US BioTek LABORATORIES · **PATIENT REPORT**
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

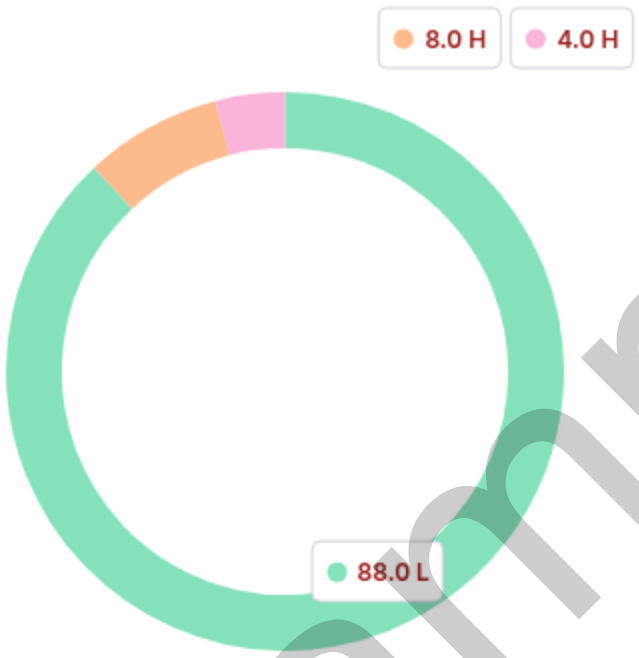
Test Patient
Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

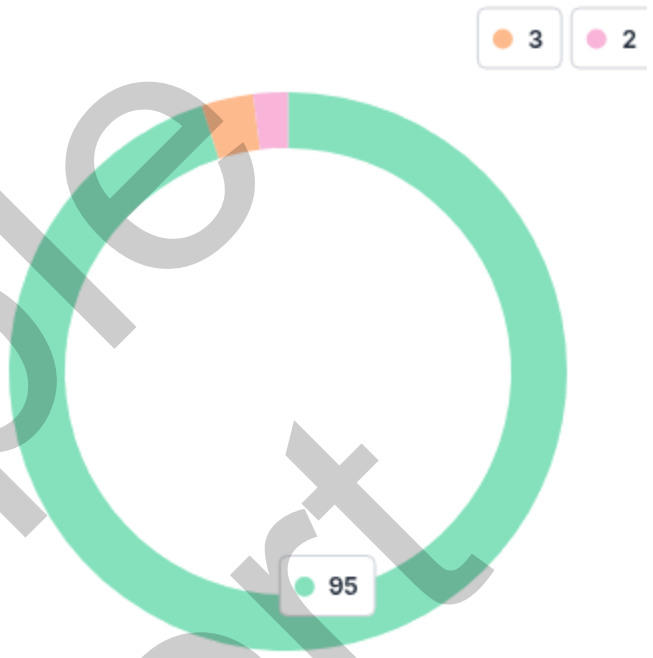
ALL-Tox PROFILE
Specimen type - Urine, Spot

Collected
20-Oct-25 10.50am

TOXIC BURDEN INDEX



HEALTHY INDEX



Low Toxic Burden Moderate Toxic Burden High Toxic Burden

Toxic Burden Comment

Interpretation:

Markedly elevated results suggest significant or chronic toxicant accumulation that may carry clinical relevance. Such elevations warrant investigation of occupational, dietary, or environmental exposures and assessment of detoxification efficiency, mitochondrial status, and organ function. A structured detoxification protocol under clinical supervision is recommended, including source removal, targeted antioxidant and mitochondrial support, and medically guided use of binders or glutathione supplementation. Re-evaluation after intervention is advised to ensure toxin clearance and metabolic recovery.

