NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

COMPLETE MICROBIOME MAPPING

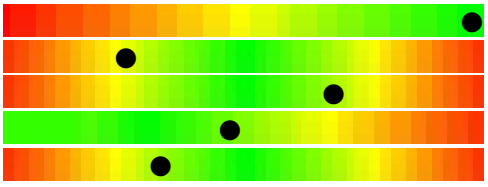
General Macroscopic Description

	Result	Markers
Stool Colour	Brown	**Colour** - Brown is the colour of normal stool. Other colours may indicate abnormal gut health.
Stool Form	Semi-formed	**Form** -Sample form is categorised using the Bristol stool chart. A comment on stool appearance can be found in the comments section.
Mucous	Not Detected	**Mucous** - Mucous production may indicate the presence of an infection and/or inflammation.
Occult Blood	Negative	**Blood (Macro)**- The presence of blood in the stool may be the result of several causes besides colorectal bleeding, including hemorrhoids or gastrointestinal infection.

Short Chain Fatty Acids

Methodology: GC/MS

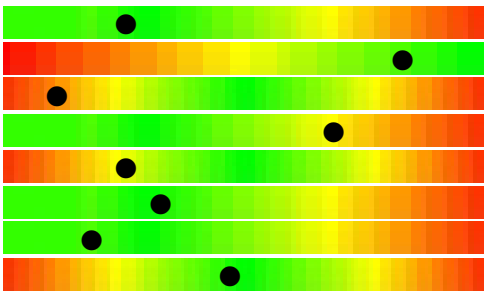
	Result	Range	Units
Short Chain Fatty Acids, Beneficial	65.6	> 13.6	umol/g
Butyrate	12.7	10.8 - 33.5	%
Acetate	67.3	44.5 - 72.4	%
Propionate	17.5	0.0 - 32.0	%
Valerate	2.5	0.5 - 7.0	%



GIT Functional Markers

Methodology: FEIA, EIA, CLIA, pH electrode

	Result	Range	Units
Calprotectin.	6.4	0.0 - 50.0	ug/g
Pancreatic Elastase	304.0	> 200.0	ug/g
Secretory (sIgA)	*208.7* *L	510.0 - 2040.0	ng/mL
Zonulin	88.5	0.0 - 107.0	ng/mL
Beta glucuronidase	1119.9	368.0 - 6266.0	U/g
Steatocrit	2.0	0.0 - 10.0	%
a-Transglutaminase IgA	<20	0.0 - 100.0	units/L
pH	7.0	6.3 - 7.7	



Microbiome Mapping Summary

Parasites & Worms

Dientamoeba fragilis.
Endolimax nana

Bacteria & Viruses

Desulfovibrio piger

Mycology

Key Phyla Microbiota

Firmicutes:Bacteroidetes Ratio	0.60	< 1.00	RATIO

Relative Commensal Abundance of the 6 Phyla groups can be found on page 6 of this report

NutriPATH
Integrative Pathology Services
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Parasites and Worms.	Result	Range	Units
Parasitic Organisms			
Cryptosporidium species	<dl	< 1.0	x10^5 org/g
Entamoeba histolytica.	<dl	< 1.0	x10^5 org/g
Giardia intestinalis	<dl	< 1.0	x10^5 org/g
Blastocystis hominis.	<dl	< 1.0	x10^5 org/g
Dientamoeba fragilis.	12.4 *H	< 1.0	x10^5 org/g
Endolimax nana	3.0 *H	< 1.0	x10^5 org/g
Entamoeba coli.	<dl	< 5.0	x10^5 org/g
Pentatrichomonas hominis	<dl	< 1.0	x10^5 org/g

Worms

Ancylostoma duodenale, Roundworm	Not Detected		
Ascaris lumbricoides, Roundworm	Not Detected	Necator americanus, Hookworm	Not Detected
Trichuris trichiura, Whipworm	Not Detected	Enterobius vermicularis,Pinworm	Not Detected
Enterocytozoon spp	Not Detected	Hymenolepis spp, Tapeworm	Not Detected
Strongyloides spp, Roundworm	Not Detected	Taenia species, Tapeworm	Not Detected

Comment: Not Detected results indicate the absence of detectable DNA in the sample for the worms reported.
NOTE: Reflex testing is performed on clinically indicated samples

