designs for health

Metabolomics Spotlight™

Functional Organic Acids and Metabolomics Assessment

PATIENT INFO:

PATIENT: Random One
COLLECTED: 11/5/2021
DOB: 11/4/2021

ACCESSION: PatientImport01
RECEIVED: 11/6/2021
COMPLETED:

PROVIDER INFO:

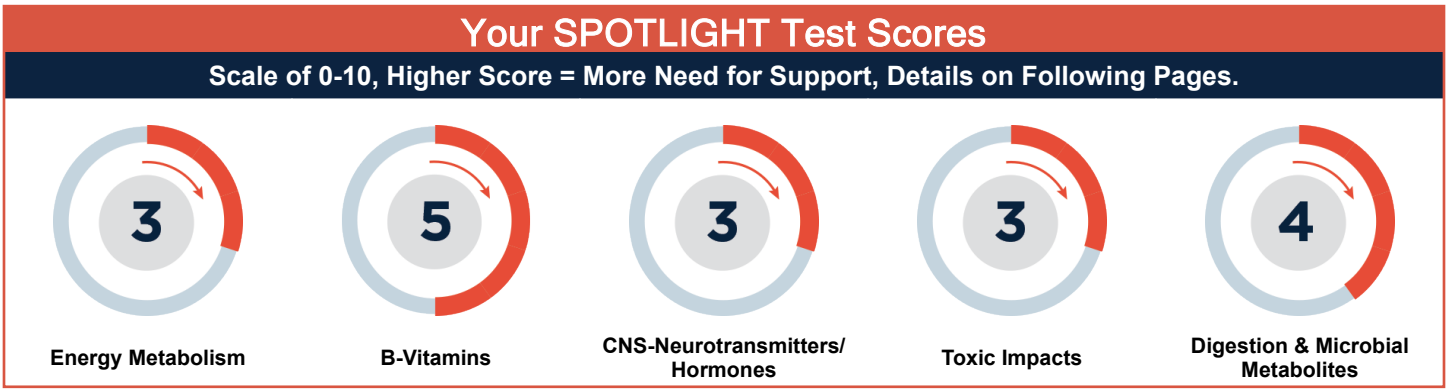
Rucks Winkeljohn,

Introduction - Your Metabolomic Signature

Designs for Health is pleased to offer you Designs for Health Metabolomics Spotlight™ analysis revealing your unique metabolic signature.

Using a systems-biology approach, the test assesses biomarkers that go beyond the traditional lists of analytes. Metabolites are impacted by many factors and can change in response to diet, nutrient status, toxin exposures, exercise, physiologic demands, genetics, gut microbiome alterations, or disordered health state. Metabolic analysis can help clinicians evaluate the function of key pathways to better target support.

This test enables you to see a larger personal health picture by deciphering and connecting perturbations of key metabolic pathways and analytes, allowing for truly personalized support. Metabolomics, also called *comprehensive metabolic profiling*, evaluates patterns related to core biological systems, offering insight into biochemical dysfunctions that may be of concern. Organic acids and other small molecules are intermediate compounds that can define the efficient flow of metabolic pathways and can help in revealing the functional status of key areas of biochemistry and health.



Lifestyle and Supplement Recommendations:

The lifestyle and supplement recommendations included in this report are generalized and made for adults. Not all recommendations are appropriate or applicable for every individual. A knowledgeable and qualified healthcare practitioner should review all recommendations and adjust them as needed, based on the individual's age, personal health history, pregnancy or breastfeeding status, potential drug or nutrient interactions, contraindications, current supplement use, diet, lifestyle, and other relevant factors.

SPOTLIGHT 1

KEY: < DL = Results below detection limit.

