

Gut Zoomer

The Gut Zoomer evaluates a broad range of gut and gut–brain markers to characterize microbial balance, digestive function, barrier integrity, immune activity, metabolic byproducts, and neurochemical signaling. The marker set is designed to capture both upstream gut drivers and downstream functional effects, helping clinicians assess how microbial and intestinal patterns influence inflammation, metabolism, nervous system signaling, and whole-body symptom expression.

Gut Commensals Risk	Digestion & Immune	
<ul style="list-style-type: none"> • Autoimmune Health • Cardiovascular Health • Hormones • Inflammatory Bowel Disease (IBD) • Intestinal Gas • Intestinal Permeability • Irritable Bowel Syndrome (IBS) • Keystone Health • Liver Health • Metabolic Health • Neurological Health • Nutrition • Probiotic Health • SIBO 	<ul style="list-style-type: none"> • Fecal Immunochemical Test (FIT) • Fecal Zonulin (ng/mL) • Pancreatic elastase 1 (mcg/g) • pH • Secretory IgA (mcg/g) 	
	Gut Metabolites	
	<ul style="list-style-type: none"> • β-glucuronidase (U/mL) <p>Bile Acids</p> <ul style="list-style-type: none"> • Cholic acid (CA) (%) • Chenodeoxycholic acid (CDCA) (%) • Deoxycholic acid (DCA) (%) • Lithocholic acid (LCA) (%) • LCA/DCA ratio <p>Short Chain Fatty Acids</p> <ul style="list-style-type: none"> • Acetate (%) • Butyrate (%) • Propionate (%) • Valerate (%) • Total SCFA (mmol/g) 	
Gut Pathogens		
<p>28 Bacteria</p> <ul style="list-style-type: none"> • <i>Aeromonas</i> spp. • <i>Bacillus cereus</i> • <i>Campylobacter coli</i> • <i>Campylobacter jejuni</i> • <i>Campylobacter</i> spp. • <i>Campylobacter upsaliensis</i> • <i>Clostridium difficile</i> • <i>Clostridium difficile</i> Toxin A • <i>Clostridium difficile</i> Toxin B • <i>Clostridium perfringens</i> • <i>E. coli</i> O157 • <i>Edwardsiella tarda</i> • Enteroaggregative <i>E. coli</i> (EAEC) • Enteropathogenic <i>E. coli</i> (EPEC) • Enterotoxigenic <i>E. coli</i> (ETEC) LT/ST • <i>Helicobacter pylori</i> • <i>Klebsiella pneumoniae</i> • <i>Listeria</i> • Non-<i>pylori Helicobacter</i> spp. • <i>Plesiomonas shigelloides</i> • <i>Salmonella</i> • Shiga-like toxin-producing <i>E. coli</i> (STEC) Stx1/Stx2 • <i>Shigella</i>/EIEC • <i>Staphylococcus aureus</i> • <i>Vibrio cholerae</i> • <i>Vibrio parahaemolyticus</i> • <i>Vibrio vulnificus</i> • <i>Yersinia enterocolitica</i> 	<p>14 Protozoans</p> <ul style="list-style-type: none"> • <i>Balantidium coli</i> • <i>Blastocystis hominis</i> • <i>Chilomastix mesnili</i> • <i>Cryptosporidium</i> • <i>Cyclospora cayetanensis</i> • <i>Cyclospora</i> spp. • <i>Dientamoeba fragilis</i> • <i>Endolimax nana</i> • <i>Entamoeba coli</i> • <i>Entamoeba histolytica</i> • <i>Giardia lamblia</i> • <i>Isospora belli</i> • <i>Pentatrichomonas hominis</i> • <i>Trichomonas hominis</i> <p>15 Helminths</p> <ul style="list-style-type: none"> • <i>Ancylostoma duodenale</i> • <i>Ascaris lumbricoides</i> • <i>Diphyllobothrium latum</i> • <i>Dipylidium caninum</i> • <i>Enterobius vermicularis</i> • <i>Fasciola/Fasciolopsis</i> • <i>Hymenolepis</i> • Larval nematode • <i>Mansonella</i> • <i>Necator americanus</i> • <i>Schistosoma</i> • <i>Strongyloides stercoralis</i> • <i>Taenia solium</i> • <i>Taenia</i> spp. • <i>Trichuris trichiura</i> 	
<p>6 Fungi</p> <ul style="list-style-type: none"> • <i>Candida albicans</i> • <i>Candida glabrata</i> • <i>Candida</i> spp. • <i>Geotrichum</i> spp. • <i>Microsporidium</i> spp. • <i>Rodotorula</i> spp. <p>13 Viruses</p> <ul style="list-style-type: none"> • Adenovirus F40/41 • Astrovirus • Cytomegalovirus • Enterovirus • Epstein Barr virus • Human Bocavirus • Norovirus GI Virus • Norovirus GII Virus • Rotavirus A • Sapovirus I • Sapovirus II • Sapovirus IV • Sapovirus V 	<th style="background-color: #004a7c; color: white;">Gut Inflammatory Markers</th>	Gut Inflammatory Markers
	<ul style="list-style-type: none"> • Beta defensin 2 (ng/mL) • Calprotectin (mcg/g) • Fecal Eosinophil Protein X (mcg/g) • Fecal lactoferrin (mcg/ml) • Lysozyme (ng/mL) • MMP 9 (ng/mL) • S100A12 (mcg/ml) 	
	Gut Antibodies	
	<ul style="list-style-type: none"> • Tissue transglutaminase (tTg) • Deamidated gliadin peptide (DGP) • Fecal Anti Gliadin • Actin antibody • Lipopolysaccharide (LPS) antibody • Anti-Saccharomyces cerevisiae antibody (ASCA) 	
Gut Diversity Indices	Malabsorption	
<ul style="list-style-type: none"> • Shannon's Diversity Index • Simpson's Diversity Index • Firmicutes/Bacteroidetes • Prevotella /Bacteroidetes (P/B) 	<ul style="list-style-type: none"> • Meat fiber • Vegetable fiber <p>Fat Malabsorption</p> <ul style="list-style-type: none"> • Total Fecal Fat (mg/g) • Total Fecal Triglycerides (mg/g) • Long chain fatty acids (mg/g) • Total Cholesterol (mg/g) • Total Phospholipids (mg/g) 	