Opportunistic Bacteria/Overgrowth	Result	Range	Units
Bacillus species.	<dl	< 1.00	x10^4 CFU/g
Enterococcus faecalis	<dl	< 1.00	x10^5 CFU/g
Enterococcus faecium	<dl	< 1.00	x10^5 CFU/g
Morganella species	<dl	< 1.00	x10^5 CFU/g
Pseudomonas species	<dl	< 1.00	x10^4 CFU/g
Pseudomonas aeruginosa.	<dl	< 3.00	x10^4 CFU/g
Staphylococcus species	<dl	< 1.00	x10^3 CFU/g
Staphylococcus aureus	<dl	< 5.00	x10^3 CFU/g
Streptococcus agalactiae.	<dl	< 3.00	x10^4 CFU/g
Streptococcus anginosus.	<dl	< 1.00	x10^6 CFU/g
Streptococcus mutans.	<dl	< 1.00	x10^4 CFU/g
Streptococcus oralis.	<dl	< 1.00	x10^6 CFU/g
Streptococcus salivarius.	0.27	< 5.00	x10^6 CFU/g
Methanobrevibacter smithii	<dl	< 1.00	x10^5 CFU/g
Desulfovibrio piger	21.72 *H	< 18.00	x10^6 CFU/g
Enterobacter cloacae complex.	<dl	< 5.00	x10^5 CFU/g
Potential Autoimmune Triggers			
Citrobacter species.	<dl	< 5.00	x10^4 CFU/g
Citrobacter freundii complex.	1.53	< 5.00	x10^4 CFU/g
Klebsiella species	<dl	< 5.00	x10^3 CFU/g
Klebsiella pneumoniae complex.	2.00	< 5.00	x10^5 CFU/g
Prevotella copri	<dl	< 1.00	x10^9 CFU/g
Proteus species	<dl	< 5.00	x10^5 CFU/g
Proteus mirabilis.	<dl	< 1.00	x10^4 CFU/g
Fusobacterium species	0.64	< 20.00	x10^4 CFU/g

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Mycology	Result	Range	Units
Candida dubliniensis.	<dl	< 1.00	x10^5 CFU/g
Candida glabrata.	<dl	< 1.00	x10^5 CFU/g
Candida intermedia.	<dl	< 1.00	x10^5 CFU/g
Candida krusei.	<dl	< 1.00	x10^5 CFU/g
Candida lambica.	<dl	< 1.00	x10^5 CFU/g
Candida lusitaniae.	<dl	< 1.00	x10^5 CFU/g
Candida parapsilosis.	<dl	< 1.00	x10^5 CFU/g
Candida tropicalis.	1.20 *H	< 1.00	x10^5 CFU/g
Candida albicans.	<dl	< 1.00	x10^5 CFU/g
Candida famata.	<dl	< 1.00	x10^5 CFU/g
Candida keyfr.	<dl	< 1.00	x10^5 CFU/g
Candida lipolytica.	<dl	< 1.00	x10^5 CFU/g
Geotrichum species.	<dl	< 1.00	x10^5 CFU/g
Rhodotorula species.	<dl	< 1.00	x10^5 CFU/g
Saccharomyces cerevisiae:	<dl	< 1.00	x10^5 CFU/g

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Bacterial Pathogens:	Result	Range	Units
Aeromonas hydrophila.	<dl	< 1.00	x10^3 CFU/g
Campylobacter species.	<dl	< 1.00	x10^5 CFU/g
C. difficile, Toxin A	<dl	< 1.00	x10^4 CFU/g
C. difficile, Toxin B	<dl	< 1.00	x10^4 CFU/g
Enteroaggregative E. coli	<dl	< 1.00	x10^3 CFU/g
Enteropathogenic E. coli	<dl	< 1.00	x10^3 CFU/g
E. coli O157	<dl	< 1.00	x10^2 CFU/g
Hypervirulent Clostridium difficile	<dl	< 1.00	x10^3 CFU/g
Enteroinvasive E. coli/Shigella	<dl	< 1.00	x10^3 CFU/g
Enterotoxigenic E. coli LT/ST	<dl	< 1.00	x10^5 CFU/g
Salmonella species.	<dl	< 1.00	x10^5 CFU/g
Shiga toxigenic E.coli	<dl	< 1.00	x10^3 CFU/g
Vibrio species.	<dl	< 1.00	x10^4 CFU/g
Yersinia species.	<dl	< 1.00	x10^5 CFU/g
Helicobacter pylori	<dl	< 1.0	x10^3 CFU/g