Energy Metabolism

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Glycolysis			
Glucose *Glucokinase*	3.1		< 15.2 mg/dL
Pyruvic Acid *Pyruvate dehydrogenase + B1, B2, B3, B5 LA*	51.2 H		< 47.2 nmol/mg Creatinine
Lactic Acid *Lactate dehydrogenase + B3*	175.0		23.1 - 722.6 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Krebs Cycle			
Citric Acid *Citrate synthase*	>2987.4		> 356.2 nmol/mg Creatinine
cis-Aconitic Acid *Aconitase*	118.5		91.3 - 363.1 nmol/mg Creatinine
Isocitric Acid *Isocitrate dehydrogenase + B3*	326.7		< 415.6 nmol/mg Creatinine
α-Ketoglutaric Acid *alpha-Ketoglutarate dehydrogenase + B1, B2, B3, B5, LA*	72.4		< 157.2 nmol/mg Creatinine
Succinic Acid *Succinic dehydrogenase + B2*	56.6		4.8 - 224.1 nmol/mg Creatinine
Fumaric Acid *Fumarase*	215.4 L		320.2 - 3375.5 nmol/mg Creatinine
Malic Acid *Malate dehydrogenase + B3*	13.9		< 21.5 nmol/mg Creatinine

The assays were developed and/or the performance characteristics determined by Diagnostic Solutions Laboratory. The results are for research and not for diagnostic purposes.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

SPOTLIGHT 1

Energy Metabolism

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Fatty Acid Oxidation			
Adipic Acid *Saturated dicarboxylic acid*	5.7		2.0 - 15.1 nmol/mg Creatinine
Suberic Acid *Fatty acid oxidation + Carnitine*	6.5		3.0 - 29.4 nmol/mg Creatinine
Ethylmalonic Acid *Dicarboxylic acid*	11.4		5.0 - 43.3 nmol/mg Creatinine

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Ketones			
β-Hydroxybutyric Acid *beta-Hydroxybutyrate dehydrogenase + B3*	<dl		< 60.5 nmol/mg Creatinine

SPOTLIGHT Score

SPOTLIGHT Score Key:

Scale 0-10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools for Energy Metabolism

Depending on your unique test outcomes, lipoic acid, CoQ10, nicotinamide riboside (NR), carnitine and B-complex might be beneficial. If the ketone marker is elevated, insulin resistance and/or participation in a ketogenic diet or intermittent fasting may be considered. Your health care provider may use this information to help determine proper selection and recommended intake related to supplement utilization, diet, and lifestyle changes.

Designs for Health Product Considerations

Supplement recommendations may include **Lipoic Acid Supreme**, **MitoNR™**, and **Carnitine Synergy™**.

SPOTLIGHT 2

KEY: < DL = Results below detection limit.

B-Vitamins

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
B-Complex (B1, B2, B3, B5, LA)			
Pyruvic Acid *Pyruvate dehydrogenase + B1, B2, B3, B5 LA*	**51.2 H**		< 47.2 nmol/mg Creatinine
α-Ketoglutaric Acid *alpha-Ketoglutarate dehydrogenase + B1, B2, B3, B5, LA*	**72.4**		< 157.2 nmol/mg Creatinine
Branched Chain Alpha-Keto Organic Acids *Branched-chain keto acid dehydrogenase + B1, B2, B3, B5, LA*	**36.2 H**		< 28.3 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Vitamin B12			
Methylmalonic Acid *Methylmalonyl-CoA mutase + B12*	**8.3**		2.7 - 25.9 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Folate			
Formiminoglutamic Acid *Glutamate formimino-transferase + Folate*	**0.02**		< 0.4 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Vitamin B6			
Xanthurenic Acid *Kynurenine transaminase + B6*	**33.0 H**		< 9.5 nmol/mg Creatinine
Pyridoxic Acid *Aldehyde oxidase*	**23.5**		< 111.9 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Biotin			
β-Hydroxyisovaleric Acid *Methylcrotonyl-CoA carboxylase + Biotin*	**40.6**		25.1 - 223.4 nmol/mg Creatinine

The assays were developed and/or the performance characteristics determined by Diagnostic Solutions Laboratory. The results are for research and not for diagnostic purposes.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

SPOTLIGHT 2

B-Vitamins

SPOTLIGHT Score	General Support Recommendations
	**Lifestyle and Supplement Tools for Energy Metabolism** Depending on your unique test outcomes, vitamins B12, B6, folate, and/or B-complex may be beneficial. Your health care provider may use this information to help determine proper selection and recommended intake related to supplement utilization, diet, and lifestyle changes.
SPOTLIGHT Score Key: *Scale 0-10. Higher score indicates more need for support.*	**Designs for Health Product Considerations** Supplement recommendations may include **B-Supreme**, **Tricobalamin™**, **Trifolamin™**, Or **L-5-MTHF-500**.