Mineral Imbalance/Mitochondrial Dysfunction	HIGH Priority	Moderate Priority
Iodine	Arsenic Glyphosate Aflatoxin Group Ochratoxin A	Cadmium Lead Bisphenol A (BPA) Perfluorooctanoic Acid (PFOA) Mono-n-Butyl phthalate (mBP)

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

US BioTek LABORATORIES · **PATIENT REPORT**
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient
Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

OCHRATOXINS GROUP

Ochratoxin A

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Ochratoxin A	5.840	H	PRESENT	(<1.800)	ppb

AFLATOXINS GROUP

Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Aflatoxin Group	0.950	H	EQUIVOCAL	(<0.800)	ppb

TRICOTHECENES GROUP

Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucarin A, Verrucarin J, Satratoxin G, Satratoxin H, Isosatratoxin F

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Tricothecenes Group	0.012		Not Present	(<0.070)	ppb

GLIOTOXINS GROUP

Gliotoxin Derivative

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Gliotoxin Derivative	0.770	H	EQUIVOCAL	(<0.500)	ppb

ZEARALENONE GROUP

Zearalenone

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Zearalenone	0.350		Not Present	(<0.500)	ppb

Reference Ranges Interpretation

MYCOTOXIN GROUP	Not Present	EQUIVOCAL	PRESENT
Ochratoxin Group	< 1.80 ppb	1.80 - 2.00 ppb	> 2.00 ppb
Aflatoxin Group	< 0.80 ppb	0.80 - 1.00 ppb	> 1.00 ppb
Tricothecenes Group	< 0.04 ppb	0.04 - 0.08 ppb	> 0.08 ppb
Gliotoxins Group	< 0.50 ppb	0.50 - 1.00 ppb	> 1.00 ppb
Zearalenone Group	< 0.50 ppb	0.50 - 0.70 ppb	> 0.70 ppb

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient
Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

MYCOTOXINS COMMENT

Mycotoxins are low molecular weight secondary metabolites produced by moulds that;

1. Are not essential in maintaining the lifecycle of the mold
2. But give the mold a competitive advantage over other organisms (bacteria and molds)

Mycotoxins are more commonly known to be present through ingestion of food but airborne contamination (inhaling mouldy air in damp indoor areas) is being recognized as a cause as well.

Mycotoxins,

1. bind to DNA and RNA and alter regular protein synthesis and function,
2. cause oxidative stress through antioxidant depletion,
3. alter cell membrane function and transport.

The following are the key mycotoxins and the organisms that produce them;

KEY MYCOTOXIN ORGANISM/S and EFFECTS

Aflatoxin Causing Organism/s (*Aspergillus flavus, parasiticus, oryzae, fumigatus)*

- Produce Aflatoxin Groups B1, B2, G1, G2
- Inhibit Protein synthesis, cause immune suppression,
- Primary target liver but also found in lung and brain

Ochratoxin A Causing Organism/s (*Aspergillus ochraceus, niger, Penicillium species)*

- Produce Ochratoxin A
- Inhibits phenylalanine tRNA synthetase and mitochondrial ATP production, stimulates lipid peroxidation, suppresses antibody production and globulin synthesis
- Found in grains, coffee beans and some wines
- Primary target is kidney (Nephrotoxic)
- Associated with UTIs and bladder cancer

Macrocyclic Trichothecenes Causing Organism/s (*Stachybotrys chartarum (black mould)*

- Produce Toxins Roridins (A, E, H, L-2), Satratoxins (G, H), Verrucarins (A, J), Isosatratoxin F.
- Inhibits protein synthesis, peptidyl synthesis, causes lymphoid, necrosis and dysregulation of IgA production
- Immunosuppression (weakened immune system), nausea, vomiting, weight loss

Gliotoxin Causing Organism/s (*Aspergillus fumigatus, terreus, niger, flavus)*

_ Produce Gliotoxin
- Inhibits macrophage phagocytosis, induces macrophage apoptosis, blocks T and B cell Activation
- Immunosuppression, in-vivo displays anti-inflammatory activity

Zearalenone Causing Organism/s (*Fusarium species)*

- Produce Zearalenone
- Has strong affinity to Estrogen Receptor, increasing activation of this receptor and leading to numerous endocrinology disorders. (Low sperm count, abnormal levels of Progesterone, disruption of ovulation)
- Reduces integrity of gut lining leading to intestinal hyperpermeability.
- Reduces gut microbiota diversity.
- Down regulates expression of tumour suppression genes leading to higher risk of GIT cancer.