Comment: Helico Pylori virulence factors will be listed below if detected POSITIVE

Gene: A2142C	Not Detected		
Gene: A2142G	Not Detected		
Gene: A2143G	Not Detected		
H.pylori Virulence Factor, babA	Not Detected	H.pylori Virulence Factor, cagA	Not Detected
H.pylori Virulence Factor, oipA	Not Detected	H.pylori Virulence Factor, vacA	Not Detected
H.pylori Virulence Factor, virB	Not Detected	H.pylori Virulence Factor, virD	Not Detected

Viral Pathogens	Result	Range	Units
Adenovirus 40/41	Not Detected		
Norovirus GI/II	Not Detected		
Rotavirus A	Not Detected		
Sapovirus (I,II,IV,V)	Not Detected		
Astrovirus (hAstro)	Not Detected		

GIT Functional markers performed by GCMS,EIA,FEIA.
Bacteriology,Virology,Fungi,Parasites & Worms performed by PCR,qPCR.
<dl = result below detectable limit. *H = Result greater than the reference range. *L = Result less than the reference range

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

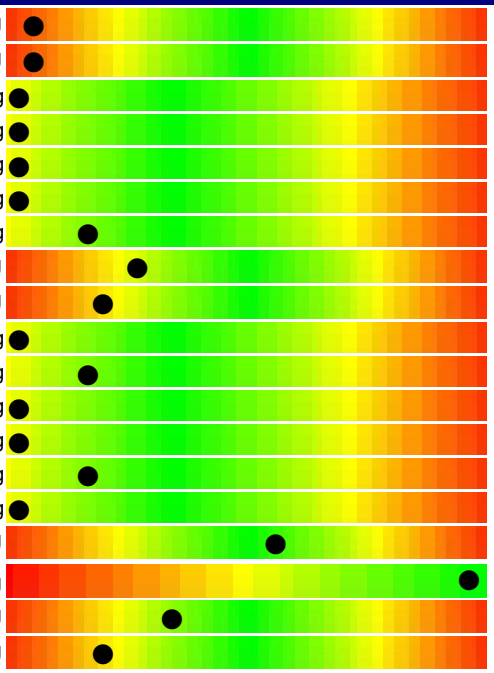
3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Normal Bacterial GUT Flora.	Result	Range	Units
Bacteroides fragilis	1.0*L	1.6 - 250.0	x10^5 CFU/g
TOTAL BIFIDOBACTERIA	2.0*L	5.0 - 2000.0	x10^6 CFU/g
Bifidobacterium adolescentis	<dl	4.6 - 1000.0	x10^6 CFU/g
Bifidobacterium bifidum.	<dl	4.6 - 1000.0	x10^6 CFU/g
Bifidobacterium breve.	2.0 *L	4.6 - 1000.0	x10^6 CFU/g
Bifidobacterium longum	<dl	4.6 - 1000.0	x10^6 CFU/g
Enterococcus species	5.4	1.9 - 2000.0	x10^3 CFU/g
Escherichia species	405.1	3.7 - 3800.0	x10^4 CFU/g
TOTAL LACTOBACILLI	9.5	1.7 - 3000.0	x10^3 CFU/g
Lactobacillus acidophilus.	<dl	1.7 - 500.0	x10^3 CFU/g
Lactobacillus casei.	3.5	1.7 - 500.0	x10^3 CFU/g
Lactobacillus delbrueckii	<dl	1.7 - 500.0	x10^3 CFU/g
Lactobacillus plantarum.	<dl	1.7 - 500.0	x10^3 CFU/g
Lactobacillus rhamnosus	6.0	1.7 - 500.0	x10^3 CFU/g
Lactobacillus salivarius	<dl	1.7 - 500.0	x10^3 CFU/g
Clostridium species	31.9	5.0 - 50.0	x10^7 CFU/g
Oxalobacter formigenes	8.88	> 5.00	x10^6 CFU/g
Akkermansia muciniphila	10.26	1.00 - 50.00	x10^7 CFU/g
Faecalibacterium prausnitzii	301.6	100.0 - 3500.0	x10^6 CFU/g



A total count of Lactobacillus and Bifidobacterium has been included to offer a broad overview of the species present in the microbiome, which may assist in guiding clinical treatment decisions. However, identifying individual strains of Lactobacillus and Bifidobacterium can yield more detailed and clinically specific information, as different strains exhibit distinct physiological effects, as outlined in the probiotics action chart below.