SPOTLIGHT 3

KEY: < DL = Results below detection limit.

CNS-Neurotransmitters/Hormones

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Tryptophan Metabolism			
Tryptophan *Tryptophan hydroxylase + BH4*	19.7		10.5 - 68.7 nmol/mg Creatinine
5-Hydroxyindoleacetic Acid *Aldehyde dehydrogenase + B3*	98.1 H		6.3 - 28.7 nmol/mg Creatinine
Kynurenine *Kynurenine mono-oxygenase (KMO) + B2*	5.5		< 13.7 nmol/mg Creatinine
KT Ratio *Kynurenine / Tryptophan*	0.280		0.064 - 0.638
Kynurenic Acid *Kynurenine transaminase + B6*	6.9		2.1 - 18.5 nmol/mg Creatinine
Quinolinic Acid *Non-enzymatic conversion*	37.5		9.0 - 105.7 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Neurotransmitter			
Tyrosine *Tyrosine hydroxylase + BH4*	27.7		11.4 - 126.7 nmol/mg Creatinine
γ-Aminobutyric Acid *gamma-Aminobutyric acid aminotransferase + B6*	<dl		< 2.9 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Catecholamine Turnover			
Homovanillic Acid *COMT + Magnesium & Monoamine oxidase + B2*	2.8		< 10.3 nmol/mg Creatinine
Vannilylmandelic Acid *Monoamine oxidase + B2*	14.6		4.8 - 21.4 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Steroid Hormone			
Cortisol *11-beta-Hydroxysteroid dehydrogenase + B3*	14.8		< 82.0 mcg/g Creatinine

The assays were developed and/or the performance characteristics determined by Diagnostic Solutions Laboratory. The results are for research and not for diagnostic purposes.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

SPOTLIGHT 3

CNS-Neurotransmitters/Hormones

SPOTLIGHT Score	General Support Recommendations

SPOTLIGHT Score Key:

Scale 0-10. Higher score indicates more need for support.

Lifestyle and Supplement Tools for Energy Metabolism

Depending on your unique test outcomes, 5-HTP, GABA, adaptogenic herbs, magnesium, B-complex, B6, taurine, L-theanine, L-tyrosine, Macuna (L - Dopa), and/or stress reducing lifestyle techniques might be beneficial. Your health care provider may use this information to help determine proper selection and recommended intake related to supplement utilization, diet, and lifestyle changes.

Designs for Health Product Considerations

Supplement recommendations might include **Glucosupreme™**, **CatecholaCalm™**, **DopaBoost™**, **Adrenatone™**, **L-Tyrosine**, **5-HTP**, **OmegaEvail™**, and **pharma-GABA**.

SPOTLIGHT 4

KEY: < DL = Results below detection limit.

Toxic Impacts

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Oxidative Damage			
8-Hydroxy-2'-deoxyguanosine *DNA oxidation*	<dl		< 8.4 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Urea Cycle			
Arginine *Arginase & Nitric oxide synthase*	9.9		< 31.4 nmol/mg Creatinine
Citrulline *Argininosuccinate synthase*	7.4		< 13.6 nmol/mg Creatinine
Ornithine *Ornithine transcarbamylase*	8.7		< 63.0 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Kidney Impacts			
Orotic Acid *Uridine monophosphate synthase*	1.9		0.7 - 6.0 nmol/mg Creatinine
Microalbumin *Blood protein*	17.5		< 130.4 mcg/mg Creatinine
Creatinine *Creatine breakdown*	69.7		29.3 - 296.8 mg/dL
Oxalic Acid *Divalent metallic cations*	253.7		< 1532.5 nmol/mg Creatinine