US BioTek LABORATORIES · **PATIENT REPORT**
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

PHYSIOLOGICAL MINERALS

TEST	RESULT	H/L	REFERENCE	UNITS
Calcium	48.00		(<450.00)	mg/gCR
Iron	2.9		(<200.0)	ug/gCR
Magnesium	32.00		(<290.00)	mg/gCR
Zinc	0.13		(<900.00)	mg/gCR

TRACE MINERALS

TEST	RESULT	H/L	REFERENCE	UNITS
Boron	0.11		(<5500)	ug/gCR
Chromium	2.09		(<4.60)	ug/gCR
Cobalt	0.88		(<1.60)	ug/gCR
Copper	66.0	H	(<55.0)	ug/gCR
Germanium	0.30		(<1.50)	ug/gCR
Iodine	88.00	L	(>100.00)	ug/L
Lithium	45.00		(<55.00)	ug/gCR
Manganese	0.93		(<1.50)	ug/gCR
Molybdenum	9.10		(<65.00)	ug/gCR
Nickel	0.81		(<2.00)	ug/gCR
Rubidium	<DL		(<3000)	ug/gCR
Selenium	9.80		(<63.00)	ug/gCR
Strontium	82.00		(<310.00)	ug/gCR
Vanadium	3.88		(<8.00)	ug/gCR

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

US BioTek LABORATORIES · PATIENT REPORT
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

TOXIC METALS

TEST	RESULT	H/L	REFERENCE	UNITS
Aluminium	26.00		(<40.00)	ug/gCR
Antimony	<DL		(<1.00)	ug/gCR
Arsenic	38.00	H	(<35.00)	ug/gCR
Barium	0.89		(<5.70)	ug/gCR
Beryllium	<DL		(<0.60)	ug/gCR
Bismuth	<DL		(<1.00)	ug/gCR
Bromine	1900.00		(<4800)	ug/gCR
Cadmium	48.00	H	(<0.60)	ug/gCR
Cesium	1.33		(<10.30)	ug/gCR
Gadolinium	<DL		(<0.23)	ug/gCR
Gallium	<DL		(<0.10)	ug/gCR
Lead	19.00	H	(<8.00)	ug/gCR
Mercury	5.9		(<3.0)	ug/gCR
Palladium	0.01		(<15.00)	ug/gCR
Platinum	0.10		(<1.00)	ug/gCR
Silver	0.22	H	(<0.10)	ug/gCR
Tellurium	<DL		(<0.80)	ug/gCR
Thallium	<DL		(<1.50)	ug/gCR
Tin	0.65	H	(<0.50)	ug/gCR
Titanium	0.05		(<50.00)	ug/gCR
Tungsten	0.01		(<0.50)	ug/gCR
Uranium	0.01		(<0.10)	ug/gCR
Zirconium	0.16		(<5.00)	ug/gCR

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

Nutrient Mineral Comment

LOW SELENIUM LEVEL:

Treatment considerations:

1. Increase foods rich in Selenium e.g. organ meats, eggs, garlic, shellfish, brazil nuts, whole grains, brazil nuts
2. Selenium
3. Reduce exposure to heavy metals. Lead and Arsenic are antagonistic to Selenium.

LOW URINARY CALCIUM:

Urine is not the specimen of choice to detect nutritional deficiencies; however, when urine levels are low before, and especially after chelation therapy, it can be safely assumed that the calcium availability was low. This may be a reflection of an adequate dietary intake.

Calcium essential for bone and teeth growth, muscular and neuronal functions; it influences hormonal secretion and is involved in immune/oxidant responses. Deficiency symptoms are muscle cramps, musculoskeletal pain, menstrual cramps, periodontal disease, and osteoporosis. The RDA is 800-1800 mg/day, depending on age and condition. The ability of the body to absorb calcium decreases with age, due to hormonal changes, reduced gastric ability and decreased activity levels.

SOURCES: Dairy products, green leafy vegetables, citrus fruits, molasses and fish with edible bones.

THERAPEUTIC CONSIDERATION: Vitamin D, the amino acid lysine and digestive enzymes, containing hydrochloric acid and pepsin assist calcium absorption. Lactobacillus acidophilus assists intestinal absorption.

COPPER ELEVATED:

Elevated urine copper excretion may be due to Wilsons disease. Elevated levels may also occur with copper toxicity, chronic active liver disease and in contaminated specimens. Please correlate clinically and repeat with follow up testing if necessary.

IODINE COMMENT: Urinary iodine reflects dietary iodine intake, more than 90% of dietary iodine is excreted in the urine. WHO Guidelines: >100 ug/gCR Not Iodine deficient 50 - 100 ug/gCR Mild Iodine deficiency 20 - 49 ug/gCR Moderate Iodine deficiency < 20 ug/gCR Severe Iodine deficiency Low levels of iodine may lead to hypothyroidism and goitre and in severe cases, intellectual disability.

