fungi containing foodstuffs are still a global burden, affecting developing countries much more than developed regions such as the EU, where strict regulations are ensuring food safety."

Deoxynivalenol Exposure in Norway, Risk Assessments for Different Human Age Groups

Sundheim L, Lillegaard IT, Fæste CK, Brantsæter AL, Brodal G, Eriksen GS. *Toxins (Basel)*. 2017;9(2):46. Published 2017 Feb 4.

To illustrate a worst-case acute exposure, the amount of oat flakes or wheat bread a person would have to consume to reach the Acute Reference Dose (ARfD) was estimated using the highest measured concentrations. A a 2-year-old child with a body weight of 28.2 lbs, would have to consume 4.7 oz oat flakes, corresponding to about 38.8 oz ready-to-eat oatmeal porridge, or 3.2 oz wheat, corresponding to 4.7 oz based bread (approximately 3.5 slices of bread), to exceed the ARfD.

An adult with a body weight of 170.9 lbs would have to consume 28.2 oz oat flakes, corresponding to about 14.3 lbs ready-to-eat oatmeal porridge, or 19.5 oz wheat, corresponding to 28.2 oz bread (20 slices of bread), to exceed the ARfD.

WHAT STUDIES SHOW:

- Binders rely on the absorption of mycotoxins from the gut, preventing it from getting into the bloodstream.
- Included are kaolinite, clays, activated charcoal, zeolite, bentonite, and aluminosilicates.
- They are effective in neutralizing aflatoxins.
- They are ineffective in all other mycotoxins. In addition, they also bind vital vitamins, as well as macro- and micro-elements.

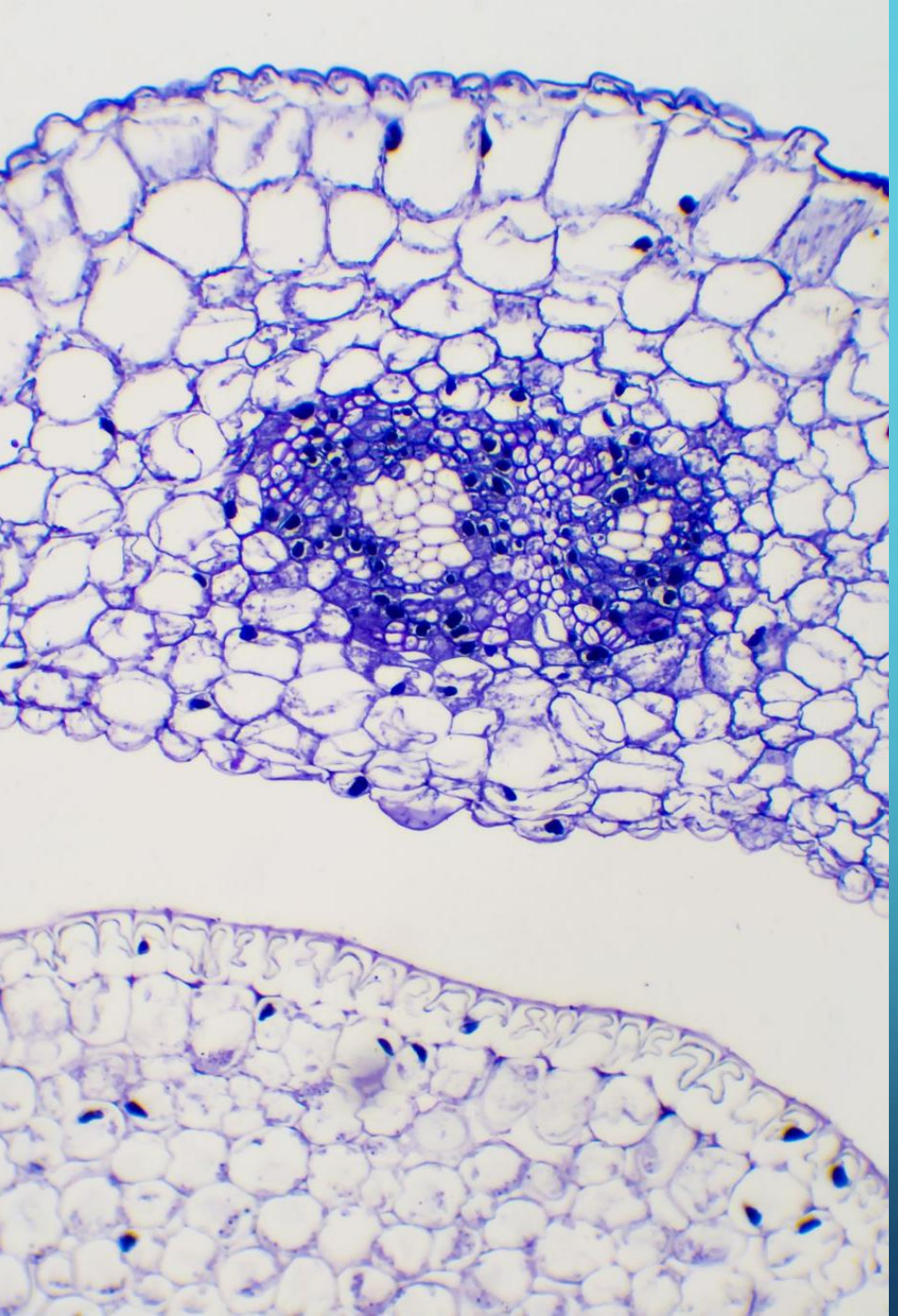
- Rogowska A, et al. Zearalenone and its metabolites: Effect on human health, metabolism and neutralisation methods. Toxicon. 2019 Apr 15;162:46-56.

IN URINE TESTING FOR MYCOTOXINS:

- The variability of mycotoxins concentration in urine and its volume based on daily intake demands urine sampling at different time points during the day and the normalization of results with creatinine concentration. The inter-individual comparison of mycotoxins in challenging because various factors, such as gender, age, diet, and muscle mass, can influence creatinine secretion.

THE ELISA METHOD TO DETECT MYCOTOXINS IN HUMAN SERUM COMES WITH SIGNIFICANT ACCURACY, PRECISION, AND SPECIFICITY.

GARG K, VILLAVICENCIO-AGUILAR F, SOLANO-RIVERA F, GILBERT L. ANALYTICAL VALIDATION OF A DIRECT COMPETITIVE ELISA FOR MULTIPLE MYCOTOXIN DETECTION IN HUMAN SERUM. TOXINS (BASEL). 2022 OCT 25;14(11):727.



FUNGI FOUND IN 35 DIFFERENT CANCERS

- PAN-CANCER ANALYSES REVEAL CANCER-TYPE SPECIFIC FUNGAL ECOLOGIES AND BACTERIOME INTERACTIONS. CELL. 2022 SEP 29;185(20):3789-3806. NARUNSKY-HAZIZA L, SEPICH-POORE GD, LIVYATAN I, ET AL.

FUNGI FOUND IN 35 DIFFERENT CANCERS

- 17,401 patient tissue, blood, and plasma samples from 35 cancer types. None were urine.
- Fungi were found in individual tumor types and contribute to carcinogenesis:
- Esophageal, pancreatic, breast, lung, melanoma, ovary, colon, brain, and bone.

FOR MORE INFORMATION

immunedoctor@gmail.com

- For a copy of the patient questionnaire, and:
- “Mold, Mycotoxins, the Brain, the Gut, and Misconceptions”, Campbell AW, Weinstock L. Alt Ther Health Med. 2022 Mar;28(3)8-12.