SPOTLIGHT 4

Toxic Impacts

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Toxins			
2-Methylhippuric Acid *Xylene exposure*	0.3		< 2.1 nmol/mg Creatinine
Mandelic Acid *Styrene exposure*	2.1		< 4.6 nmol/mg Creatinine
Benzoylform *Styrene exposure*	1.7		< 4.3 nmol/mg Creatinine
Glucaric Acid *Glucuronic Acid Pathway*	15.4		3.6 - 25.8 nmol/mg Creatinine
Analytes Tested	**Result**	**20% 40% 60% 80%**	**95% Reference Range**
Detox			
Homocystine *Methionine synthase + B12*	<dl		< 5.7 nmol/mg Creatinine
Sulfocysteine *Sulfite oxidase (SOX) + Mo*	10.7 H		< 8.8 nmol/mg Creatinine
Cystine *Oxidation*	19.1		9.7 - 96.1 nmol/mg Creatinine
α-Hydroxybutyric Acid *Dehydrogenase + B3*	23.7		10.6 - 62.6 nmol/mg Creatinine
Pyroglutamic Acid *5-Oxoprolinase*	98.7 H		< 72.7 nmol/mg Creatinine

SPOTLIGHT 4

Toxic Impacts

SPOTLIGHT Score	General Support Recommendations

SPOTLIGHT Score Key:

Scale 0-10. Higher score indicates more need for support.

Lifestyle and Supplement Tools for Energy Metabolism

Depending on your unique test outcomes, glutathione, various antioxidants, B-complex, NAC, glycine, glutamine, taurine, ornithine, MSM, and/or methionine may be beneficial. Your health care provider may use this information to help determine proper selection and recommended intake related to supplement utilization, diet, and lifestyle changes.

Designs for Health Product Considerations

Supplement recommendations may include **Detox Antiox™**, **Kidney Korrect™**, **Homocysteine Supreme™**, **B-Supreme**, **S-Acetyl Glutathione Synergy** and **Amino-D-Tox™**.

SPOTLIGHT 5

KEY: < DL = Results below detection limit.

Digestion & Microbial Metabolites

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Amino Acid Microbial Metabolites			
Proline *Prolyl hydroxylase + Vitamin C*	<dl		< 14.7 nmol/mg Creatinine
Hydroxyproline *4-Hydroxyproline oxidase*	10.9		< 25.3 nmol/mg Creatinine
Glycylproline *Dipeptide of Glycine + Proline*	10.8		< 18.9 nmol/mg Creatinine
4-Hydroxyphenylacetic Acid *Disordered tyrosine metabolism*	121.6		85.8 - 902.3 nmol/mg Creatinine
Indoleacetic Acid *Disordered tryptophan metabolism*	17.0 H		< 13.7 nmol/mg Creatinine
3,4-Dihydroxyhydrocinnamic Acid *Polyphenol metabolite*	3.1		< 1490.3 nmol/mg Creatinine
3,5-Dihydroxybenzoic Acid *Microbial metabolite*	111.7		< 277.1 nmol/mg Creatinine
4-Hydroxybenzoic Acid *Hydroxybenzoic acid derivative*	2.5		< 14.9 nmol/mg Creatinine
Benzoic Acid *Glycine N-benzoyltransferase*	9.3		< 488.0 nmol/mg Creatinine
Hippuric Acid *Glycine conjugate of benzoate*	585.8 H		< 291.9 nmol/mg Creatinine

Analytes Tested	Result	20% 40% 60% 80%	95% Reference Range
Fungal Assessment			
Arabinitol *Dehydrogenase*	2.1		< 9.0 nmol/mg Creatinine

The assays were developed and/or the performance characteristics determined by Diagnostic Solutions Laboratory. The results are for research and not for diagnostic purposes.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

SPOTLIGHT 5

Digestion & Microbial Metabolites

SPOTLIGHT Score	General Support Recommendations
	**Lifestyle and Supplement Tools for Energy Metabolism** Depending on your unique test outcomes, digestive enzymes, probiotics, collagen peptides, and/or certain botanicals to address microbial imbalance may be beneficial. Your health care provider may use this information to help determine proper selection and recommended intake related to supplement utilization, diet, and lifestyle changes.
SPOTLIGHT Score Key: *Scale 0-10. Higher score indicates more need for support.*	**Designs for Health Product Considerations** Supplement recommendations may include **Digestzymes™**, **GI Microb-X™**, **ProbioMed™-100**, **Oil of Oregano™**, and **Whole Body Collagen**.