Gut Commensals

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| <ul style="list-style-type: none"> • <i>Acinetobacter</i> • <i>Actinomyces</i> • <i>Akkermansia muciniphila</i> • <i>Alistipes</i> • <i>Alloprevotella</i> • <i>Atopobium</i> • <i>Atopobium parvulum</i> • <i>bacillus coagulans</i> • <i>Bacillus subtilis</i> • <i>Bacteroidales</i> • <i>Bacteroides</i> • <i>Bacteroides caccae</i> • <i>Bacteroides vulgatus</i> • <i>Bacteroidetes</i> • <i>Bifidobacterium</i> • <i>Bifidobacterium adolescentis</i> • <i>Bifidobacterium animalis</i> • <i>Bifidobacterium animalis subspecies lactis</i> • <i>bifidobacterium bifidum</i> • <i>bifidobacterium breve</i> • <i>Bifidobacterium catenulatum</i> • <i>Bifidobacterium dentium</i> • <i>Bifidobacterium infantis</i> • <i>Bifidobacterium lactis</i> • <i>Bifidobacterium longum</i> • <i>Blautia</i> • <i>Blautia hydrogenotrophica</i> • <i>Blautia obeum</i> • <i>Bradyrhizobiaceae</i> • <i>Butyricimonas</i> • <i>Butyrivibrio</i> • <i>Catenibacterium</i> • <i>Christensenella minuta</i> • <i>Clostridia cluster IV</i> • <i>Clostridia cluster XIVa</i> • <i>Clostridia cluster XVIII</i> • <i>Clostridiales Family XIV incertae sedis</i> • <i>Clostridiales incertae sedis IV</i> • <i>Clostridium</i> • <i>Clostridium hathewayi</i> • <i>Clostridium ramosum</i> • <i>Clostridium species</i> • <i>Clostridium spp.</i> • <i>Clostridium symbiosum</i> • <i>Collinsella</i> | <ul style="list-style-type: none"> • <i>Coprococcus</i> • <i>Desulfovibrio</i> • <i>Desulfovibrio piger</i> • <i>Dialister invisus</i> • <i>Dorea</i> • <i>Desulfovibrio</i> • <i>Desulfovibrio piger</i> • <i>Dialister invisus</i> • <i>Dorea</i> • <i>Eggerthella lenta</i> • <i>Enterobacteria</i> • <i>Enterobacteriaceae</i> • <i>Enterococcus</i> • <i>Enterococcus gallinarum</i> • <i>Enterococcus species</i> • <i>Enterococcus spp.</i> • <i>Escherichia coli</i> • <i>Escherichia coli nissle</i> • <i>Eubacterium</i> • <i>Eubacterium rectale</i> • <i>Eubacterium spp.</i> • <i>Faecalibacterium</i> • <i>Faecalibacterium prausnitzii</i> • <i>Fusobacterium</i> • <i>Haemophilus</i> • <i>Hafnia</i> • <i>Holdemania</i> • <i>Klebsiella aerogenes</i> • <i>Lachnospiraceae</i> • <i>Lactobacillaceae</i> • <i>Lactobacillus</i> • <i>Lactobacillus acidophilus</i> • <i>Lactobacillus animalis</i> • <i>Lactobacillus brevis</i> • <i>Lactobacillus bulgaricus</i> • <i>Lactobacillus casei</i> • <i>Lactobacillus fermentum</i> • <i>Lactobacillus paracasei</i> • <i>Lactobacillus plantarum</i> • <i>Lactobacillus reuteri</i> • <i>Lactobacillus rhamnosus</i> • <i>Lactobacillus rhamnosus GG</i> • <i>Lactobacillus ruminis</i> • <i>Lactobacillus sakei</i> • <i>Lactobacillus salivarius</i> • <i>Lactobacillus spp.