Actions

	L. plantarum HEAL9	L. paracasei 8700:2	L. plantarum HEAL19	L. plantarum 6595	L. plantarum 299V	L. rhamnosus GG	L. acidophilus LA02	B. animalis subsp. lactis BS01	L. casei LC03	B. breve BR03	L. fermentum LF08	L. crispatus strains	B. animalis subsp. lactis BA05	L. plantarum LP01	L. rhamnosus LR06	B. longum 04	L. fermentum LF16	L. salivarius LS01	B. breve B632	L. fermentum LF10	L. salivarius LS03	L. helveticus Rosell-52	L. rhamnosus Rosell-11	B. longums Rosell-75	S. boulardii CNCM I-1079	S. thermophilus FP4
Intestinal epithelial barrier health				•	•	•			•	•								•				•	•		•	
Mucous membrane health				•		•																	•		•	
Normalisation of bowel movements					•	•	•	•		•				•								•				
Normalisation of bloating					•	•	•	•		•				•												
Normalisation of peristalsis					•	•	•	•		•				•											•	
Autoimmune immunomodulation	•	•	•		•	•																				
Inhibition of pathogenic overgrowth				•	•	•				•									•		•	•	•	•	•	
Inactivate microbial toxins																									•	
Increase infection resistance	•	•		•		•		•														•		•	•	
Th1/Th2 immune cell modulation						•				•								•	•			•	•			
Staphylococci inhibition										•								•								
Gut-brain axis support					•									•	•	•	•					•		•		
GABA production						•			•																	
Bone resorption inhibition	•	•	•																							
E. coli inhibition										•				•	•				•			•	•	•	•	
Oxalate degradation						•	•							•												

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

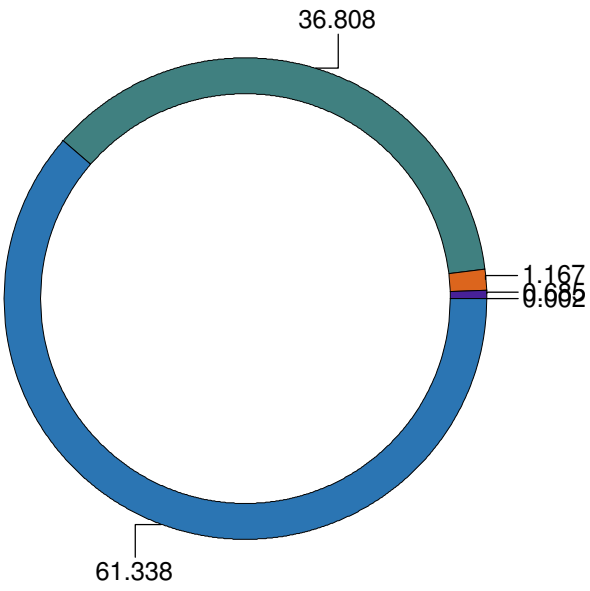
LAB ID :	4034109
UR NO. :	6315237
Collection Date :	15-Oct-2024
Received Date:	16-Oct-2024

4034109

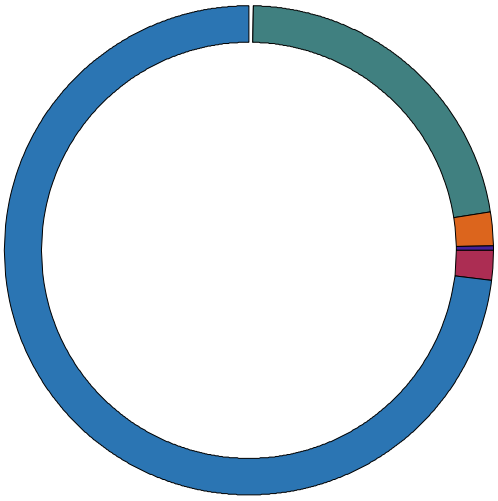
Introduction:
Your gut microbiome is a collective name for the 40 trillion cells and up to 1000 microbial species that include bacteria, viruses, fungi, parasites, and archaea and reside in our gut. The number of gut bacterial cells is approximately equal to the total number of human cells in our body, so if we consider only cell counts, we are only about half human. In terms of gene counts, the microbiome contains about 200 times more genes than the human genome, making bacterial genes responsible for over 99% of our body's gene content! Of all the microbial communities in the human body, the gut microbiome is by far the most dense, diverse, and physiologically important ecosystem to our overall health.