Toxic Metals Comment

ARSENIC (As) ELEVATED:

Description: A toxic metalloid found in contaminated water, rice, seafood (organic arsenic), pesticides, and pressure-treated wood.

Symptoms: Fatigue, neuropathy, skin changes, cardiovascular disease, increased cancer risk.

Treatment: Distinguish between organic and inorganic forms; support methylation (folate, B12, SAMe), and use chelation agents like DMSA or NAC if applicable.

LEAD (Pb) ELEVATED:

Description: A potent neurotoxin found in old paint, plumbing, industrial emissions, and contaminated soil or dust.

Symptoms: Cognitive decline, developmental delay (children), anemia, hypertension, mood disorders.

Treatment: Chelation therapy (e.g., DMSA, EDTA), zinc and iron repletion, vitamin C and antioxidant support.

CADMIUM (Cd) ELEVATED:

Description: A highly toxic metal from cigarette smoke, batteries, industrial waste, and shellfish.

Symptoms: Kidney dysfunction, bone demineralization, hypertension, fatigue.

Treatment: Remove exposure, support zinc and selenium (compete with cadmium), and consider chelation (e.g., EDTA or DMSA).

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

SILVER (Ag) ELEVATED:

Description: Elevated levels indicate recent absorption of silver into the body, often from medical treatments like silver-containing wound creams (SSD cream) or occupational exposure to silver particles.

Symptoms: Symptoms of silver toxicity can include argyria (a blue-gray skin discoloration), as well as potential kidney issues and other systemic effects.

Treatment: Identify and eliminate the source of silver exposure; possible treatment with laser therapy.

TIN (Sn) ELEVATED:

Description: Used in food cans, PVC plastics, and industrial alloys. Organotin compounds (e.g., tributyltin) are more toxic than elemental tin.

Symptoms: Hormonal disruption, fatigue, immune dysregulation.

Treatment: Eliminate exposure, support liver detoxification, and use antioxidants (e.g., vitamin E, selenium).

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

CYSTEINE DERIVATIVES

TEST	RESULT	H/L	REFERENCE	UNITS
N-Acetyl (3,4-Dihydroxybutyl) cysteine (NADB)	14.00		(<250.00)	ug/gCR
N-Acetyl (carbomoylethyl) cysteine	13.00		(<190.00)	ug/gCR
N-Acetyl phenyl cysteine (SPMA)	<DL		(<5.00)	ug/gCR
N-Acetyl (propyl) cysteine (NAPR)	<DL		(<25.00)	ug/gCR

ENVIRONMENTAL PHENOLS

TEST	RESULT	H/L	REFERENCE	UNITS
4-Nonylphenol	5.30	H	(<3.00)	ug/gCR
Bisphenol A (BPA)	7.21	H	(<4.00)	ug/gCR
Triclosan (TCS)	4.30		(<50.00)	ug/gCR

HERBICIDES (Synthetic Auxins)

TEST	RESULT	H/L	REFERENCE	UNITS
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.02		(<1.00)	ug/gCR

HERBICIDES (Photosynthetic Inhibitors)

TEST	RESULT	H/L	REFERENCE	UNITS
Atrazine	0.13		(<0.50)	ug/gCR
Atrazine mercapturate	0.18		(<0.50)	ug/gCR

HERBICIDES (EPSP Inhibitors)

TEST	RESULT	H/L	REFERENCE	UNITS
Aminomethylphosphonic Acid (AMPA)	0.92		(<2.00)	ug/gCR
Glyphosate	55.9	H	(<40.0)	ppb

METHYLTERT-BUTYL ETHER (MTBE) EXPOSURE

TEST	RESULT	H/L	REFERENCE	UNITS
alpha-HydroxyIsoButyrate	1.19		(<6.35)	ug/mgCR

MITOCHONDRIAL MARKERS

TEST	RESULT	H/L	REFERENCE	UNITS
Tiglylglycine				ug/gCR

PARABENS

TEST	RESULT	H/L	REFERENCE	UNITS
Benzylparaben	3.66	H	(<2.00)	ug/gCR
Butylparaben	<DL		(<1.00)	ug/gCR
Ethylparaben	<DL		(<7.00)	ug/gCR