</i> | <ul style="list-style-type: none"> • <i>Lactococcus</i> • <i>Leuconostoc</i> • <i>Marvinbryantia</i> • <i>Methanobrevibacter smithii</i> • <i>Mycoplana</i> • <i>Oscillospira</i> • <i>arabacteroides</i> • <i>Pediococcus</i> • <i>Peptostreptococcus species</i> • <i>Phascolarctobacterium</i> • <i>Parabacteroides</i> • <i>Pediococcus</i> • <i>Peptostreptococcus species</i> • <i>Phascolarctobacterium</i> • <i>Porphyromonas gingivalis</i> • <i>Prevotella</i> • <i>Prevotella copri</i> • <i>Propionibacterium freudenreichi</i> • <i>Proteus mirabilis</i> • <i>Pseudobutyrvibrio</i> • <i>Pseudomonas</i> • <i>Roseburia</i> • <i>Roseburia intestinalis</i> • <i>Ruminococcaceae</i> • <i>Ruminococcus</i> • <i>Ruminococcus bromii</i> • <i>Ruminococcus gnavus</i> • <i>Ruminococcus spp.</i> • <i>Saccharomyces boulardii</i> • <i>Solobacterium moorei</i> • <i>Staphylococcaceae</i> • <i>Staphylococcus</i> • <i>Staphylococcus epidermidis</i> • <i>Staphylococcus pasteurii</i> • <i>Staphylococcus species</i> • <i>Streptococci</i> • <i>Streptococcus</i> • <i>Streptococcus species</i> • <i>Streptococcus spp.</i> • <i>Streptococcus thermophilus</i> • <i>Tyzzera</i> • <i>Tyzzera 4</i> • <i>Veillonella</i> • <i>Veillonellaceae</i> • <i>β-galactosidase producing bacteria</i> • <i>β-glucuronidase producing bacteria</i> |
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Dopaminergic Pathway	Other Pathways	Serotonergic Pathway	Resistance Genes	
<ul style="list-style-type: none"> • PEA (Phenylethylamine) • Dopamine • DOPAC • HVA • Normetanephrine • VMA • 3-Methoxy-tyramine • Metanephrine • Tyrosine • Tyramine • L-DOPA • HVA / VMA Ratio • HVA / DOPAC Ratio 	<ul style="list-style-type: none"> • Glycine • Taurine • Acetylcholine • Aspartate • Serine • Oxytocin 	<ul style="list-style-type: none"> • Serotonin • 5-HIAA • 5-HTP • Tryptophan 	<ul style="list-style-type: none"> • Helicobacter - Clarithromycin • Helicobacter - Fluoroquinolones • Fluoroquinolones • Vancomycin • b-lactamase 	<ul style="list-style-type: none"> • Macrolides • Tetracycline • Aminoglycoside • Bactrim • Carbapenem • Rifampin • Polymyxins
	Kynurenine Pathway	GABAergic Pathway	Gut Phyla	
	<ul style="list-style-type: none"> • Xanthurenic acid • Quinolinic acid • Kynurenic acid • Quinolinic Acid / 5-HIAA Ratio 	<ul style="list-style-type: none"> • GABA • Glutamate 	<ul style="list-style-type: none"> • Proteobacteria • Actinobacteria • Fusobacteria • Bacteroidetes 	<ul style="list-style-type: none"> • Firmicutes • Euryarchaeota • Verrucomicrobia
Tryptamine Pathway		Histaminergic Pathway		
<ul style="list-style-type: none"> • Tryptamine 		<ul style="list-style-type: none"> • Histamine 		