Summary and Recommendations:

Below are your supplement recommendations, as determined by the algorithmic assessment of your test results. Your healthcare practicioner should review all recommendations and adjust them as needed, based on your age, personal health history, pregnancy or breastfeeding status, potential drug or nutrient interactions, contraindications, current supplement use, diet, lifestyle, and other relevant factors.

Designs for Health Product Recommendations

Name	How to Take
5-HTP Supreme ™	Take 1 capsule per day or as directed by your health-care practitioner.
Amino-D-Tox ™	Take 6 capsules per day between meals or as directed by your health-care practitioner.
B-Supreme	Take 2 capsules per day or as directed by your health-care practitioner.
Digestzymes ™	Take 1 capsule per day with a meal or as directed by your health-care practitioner.
L-Tyrosine	Take 2 capsules per day on an empty stomach or as directed by your health-care practitioner.
Mitro-NR ™	Take 2 capsules per day with a meal or as directed by your health-care practitioner.
S-Acetyl Glutathione Synergy	Take 2 capsules per day or as directed by your health-care practitioner.

***This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

The Designs for Health Spotlight™ tests are not diagnostic and are not eligible for coverage under Medicare, Medicaid, or medical insurance.

Designs for Health Metabolomics Spotlight™, Tricobalamin™, Trifolamin™ Glucosupreme™, CatecholaCalm™, DopaBoost™, Adrenatone™, L-Tyrosine, 5-HTP, OmegaEvail™, pharmaGABA®, Detox Antiox™, Amino-D-Tox™, Digestzymes™, GI Microb-X™, Kidney Korrect™, Homocysteine Supreme™, Oil of Oregano™, MitoNR™, and ProbioMed™ are trademarks of Designs for Health Inc.

"The opinions and supplement recommendations in this report have been added by Designs for Health, and do not necessarily reflect the position of Diagnostic Solutions Laboratory. All results should be evaluated by a licensed healthcare professional."

designs for health

GI Spotlight™

qPCR Technology Using GI Microbial Assay Plus (GI-MAP)

PATIENT INFO:
PATIENT: Sample Jane Doe
COLLECTED: 5/1/2022
DOB: 1/7/1959

ACCESSION: 00000000-101
RECEIVED: 5/2/2022
COMPLETED: 5/5/2022

PROVIDER INFO:
First Health Clinic Sample Report
Practitioner Name
321 Main Street, Mycity, US – 7654321

Introduction – Gastroinstestinal Analysis

Designs for Health is pleased to present the GI-Spotlight analysis, providing an in-depth look into the state of GI function and microbiome.

The human gastrointestinal tract contains an ecosystem with over 4 trillion microbes, living in a symbiotic relationship with their host. These microbes, when in a healthy state and balance, are responsible for performing duties essential to your health such as supporting normal digestion, hormonal balance, immune modulation, and neurotransmitter function.

This report contains a unique, in-depth assessment into many of the key microbes essential for human health. The microbes are measured using the most precise molecular analysis known as qPCR (quantitative PCR), useful for assessing absolute values – *versus only relative abundance found using sequencing methods* – and determining the accurate number of microbes, as provided on the report. This report contains many of the most well researched microbes, keystone species, and those with the greatest known correlation to functional categories listed in the report.

This is not a test constructed or intended for medical diagnosis. These results are intended to be used by your health care provider to personalize supplementation, diet and lifestyle recommendations based on your unique GI microbiome and functional status.

Note: Microbial results are reported as genome equivalents per gram of stool, which is a standard method for reporting the number of microbes measured per gram of stool, based on qPCR analysis of DNA samples. Results are expressed in standard scientific notation. For example, a reported result of 3.5e7 is equivalent to 3.5 x 10^7 microbes per gram, which equals 35,000,000 (35 million) microbes per gram of stool. <dl represents results below detectable limit.