Relative Commensal Abundance	Result	Range	Units
Bacteroidetes Phylum	61.338	50.000 - 95.000	%
Firmicutes Phylum	36.808	3.500 - 40.000	%
Proteobacteria Phylum	1.167	0.050 - 12.500	%
Verrucomicrobia Phylum	0.685	0.000 - 2.400	%
Actinobacteria Phylum	0.002	0.001 - 4.818	%
Euryarchaeota Phylum	0.000	0.000 - 0.010	%

Your Phyla:



Healthy Phyla:



References:
NOTE: Relative abundance reference ranges have been based on a healthy population study.
King CH, et., al. (2019) Baseline human gut microbiota profile in healthy people and standard reporting template. PLoS One. 2019 Sep 11;14(9):e0206484.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Pathogen Summary:

Macroscopy Comment

BROWN coloured stool is considered normal in appearance.

Faecal Occult Blood Negative:
Faecal occult blood has not been detected in this specimen. If the test result is negative and clinical symptoms persist, additional follow-up testing using other clinical methods is recommended.

Metabolism Comment

In a healthy gut Short Chain Fatty Acids (SCFAs) exhibited in the following proportions; Butyrate, Acetate, Propionate (16%:60%:24%).
The primary SCFAs butyrate, propionate and acetate are produced by predominant commensal bacteria via fermentation of soluble dietary fibre and intestinal mucus glycans.

Key producers of SCFAs include Faecalibacterium prausnitzii, Akkermansia mucinphila, Bacteroides fragilis, Bifidobacterium, Clostridium and Lactobacillus Spp.
The SCFAs provide energy for intestinal cells and regulate the actions of specialised mucosal cells that produce anti-inflammatory and antimicrobial factors, mucins that constitute the mucus barriers, and gut active peptides that facilitate appetite regulation and euglycemia. Abnormal SCFAs may be associated with dysbiosis, intestinal barrier dysfunction and inflammatory conditions.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

GIT Markers Comment

PANCREATIC ELASTASE: Normal exocrine pancreatic function.
Pancreatic Elastase reflects trypsin, chymotrypsin, amylase and lipase activity.
This test is not affected by supplements of pancreatic enzymes.
Healthy individuals should be producing >500 ug/g of PE-1 under normal/healthy conditions.
PE-1 levels between 200 - 500 ug/g may indicate suboptimal production.
PE-1 levels <200 ug/g indicate clear inadequate production.
The clinician should therefore consider digestive enzyme supplementation if one or more of the following conditions is present:
Loose watery stools, Undigested food in the stools, Post-prandial abdominal pain, Nausea or colicky abdominal pain, Gastroesophageal reflux symptoms, Bloating or food intolerance.

Testing performed by chemiluminescence immunosassay (CLIA).
CALPROTECTIN Normal:
Faecal calprotectin values <50 ug/g are not indicative of inflammation in the gastrointestinal tract. Subjects with low faecal calprotectin levels normally do not need to be further investigated by invasive procedures. In patients with strong clinical indications of intestinal inflammation, repeat testing may be useful.

Test performed by Diasorin Liaison XL chemiluminescent immunoassay (CLIA).

LOW SECRETORY IGA:
Secretory IgA represents the first line of defence of the gastrointestinal mucosa and is central to the normal function of the gastrointestinal tract as an immune barrier.

Secretory IgA binds to invading microorganisms and toxins and entrap them in the mucus layer or within the epithelial cells, so inhibiting microbial motility, agglutinating the organisms, and neutralising their exotoxins and then assist in their harmless elimination from the body in the faecal flow. sIgA also 'tags' food as acceptable, so low sIgA leads to increased sensitivity to foods. Several studies link stress and emotionality with levels of sIgA. Production is adversely affected by stress, which is mediated by cortisol levels.
Often low levels of Secretory IgA correlates with low beneficial flora levels and an increase in pathogenic and parasitic organism being present.