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

US BioTek LABORATORIES · **PATIENT REPORT**
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

TEST	RESULT	H/L	REFERENCE	UNITS
Methylparaben	<DL		(<120.00)	ug/gCR
ParahydroxyBenzoic Acid	0.00		(<0.57)	mmol/molCR
Propylparaben	<DL		(<35.00)	ug/gCR

PESTICIDES

TEST	RESULT	H/L	REFERENCE	UNITS
3-Phenoxybenzoic Acid (3PBA)	0.45		(<3.00)	ug/gCR
Diethyl Phosphate (DEP)	9.90	H	(<9.00)	ug/gCR
Diethyldithiophosphate (DEDTP)	<DL		(<0.20)	ug/gCR
Diphenyl phosphate (DPP)	<DL		(<2.50)	ug/gCR
Diethylthiophosphate (DETP)	<DL		(<1.00)	ug/gCR

PFA's

TEST	RESULT	H/L	REFERENCE	UNITS
Perfluorobutanoic acid (PFBA)	0.35		(<1.20)	ug/gCR
Perfluorooctanoic Acid (PFOA)	0.19	H	(<0.10)	ug/gCR
Perfluorooctane Sulphonic Acid (PFOS)	0.23		(<0.60)	ug/gCR

PHTHALATES

TEST	RESULT	H/L	REFERENCE	UNITS
Butyl Benzyl phthalate (BBP)	0.20		(<1.00)	ug/gCR
Mono-Benzyl phthalate (mBzP)	0.50		(<3.00)	ug/gCR
Mono-n-Butyl phthalate (mBP)	65.00	H	(<55.00)	ug/gCR
Mono (3-carboxypropyl) phthalate (mCPP)	<DL		(<31.00)	ug/gCR
Mono-ethyl phthalate (MEtP)	23.00		(<100.00)	ug/gCR
Mono-2-ethylhexyl phthalate (MEHP)	<DL		(<11.00)	ug/gCR
Mono-(2-ethy-5-hydroxyhexyl) phthalate (MEHHP)	<DL		(<12.00)	ug/gCR
Mono-(2-ethy-5-oxohexyl) phthalate (MEOHP)	<DL		(<27.00)	ug/gCR
Mono-n-octyl phthalate (mOP)	<DL		(<2.00)	ug/gCR
Phthalic Acid	45.00		(<170.00)	ug/gCR
Quinolinic Acid	3.6		(<9.1)	mmol/molCR

VOLATILE ORGANIC COMPOUNDS

TEST	RESULT	H/L	REFERENCE	UNITS
2-hydroxyethyl-mercapturic acid (HEMA)	<DL		(<5.00)	ug/gCR
Mandelic Acid	0.12		(<340.0)	ug/gCR
Phenylglyoxylic Acid	0.18		(<300.0)	ug/gCR
Mandelic Acid + Phenylglyoxylic Acid	0.30		(<610.0)	ug/gCR

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

US BioTek LABORATORIES · PATIENT REPORT
16020 Linden Av N Shoreline WA, 98133 • cservice@usbiotek.com • +1 206 365 1256

Clinical Laboratory Improvement Amendments

25304-0075

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

BENZENES EXPOSURE

TEST	RESULT	H/L	REFERENCE	UNITS
t,t-Muconic Acid	0.00		(<0.12)	mmol/molCR
3,4-Dimethylhippuric Acid	0.00		(<0.01)	mmol/molCR

TOLUENES EXPOSURE

TEST	RESULT	H/L	REFERENCE	UNITS
Benzoic Acid	2.30		(<9.30)	mmol/molCR
Hippuric Acid	109.0		(<603.0)	mmol/molCR

XYLENES EXPOSURE

TEST	RESULT	H/L	REFERENCE	UNITS
2-Methylhippuric Acid	0.02		(<0.04)	mmol/molCR
3-Methylhippuric Acid	0.03		(<0.11)	mmol/molCR

TEST	RESULT	H/L	REFERENCE	UNITS
Creatinine, Urine	8.00		(2.47-19.20)	mmol/L

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient
Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

Environmental Phenols Comment

4-NONYLPHENOL ELEVATED:

4-Nonylphenol is a degradation product of nonylphenol ethoxylates, used widely in industrial detergents, plastics, paints, and personal care products. It is classified as an endocrine-disrupting chemical due to its estrogenic activity and affinity for estrogen receptors.