Your SPOTLIGHT Test Scores

Scale of 0–10. Higher Score = More Need for Support. (Details on Following Pages.)

Microbiome Keystone Diversity	Gut Barrier Integrity	Inflammatory Balance (Lipopolysaccharide/LPS)	Digestive Sufficiency/Functionality	Immune Response/Tolerance	Fungal Balance

Lifestyle and Supplement Suggestions:

The lifestyle and supplement recommendations included in this report are generalized and intended for adults. Not all recommendations are appropriate or applicable for every individual. A knowledgeable and qualified healthcare practitioner should review all recommendations and adjust them as needed, based on the individual's age, personal health history, pregnancy or breastfeeding status, potential drug or nutrient interactions, contraindications, current supplement use, diet, lifestyle, and other relevant factors.

SPOTLIGHT 1

KEY: < DL= Results below detection limit.

Microbiome Keystone Diversity

Category	Analytes Tested		Result	Range
Microbial Diversity & Balance	*Bacteroides phylum*		**1.21e12**	8.6e11 - 3.3e12
	Firmicutes phylum	**Low**	**4.70e10**	5.7e10 - 3.0e11
	Firmicutes:Bacteroidetes Ratio		**0.04**	<1.0
	Bifidobacterium spp.		**2.4e10**	>6.70e7
	Lactobacillus spp.	**Low**	**3.7e4**	8.6e5 - 6.20e8
	Enterococcus spp.		**4.9e7**	1.9e5 - 2.0e8
	Escherichia spp.	**Low**	**6.1e5**	3.7e6 - 3.8e9
	Akkermansia muciniphilia	**Low**	**<dl**	1.0e1 - 5.0e4
	Faecalibacterium prausnitzi		**9.56e5**	1.0e3 - 5.0e8
	Total sIgA		**1873**	510 - 2010 ug/g
	Roseburia spp.	**Low**	**4.70.e10**	5.7e10 - 2.0e10

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools to Improve Diversity

The use of a broad-spectrum probiotics, prebiotics, and polyphenols, in addition to a whole-food diet rich in vegetables and fruits can promote greater diversity and richness of the GI microbiota.

Designs for Health Product Considerations

ProbioMed™ 50, FloraMyces™, PhytoBiome™, PaleoFiber® RS, IgGI Shield™, Tegricel Colostrum, Tri-Butyrin Supreme™.

SPOTLIGHT 2

KEY: < DL= Results below detection limit.

Gut Barrier Integrity

Category	Analytes Tested		Result	Range
Intestinal Permeability/ Barrier Function	Anti-gliadin sIgA		**15**	<175 U/L
	Zonulin		**186.4**	<107 ng/g
	Enterococcus spp.		**4.9e7**	1.9e5 - 2.0e8
	Akkermansia muciniphilia	**Low**	**<dl**	1.0e1 - 5.0e4
	Candida albicans		**<dl**	<5.00e2
	Faecalibacterium prausnitzi		**9.56e5**	1.0e3 - 5.0e8
	Roseburia spp.	**Low**	**6.1e5**	5.0e7 - 2.0e10
	Firmicutes phylum		**1.25e11**	5.7e10 - 3.0e11
	Bifidobacterium spp.		**2.4e10**	>6.70e7
	Escherichia spp.	**Low**	**6.1e5**	3.7e6 - 3.8e9
	Lactobacillus spp.	**Low**	**3.7e4**	8.6e5 - 6.2e8
	Enterobacter spp.		**9.16e6**	1.0e6 - 5.0e7

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools for Gut Barrier Integrity

Consumption of a wide variety of plant-based foods; consider a gluten-free diet; avoid processed foods, refined sugars, and excess alcohol. Avoid environmental toxins. Engage in appropriate stress management and sleep hygiene.

Designs for Health Product Considerations

GI Revive™, ProbioMed™ 50, Tri-Butyrin™ Supreme, IgGI Shield™.