Treatment: Investigate the root cause and rule out parasitic organisms or pathogenic bacteria. Consider the use of probiotics (saccharomyces boulardii), choline, essential fatty acids, glutathione, glycine, glutamine, phosphatidylcholine, Vitamin C and Zinc which are all required for efficient production of Secretory IgA.
PLEASE NOTE: A low Secretory IgA should be reviewed in conjunction with the stool formation. An artefactually low level may be due to fluid dilution effects in a watery or unformed/loose stool sample.

ZONULIN HIGH NORMAL:
Zonulin is a protein that modulates intestinal barrier function and can also be considered as a potential inflammatory marker. Although this result is within range, the result should be interpreted with patient clinical symptoms as well as reviewing the presence of other proteobacteria that may be the result of increased Zonulin.

beta-GLUCORONIDASE NORMAL:
B-Glucuronidase is considered normal and is within reference range.

Parasites/Worms Comment

ELEVATED DIENTAMOEBA FRAGILIS LEVEL:
Dientamoeba fragilis appears to be extremely common and may have a cosmopolitan distribution, although there are large variations in prevalence. Dientamoeba fragilis has been linked to intestinal symptoms, especially in children. The most common symptoms associated with this organism are abdominal pain, intermittent diarrhoea, bloating and anorexia.

TREATMENT SUGGESTIONS:
Mild symptoms are self-limiting.
If treatment is warranted, metronidazole for 10 days or a single 2g dose of Tinidazole may be used. Tetracycline has also proven effective in adults.
Rule out allergy to above medication before prescribing/taking. Consult ID specialist if patient is showing severe symptoms or immunocompromised.

ELEVATED ENDOLIMAX NANA LEVEL:
Endolimax is generally considered a non-pathogenic commensal protozoon parasitizing the human colon, however, some studies suggest infection may be associated with intestinal mucosa irritation, diarrhea, urticaria or polyarthritis. Transmission is through faecal-oral route or contaminated food (particularly raw vegetables) or water.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID :	**4034109**
UR NO. :	**6315237**
Collection Date :	**15-Oct-2024**
Received Date:	**16-Oct-2024**

4034109

TREATMENT SUGGESTIONS:
If treatment is warranted metronidazole or diphetarsone has proven effective. Rule out allergy to above medication before prescribing/taking. Consult ID specialist if patient is showing severe symptoms or immunocompromised.

Opportunistic Bacteria Comment

DESULFOVIBRIO PIGER ELEVATED:

PHYLUM: Proteobacterium

DESCRIPTION:
Desulfovibrio piger is part of a group called sulfate-reducing bacteria (SRB) and are normal inhabitants of the intestine. Sulfate is present in different concentrations in the intestine dependent on diet. Remnants not absorbed, alongside the presence of lactate, promote the growth of SRB. Desulfovibrio Piger has been implicated in gastrointestinal disorders such as ulcerative colitis via the reduction of sulfate to hydrogen sulfide in the gut. High Delsulfovibrio piger levels may be associated with diarrhea or inflammatory bowel disease.

TREATMENT SUGGESTIONS:
Treatment options include lowering the intake of sulfate rich foods such as some breads, dried fruits, beers, ciders and wines. It is also suggested to avoid foods high in fat.

Fungi/Yeasts Comment

CANDIDA TROPICALIS ELEVATED:
Candida tropicalis is a common gut inhabitant that can become pathogenic under certain conditions. Overgrowth of C. tropicalis can cause symptoms such as abdominal pain, bloating, and changes in bowel habits. It is known for its potential to translocate across the gut barrier, leading to systemic infections, especially in immunocompromised patients.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

Normal Bacterial Flora Comment

BACTEROIDES FRAGILIS LOW:

PHYLUM: Bacteroidetes

DESCRIPTION: Bacteroides fragilis is an anaerobic, Gram-negative bacterium. It is part of the normal microbiota of the human colon and is generally commensal. Bacteroides fragilis plays an intricate role in the human colon and usually has a beneficial relationship with the host. Low Bacteroides fragilis levels have been associated with inflammatory bowel disease and Crohn's.

TREATMENT SUGGESTIONS: Treatment may involve the use of probiotics and dietary modification.