Health implications: Chronic exposure may disrupt hormonal balance, impair reproductive development, and contribute to thyroid and metabolic dysregulation.

Symptoms: Hormonal irregularities, early puberty, reproductive issues, fatigue, and cognitive disturbances.

Treatment considerations: Minimize exposure to industrial and consumer products containing nonylphenol derivatives. Support detoxification pathways with antioxidant-rich nutrition (e.g., sulforaphane, glutathione), liver support, and hydration.

BISPHENOL A (BPA) ELEVATED:

Bisphenol A (BPA) is a synthetic chemical used in the production of certain plastics and resins, such as polycarbonate plastic.

Health implications: High BPA in urine is linked to various adverse health outcomes, including increased risks of heart disease, diabetes, obesity, and certain cancers. It may also be associated with impaired reproductive, liver, kidney, and thyroid function, as well as developmental issues in children.

Symptoms: General fatigue, less of concentration, behavioural changes in children.

Treatment considerations: Treatment focuses on reducing exposure by avoiding BPA-containing plastics and supporting the body's natural detoxification with antioxidants.

Herbicides Comment

GLYPHOSATE ELEVATED:

Glyphosate is a widely used herbicide that poses health risks, especially from large or long-term exposure, .

Health implications: Some health authorities classify glyphosate as a probable carcinogen.

Symptoms: Short-term exposure to products can cause eye, skin, and respiratory irritation, along with nausea and vomiting if swallowed.

Treatment considerations: Focus on microbiome repair, liver support, antioxidant nutrients, and avoidance of glyphosate-laden foods and environments.

Parabens Comment

BENZYLPARABEN ELEVATED:

Benzylparaben is a less common paraben, but still used in some cosmetic and pharmaceutical formulations.

Health implications: It exhibits estrogenic properties and may compound the hormonal burden when combined with other parabens. Research is more limited but suggests potential for endocrine disruption and dermal sensitization.

Symptoms: Hormonal imbalances, skin irritation, unexplained fatigue.

Treatment considerations: Minimize exposure to synthetic preservatives. Support detoxification and antioxidant systems. Evaluate total endocrine-disrupting chemical (EDC) burden if multiple parabens are elevated.

PFAS Comment

PERFLUOROOCTANOIC ACID (PFOA) ELEVATED:

Elevated PFOA in urine is primarily from exposure and can be linked to potential health effects on the kidneys, hyperuricemia (high uric acid), cancer, endocrine, reproductive.

There is no medically approved treatment to remove PFOA from the body, but exposure can be reduced by avoiding certain foods and products, and some medical interventions may help lower levels.

*** US BioTek** US BioTek. 16020 Linden Av N, Shoreline WA 98133

Lab ID
Patient ID PAT-100009
Ext ID 25304-0075

Test Patient

Sex: Female • 45yrs • 01-Jan-80

RECEIVED
31-Oct-25

Phthalates Comment

MONO-N-BUTYL PHTHALATE (mBP) ELEVATED:

mBP is a metabolite of dibutyl phthalate (DBP), used in nail polish, cosmetics, and certain medications.

Health implications: DBP is an anti-androgenic compound, potentially lowering testosterone and affecting reproductive organ development.

Symptoms: Reduced libido, fertility issues, testicular dysgenesis, fatigue, thyroid dysfunction.

Treatment considerations: Avoid DBP-containing products. Use glutathione, selenium, and zinc to support detoxification and hormone metabolism. Consider endocrine evaluation.

Environmental Toxins Comment

ENVIRONMENTAL POLLUTANTS PROFILE:

The reported markers in the Environmental Pollutants Profile commonly originate from industrial/manufacturing products or their associated byproducts. Exposures are often occupationally-related and typically through either inhalation or topical exposure.

Metabolism of these products occurs via the liver detoxification pathways leading to excretion into the urine. Chronic exposures may also lead to build up of these products in fatty tissue deposits.

Methodology

Enzyme-Linked Immunosorbent Assay (ELISA), Inductively Coupled Plasma Mass Spectrometry (ICP-MS), Automated Chemistry/Immunochemistry, Liquid Chromatography-Mass Spectrometry (LC-MS/MS/MS)

Lab Director: Jillian Harrington, PhD, HCLD (ABB). CLIA#99D2282774