SPOTLIGHT 3

KEY: < DL= Results below detection limit.

Inflammatory Balance/LPS

Category	Analytes Tested		Result	Range
Inflammatory Balance (LPS)	*Escherichia* spp.	Low	6.1e5	3.7e6 - 3.8e9
	Escherichia spp.	Low	6.1e5	3.7e6 - 3.8e9
	Enterobacter spp.		9.16e6	1.0e6 - 5.0e7
	Morganella spp.		<dl	<1.00e3
	Pseudomonas spp.	High	7.37e4	<1.00e4
	Pseudomonas aeruginosa		<dl	<5.00e2
	Klebsiella spp.	High	2.48.e4	<5.00e3
	Prevotella spp.		<dl	<1.00e8
	Proteus spp.		<dl	<5.00e4
	Proteus mirabilis		<dl	<1.00e3
	Citrobacter spp.	High	7.37e7	<5.00e6
	Fusobacterium spp.	High	2.50e9	<1.00e8

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools to Reduce Inflammation

Consumption of a whole food based anti-inflammatory and or elimination diet. Until more optimal digestive function is restored, avoid excessive protein.

Designs for Health Product Considerations

GI Microb-X™, Oil of Oregano, ProbioMed™ 50, GI Revive®, IgGI Shield™.

SPOTLIGHT 4

KEY: < DL= Results below detection limit.

Digestive Sufficiency/Functionality

Category	Analytes Tested		Result	Range
Digestive Sufficiency/Functionality	*Bacteroides phylum*	Low	4.33e11	8.6e11 - 3.3e12
	Firmicutes phylum		1.25e11	5.7e10 - 3.0e11
	Enterococcus spp.		4.9e7	1.9e5 - 2.0e8
	Enterococcus faecalis		2.56e3	<1.00e4
	Enterococcus faecium		1.11e3	<1.00e4
	Lactobacillus spp.	Low	3.7e4	8.6e5 - 6.2e8
	Clostridia (class)		6.25e6	5.0e5 - 5.0e7
	Akkermansia muciniphilia	Low	<dl	1.0e1 - 5.0e4
	Staphylococcus spp.		1.25e11	<1.00e4
	Staphylococcus aureus		1.23e1	<5.00e2
	Methanobacteriaceae (family)		3.70e7	<5.00e9
	Streptococcus spp.	High	1.34e3	<1.00e3
	Steatocrit		6	<15%
	Pancreatic Elastase-1		388	>200 ug/g
	Fusobacterium spp.		6.16e5	<1.00e8
	Bacillus spp.		2.56e5	<1.76e6

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools to Support Digestion

Lifestyle practices to support digestion – adequate chewing, lemon water, apple cider vinegar with meals. Consumption of a diversity of plant-based fibers. Engaging in sleep hygiene and stress management practices. Dietary approaches may include FODMAPS, Specific Carbohydrate Diet (SCD), and Gluten-Free (GF).

Designs for Health Product Considerations

Digestzymes™, LV-GB Complex™.

SPOTLIGHT 5

KEY: < DL= Results below detection limit.

Immune Response/Tolerance

Category	Analytes Tested		Result	Range
Histamine Tolerance	*Morganella* spp.		**<dl**	<1.00e3
	Klebsiella spp.	**High**	**2.48.e4**	<5.00e3
	Klebsiella pneumoniae		**1.41e4**	<5.00e4
	Pseudomonas spp.	**High**	**7.37e4**	<1.00e4
	Pseudomonas aeruginosa		**<dl**	<5.00e2
	Citrobacter freundii		**<dl**	<5.00e5
	Proteus spp.		**<dl**	<5.00e4
	Proteus mirabilis		**<dl**	<1.00e3
Food Tolerance	*Staphylococcus aureus*		**3.83e2**	<5.00e2
	Pseudomonas aeruginosa		**<dl**	<5.00e2
	Lactobacillus spp.	**Low**	**3.7e4**	8.6e5 - 6.2e8
	Anti-gliadin sIgA		**15**	0 - 157 U/L
	Total sIgA		**1873**	510 - 2010 ug/g

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools to Improve Tolerance

Lifestyle practices to improve tolerance: consider low histamine diet, histamine-degrading (DAO) enzyme supplementation with meals, and/or gluten free diet. Consider antibody or cellular response testing for food sensitivities or food allergies.