BIFIDOBACTERIUM ADOLESCENTIS LOW:

PHYLUM: Actinobacteria

DESCRIPTION:
Bifidobacterium adolescentis is an anaerobic species of bacteria found in the gastrointestinal tracts of humans. It is one of the most abundant and prevalent Bifidobacterium species commonly found in adults. It contributes to the production of GABA, a neurotransmitter that plays a role in reducing stress and anxiety. Some strains can synthesise B vitamins, such as folic acid. B. adolescentis enhances the growth of all bifidobacteria.

TREATMENT SUGGESTIONS:
Consider a probiotic supplement containing B. adolescentis and consuming prebiotic-rich foods like garlic, onions, and whole grains. Increase dietary fibre from fruits, vegetables, and legumes, and incorporate fermented foods such as yogurt and kefir.

BIFIDOBACTERIUM BIFIDUM LOW:

PHYLUM: Actinobacteria

DESCRIPTION:
Bifidobacterium bifidum is a Gram-positive, anaerobic bacterium integral to the human gut microbiota, especially in infants. It ferments a variety of carbohydrates, including human milk oligosaccharides, aiding in digestion, and promoting a healthy gut flora. B. bifidum produces short-chain fatty acids that lower gut pH and inhibit pathogenic bacteria while supporting intestinal cells. It also modulates the immune system, enhancing immune responses and reducing inflammation, and strengthens the intestinal barrier. Clinically, B. bifidum has shown promise in alleviating gastrointestinal disorders.

BIFIDOBACTERIUM BREVE LOW:

PHYLUM: Actinobacteria

DESCRIPTION:
Bifidobacterium breve is a Gram-positive, anaerobic bacterium that is commonly found in the human gastrointestinal tract, particularly in the intestines of infants. B. breve is known for its ability to metabolise various carbohydrates, including human milk oligosaccharides, which is essential for the development of a healthy gut flora in newborns.
Studies demonstrate that B. breve exhibits several beneficial properties, including the production of short-chain fatty acids (SCFAs) such as acetate, which contribute to gut health by lowering pH and inhibiting the growth of pathogenic bacteria.
Additionally, B. breve may alleviate symptoms of irritable bowel syndrome (IBS) and improve symptoms of atopic dermatitis.

BIFIDOBACTERIUM LONGUM LOW:

PHYLUM: Actinobacteria

DESCRIPTION:
Bifidobacterium longum is a Gram-positive, catalase-negative, rod-shaped bacterium present in the human gastrointestinal tract and one of the Bifidobacterium species. It can induce and regulate immune responses, reduce the expression of inflammatory cytokines, and maintain the normal intestinal barrier function.

Bifidobacterium longum is a clinically effective, well-established, multifunctional probiotic that has a long history of human use in alleviating gastrointestinal, immunological, and infectious diseases such as constipation, antibiotic associated diarrhoea, irritable bowel syndrome and ulcerative colitis. Low levels may be associated with irritable bowel syndrome, asthma, autism, depressive disorder and with pathogenic bacteria infection.

TREATMENT SUGGESTIONS: Treatment may involve the use of Bifidobacterium longum containing probiotics and treatment of any intestinal infections.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

LACTOBACILLUS ACIDOPHILUS LOW:

PHYLUM: Firmicutes

DESCRIPTION:
Lactobacillus acidophilus is a Gram-positive, rod-shaped, non-spore-forming bacterium commonly found in the human gut and fermented foods. It plays a key role in oxalate degradation, bowel normalisation and may assist patients with bloating.

TREATMENT SUGGESTIONS:
Consider probiotic supplementation containing L. acidophilus.

LACTOBACILLUS DELBRUECKII LOW:

PHYLUM: Firmicutes

DESCRIPTION:
Lactobacillus delbrueckii is a beneficial Gram-positive bacterium commonly found in the gut microbiome and known for its role in maintaining gastrointestinal health. It produces lactic acid through the fermentation of carbohydrates, contributing to a lower gut pH, which inhibits the growth of pathogenic microorganisms such as Clostridium and Candida species. Additionally, L. delbrueckii can enhance the intestinal barrier function and modulate the host immune response by promoting the production of anti-inflammatory cytokines. Its presence in the gut is associated with improved digestion and nutrient absorption, making it an important component in supporting overall gut health and microbial balance.

