



Verisana LAB · Suite LP22190 · Lower Ground Floor ·
145-157 St John Street · London · EC1V 4PW

John Smith
Sample Street
Anytown

Surname, First name	Smith, John
DOB	01-01-1990
Sex	male
Laboratory #	20000001
Date collected	01-01-2019
Date received	01-01-2019
Report date	03-01-2019

Laboratory report

Enclosed you will find the results of your laboratory examination. In addition to your results you will also receive a brief summary of the correlating effects, regarding the tested parameters. These are compiled without any knowledge on the clinical background and as such, may only be used as an interpretation aid. In case of health problems, please consult a doctor or practitioner for medical treatment and accompaniment for making the best decisions for your health. We explicitly warn against beginning, suspending or changing any medication or therapy without consulting your doctor or practitioner.

Test: Gut Flora & Biome Analysis

Sample material: stool

Analyte	Result	Reference range	Result
Aerobic Bacteria			
Escherichia coli	>10 ⁷ KbE/ml	10 ⁶ -10 ⁷ KbE/ml	
Proteus spec.	10 ⁷ -10 ⁹	< 10 ⁴	
Citerobacter spec.	10 ⁷ -10 ⁹	< 10 ⁴	

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Analyte	Result	Reference range	Result
Klebsiella spec.	10^7-10^9	$< 10^4$	
Other enterobacteriaceae	10^7-10^9	$< 10^4$	
Enterococci	$< 10^4$	10^6-10^7	
Pseudomonas spec.	10^7-10^9	$< 10^4$	
Anaerobic Bacteria			
Bacteroides spec.	$< 10^7$	10^9-10^{11}	
Bifidobacteria spec.	$< 10^7$	10^9-10^{11}	
Lactobacilli spec.	10^4	10^5-10^7	
Clostridia spec.	10^7-10^9	$< 10^5$	
Stool ph value			
Ph-Value	6,8	6,2-6,8	
Yeast/Fungi			
Candida albicans	10^7-10^9 cfu/ml	$< 10^2$ cfu/ml	
Candida spec.	10^7-10^9	$< 10^2$	
Geotrichum candidum	10^3-10^4	$< 10^3$	
Yeast	positiv	negative	
Mouth Swab	10^5-10^6	$< 10^2$	

Escherichia coli (E. coli) is a minority member of the gut microbiome, but a very important one. E. coli bacteria normally live in the intestines of healthy people and stimulates the intestinal immune



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system (GALT). Ample amounts of Escherichia coli have been associated with a balanced gut flora. Many of us host a population of E. coli in our gut that aids digestion and protects us from other harmful microbes. E. coli ferments to produce folic acid, vitamin K2 (this protects against osteoporosis), Co-enzyme Q10 (essential for mitochondrial function), together with 3 amino acids, namely tyrosine and phenylalanine (these are pre-cursors of dopamine, lack of which results in low mood) and tryptophan. Tryptophan is a pre-cursor of serotonin, which is responsible for gut motility. Increased E. coli indicates putrefaction in the intestine and may burden the body with metabolic toxins. Potential causes may be reduced immunity of the intestinal mucosa, low counts of bifidobacteria, excess supply of protein.

As a particularly active proteolytic germ, proteus can burden the body considerably through its metabolic toxins.

Citrobacter species are member of the Enterobacteriaceae family and are less commonly identified as pathogens.

Some Citrobacter strains can cause diarrheal disease. Citrobacter thrive on thrive on Fructooligosaccharides (FOS).

Klebsiella is a bacterium, which belongs to the Enterobacteriaceae family. Klebsiella can be found in the gastrointestinal tract of humans. Klebsiella overgrowth is commonly asymptomatic. Some strains of Klebsiella may cause diarrhea and some are enterotoxigenic. A low-starch diet may be helpful if high levels of Klebsiella are present.

Increased enterobacteriaceae indicate disturbances of the intestinal flora, malnutrition or digestive insufficiencies. A larger amount of these bacteria does not belong in the normal intestinal flora. Their multiplication often results from past antibiotics.

Decreased Enterococci in the stool indicates disturbances in balance of the intestinal flora. Enterococci produce short-chain fatty acids during the carbohydrate utilisation, which contributes to the acidification and stabilisation of the intestinal environment. As an important contribution to the intestinal milieu, they produce bacteriostatic substances.

Increased Pseudomonas may be due to an earlier antibiotic therapy.

Bacteroides is the most abundant bacteria in the microflora, which allows us to digest soluble fibre and make short chain fatty acids. Decreased bacteroides indicate a lowered resistance to pathogenic species (such as salmonella, shigella and clostridia). As oxygen kills bacteroides, there is no probiotic containing it.



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Bifidobacteria make up a significant portion of the human gut flora. Along with Lactobacillia and Enterococci, Bifidobacteria control potentially pathogenic organisms and stimulate the intestinal immune system (GALT). Bifidobacteria metabolize carbohydrates only. By doing so, they produce short chain fatty acids, which acidify the intestine and counteract pathogenic organisms. Decreased Bifidobacteria indicate deficiencies in colonisation resistance, putrefaction in the intestine and can promote constipation.

Lactobacilli is a lactic acid forming bacteria, which produces large amounts of short chain fatty acids (SCFA). SCFAs lower the intestinal pH and thereby make the environment alkaline and unsuitable for microbial pathogens (e.g. yeast). In addition, Lactobacilli secrete antifungal and antimicrobial agents. Decreased Lactobacilli indicate disturbances of the intestinal flora.

Clostridia are prevalent flora in a healthy intestine. As clostridia produce gases it may cause flatulence. Increased Clostridia indicates putrefaction in the intestine and may burden the body with metabolic toxins. Increased clostridia are often found in older people due to changes in their nutrition. Clostridium difficile and Clostridium perfringens are one cause of antibiotic-associated diarrhea.

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Geotrichum candidum is higher than the reference range. Mould fungi spores reach the intestine through food or over the mucous membranes. Due to no oxygen in the intestine they are normally incapable of causing mycoses in this area.

The enclosed mouth swab showed moderate amounts of facultative pathogenic yeasts.

Yours sincerely,
Your laboratory team