Designs for Health Product Considerations

HistaGest DAO™, AllergyZyme™.

SPOTLIGHT 6

KEY: < DL= Results below detection limit.

Fungal Balance

Category	Analytes Tested		Result	Range
Fungal Balance	*Candida* spp.	High	4.53e4	<5.00e3
	Candida albicans		<dl	<5.00e2
	Geotrichum spp.		<dl	<3.00e2
	Microsporidium spp.		<dl	<5.00e3
	Rhodotorula spp.		<dl	<1.00e3

SPOTLIGHT Score

SPOTLIGHT Score Key:
Scale of 0–10. Higher score indicates more need for support.

General Support Recommendations

Lifestyle and Supplement Tools to Support Healthy Gut Fungal Balance

Lifestyle practices to support fungal balance: Avoid refined sugars and processed foods; consider carbohydrate-controlled diet; avoid alcohol. Candida Diet or Specific Carbohydrate Diet (SCD).

Designs for Health Product Considerations

GI Microb-X™, Oil of Oregano, ProbioMed™ 50, GI Revive®, IgGI Shield™.

The assays were developed and the performance characteristics determined by Diagnostic Solutions Laboratory.

CLIA# 11D-2097795
Medical Director - Diane Farhi, MD

Summary and Recommendations:

Below are your supplement recommendations, as determined by the algorithmic assessment of your test results. Your healthcare practitioner should review all recommendations and adjust them as needed based on your age, personal health history, pregnancy or breastfeeding status, potential drug or nutrient interactions, contraindications, current supplement use, diet, lifestyle, and other relevant factors.

More personalized dosing, specific dietary recommendations, assessment of progression, duration, and integration of all suggestions should be reviewed, clinically contextualized and curated by the managing healthcare provider.

Designs for Health Product Recommendations

Name	How to Take
GI Microb-X™	Take 1 capsule per day on an empty stomach or as directed by your health-care practitioner.
FloraMyces™	Take 2 capsules per day or as directed by your health-care practitioner.
Digestzymes™	Take 1 capsule per day with a meal or as directed by your health-care practitioner.
LV-GB Complex™	Take 3 capsules per day with meals or as directed by your health-care practitioner.
PhytoBiome™	Take 3 capsules per day or as directed by your health-care practitioner.
Tri-Butyrin™ Supreme	Take 1 softgel per day or as directed by your health-care practitioner.
ProbioMed™ 50	Take 1 capsule per day with a meal or as directed by your health-care practitioner.
PaleoFiber® RS	Take 10 grams (approximately one scoop) per day or as directed by your health-care practitioner.
IgGI Shield™	Mix 3.5 grams (approximately one scoop) in water or other liquid per day or as directed by your health-care practitioner.
HistaGest DAO™	Take 1 tablet just prior to the consumption of histamine-rich foods or as directed by your health-care practitioner. (Take by mouth and swallow whole 20 minutes before meals.)
Tegricel® Colostrum	Take 2 capsules per day or as directed by your health-care practitioner.
Oil Of Oregano	Take 1 softgel per day with a meal or as directed by your health-care practitioner.
GI Revive®	Mix 8 grams (approximately one scoop) in water or other liquid per day or as directed by your health-care practitioner.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

The Designs for Health Spotlight™ tests are not diagnostic and are not eligible for coverage under Medicare, Medicaid, or medical insurance.

Designs for Health GI Spotlight™, Designs for Health Spotlight™, ProbioMed™ 50, GI Revive®, FloraMyces™, PhytoBiome™, PaleoFiber®, IgGI Shield™, Tri-Butyrin Supreme™, AllergyZyme™, GI Microb-X™, Ultra, Digestzymes™, and LV-GB Complex™ are trademarks of Designs for Health, Inc.

Tegricel® is a registered trademark of Sterling Technology, Inc.