LACTOBACILLUS PLANTARUM LOW:

PHYLUM: Firmicutes

DESCRIPTION:
Lactobacillus plantarum is a Gram-positive, non-spore-forming, rod-shaped bacterium. L. plantarum plays a crucial role in gut health by enhancing intestinal barrier function, modulating the immune system, and inhibiting pathogenic bacteria. Additionally, it is beneficial for conditions such as irritable bowel syndrome, ulcerative colitis, and high cholesterol.

TREATMENT SUGGESTIONS:
Consider probiotic supplementation containing L. plantarum.

LACTOBACILLUS SALIVARIUS LOW:

PHYLUM: Firmicutes

DESCRIPTION:
Lactobacillus salivarius is a Gram-positive, rod-shaped, non-spore-forming bacterium predominantly found in the human oral cavity, gastrointestinal tract, and vagina. It plays a significant role in maintaining oral and gut health by producing lactic acid and bacteriocins, which inhibit the growth of pathogenic bacteria. L. salivarius enhances gut barrier function, modulates the immune system, and helps in the digestion of proteins and complex carbohydrates. It has been studied for its potential benefits in managing conditions such as irritable bowel syndrome (IBS), periodontal disease, and atopic dermatitis, highlighting its importance in promoting overall health and preventing infections.

TREATMENT SUGGESTIONS:
Consider L. salivarius as a probiotic strain which may improve intestinal permeability and immune response.

NutriPATH
INTEGRATIVE PATHOLOGY SERVICES
P: 1300 688 522
E: info@nutripath.com.au

-.DINA SAVITZ
24 STEWART STREET
BONDI NORTH NSW 2026

SOPHIE BLOOM
06-Oct-1988 Female

3 SANDRIDGE STREET
BONDI NSW 2026

LAB ID : 4034109
UR NO. : 6315237
Collection Date : 15-Oct-2024
Received Date: 16-Oct-2024

4034109

The Four "R" Treatment Protocol

REMOVE	Using a course of antimicrobial, antibacterial, antiviral or anti parasitic therapies in cases where organisms are present. It may also be necessary to remove offending foods, gluten, or medication that may be acting as antagonists. Consider testing IgG96 foods as a tool for removing offending foods.	ANTIMICROBIAL	Oil of oregano, berberine, caprylic acid
		ANTIBACTERIAL	Liquorice, zinc carnosine, mastic gum, tribulus, berberine, black walnut, caprylic acid, oil of oregano
		ANTIFUNGAL	Oil of oregano, caprylic acid, berberine, black walnut
		ANTIPARASITIC	Artemesia, black walnut, berberine, oil of oregano
		ANTIVIRAL	Cat's claw, berberine, echinacea, vitamin C, vitamin D3, zinc, reishi mushrooms
		BIOFILM	Oil of oregano, protease
REPLACE	In cases of maldigestion or malabsorption, it may be necessary to restore proper digestion by supplementing with digestive enzymes.	DIGESTIVE SUPPORT	Betaine hydrochloride, tilactase, amylase, lipase, protease, apple cider vinegar, herbal bitters
REINOCULATE	Recolonisation with healthy, beneficial bacteria. Supplementation with probiotics, along with the use of prebiotics helps re-establish the proper microbial balance.	PREBIOTICS	Slippery elm, pectin, larch arabinogalactans
		PROBIOTICS	Bifidobacterium animalis sup lactise, lactobacillus acidophilus, lactobacillus plantarum, lactobacillus casei, bifidobacterium breve, bifidobacterium bifidum, bifidobacterium longum, lactobacillus salivarius ssp salivarius, lactobacillus paracasei, lactobacillus rhamnosus, Saccaromyces boulardii
REPAIR & REBALANCE	Restore the integrity of the gut mucosa by giving support to healthy mucosal cells, as well as immune support. Address whole body health and lifestyle factors so as to prevent future GI dysfunction.	INTESTINAL MUCOSA IMMUNE SUPPORT	Saccaromyces boulardii, lauric acid
		INTESTINAL BARRIER REPAIR	L-Glutamine, aloe vera, liquorice, marshmallow root, okra, quercetin, slippery elm, zinc carnosine, Saccaromyces boulardii, omega 3 essential fatty acids, B vitamins
		SUPPORT CONSIDERATION	Sleep, diet, exercise, and stress management