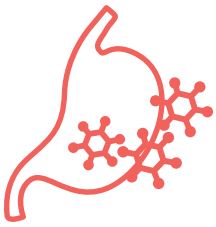
Healthpath Pro's Gut Health Tests

BIOMARKERS

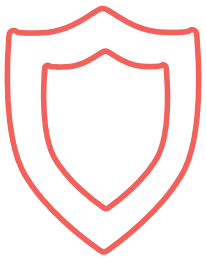
Healthpath Pro's GI Pro **Essential**, **Advanced** and **Ultimate Gut Health Tests** show you what's going on in your gut. By looking at imbalances in bacteria, yeasts, parasites and other intestinal health biomarkers, you find out what's contributing to your symptoms.

The biomarkers provide clinical information on three key areas:



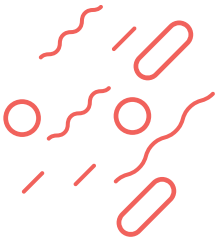
1 | Digestion/Absorption

- pH
- Pancreatic elastase
- Zonulin
- Digestive Residues



2 | Immune activity/ Inflammation

- Calprotectin
- Haemoglobin
- Secretory IgA
- H. Pylori
- Archaea/methanogens
- E. Coli, Lactobacillus species, Enterococcus species
- Akkermansia muciniphila, Faecalibacterium prausnitzii

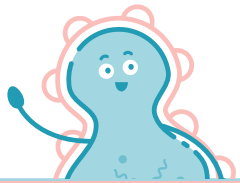


3 | Gut microbiome/ Mycobiome

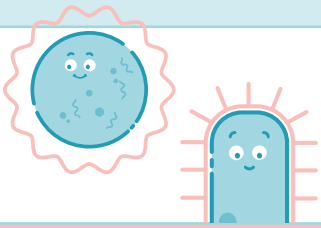
- Microbiome diversity
- Enterotype
- Dysbiosis index
- Actinobacteria
- Bacteroidetes
- Firmicutes
- Proteobacteria
- Fusobacteria
- Verrucomicrobia
- Hydrogen-sulphide production
- Oxalate-degrading bacteria
- Yeasts
- Parasites
- Helminths

Clinical advantages of the qPCR technology used in Healthpath Pro tests

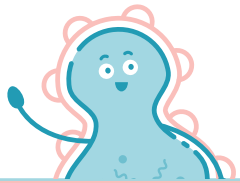
This new method of analysis allows for a single sample. This makes the process easier for everyone, and it's particularly helpful for children and those struggling with diarrhoea or constipation.



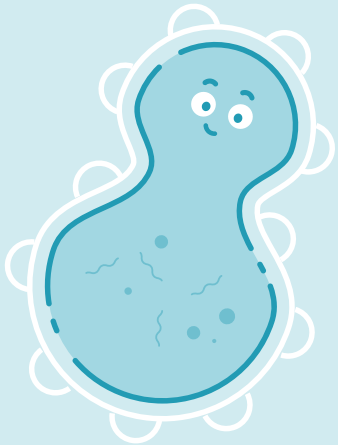
	GI Pro Essential	GI Pro Advanced
Stool properties		
Colour	✓	✓
Consistency	✓	✓
pH	✓	✓
Biodiversity		
Diversity	✓	✓
Dysbiosis index	✓	✓
Bacterial distribution		
Actinobacteria	✓	✓
Bacteroidetes	✓	✓
Firmicutes	✓	✓
Fusobacteria	✓	✓
Proteobacteria	✓	✓
Verrucomicrobia	✓	✓
Other	✓	✓
Firmicutes/ Bacteroidetes Ratio	✓	✓
Enterotype		
1, 2 or 3	✓	✓

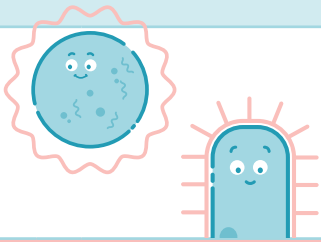


	GI Pro Essential	GI Pro Advanced
Actinobacteria		
Bifidobacteria	✓	✓
Equol-producing bacteria	✓	✓
Adlercreutzia species	✓	✓
Eggerthella lenta	✓	✓
Slackia species	✓	✓
Bacteroidetes		
Bacteroides	✓	✓
Bacteroides uniformis	✓	✓
Bacteroidesovatus	✓	✓
Prevotella	✓	✓
Prevotella copri	✓	✓
Firmicutes		
Butyrate-producing bacteria	✓	✓
Faecalibacterium prausnitzii	✓	✓
Eubacterium rectale	✓	✓
Eubacterium hallii	✓	✓
Roseburia species	✓	✓
Ruminococcus species	✓	✓
Coprococcus	✓	✓
Butyrivibrio species	✓	✓
Cl. butyricum		✓
Total bacterial count	✓	✓

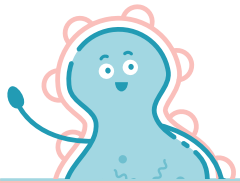


	GI Pro Essential	GI Pro Advanced
Firmicutes		
Clostridia	✓	✓
Clostridia total bacterial count	✓	✓
Clostridia cluster 1	✓	✓
Clostridia histolytium		✓
Clostridium perfringens		✓
Clostridium sporenges		✓
Other Firmicutes		✓
Christensenellaceae		✓
Dialister invisus		✓
Fusobacteria		
Fusobacterium species	✓	✓
Verrucomicrobia		
Akkermansia muciniphila	✓	✓

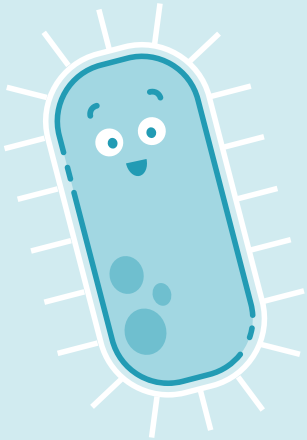


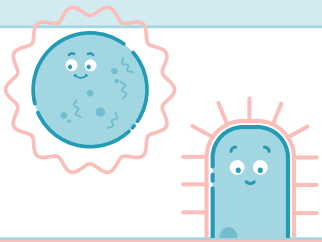


	GI Pro Essential	GI Pro Advanced
Proteobacteria		
Potentially pathogenic bacteria	✓	✓
Haemophilus	✓	✓
Acinetobacter	✓	✓
Proteus species	✓	✓
Proteus mirabilis		✓
Klebsiella species	✓	✓
Enterobacter species	✓	✓
Serratia species	✓	✓
Hafnia species	✓	✓
Morganella species	✓	✓
Providencia species	✓	✓
Citrobacter species	✓	✓
Pseudomonas species	✓	✓
Histamine-producing bacteria	✓	✓
H2S production	✓	✓
Sulphate-reducing bacteria	✓	✓
Desulfovibrio piger	✓	✓
Desulfomonas pigra	✓	✓
Bilophila wadsworthii	✓	✓



	GI Pro Essential	GI Pro Advanced
Proteobacteria		
Oxalate-degrading bacteria		✓
Oxalobacter formigenes		✓
Archaea		
Methanobrevibacter	✓	✓
Immunogenically effective bacteria		
Escherichia coli	✓	✓
Enterococcus species	✓	✓
Lactobacillus species	✓	✓
Mucin production/ mucosal barrier		
Akkermansia muciniphila	✓	✓
Faecalibacterium prausnitzii	✓	✓
Helicobacter pylori (H. pylori)		
Helicobacter AG	✓	✓





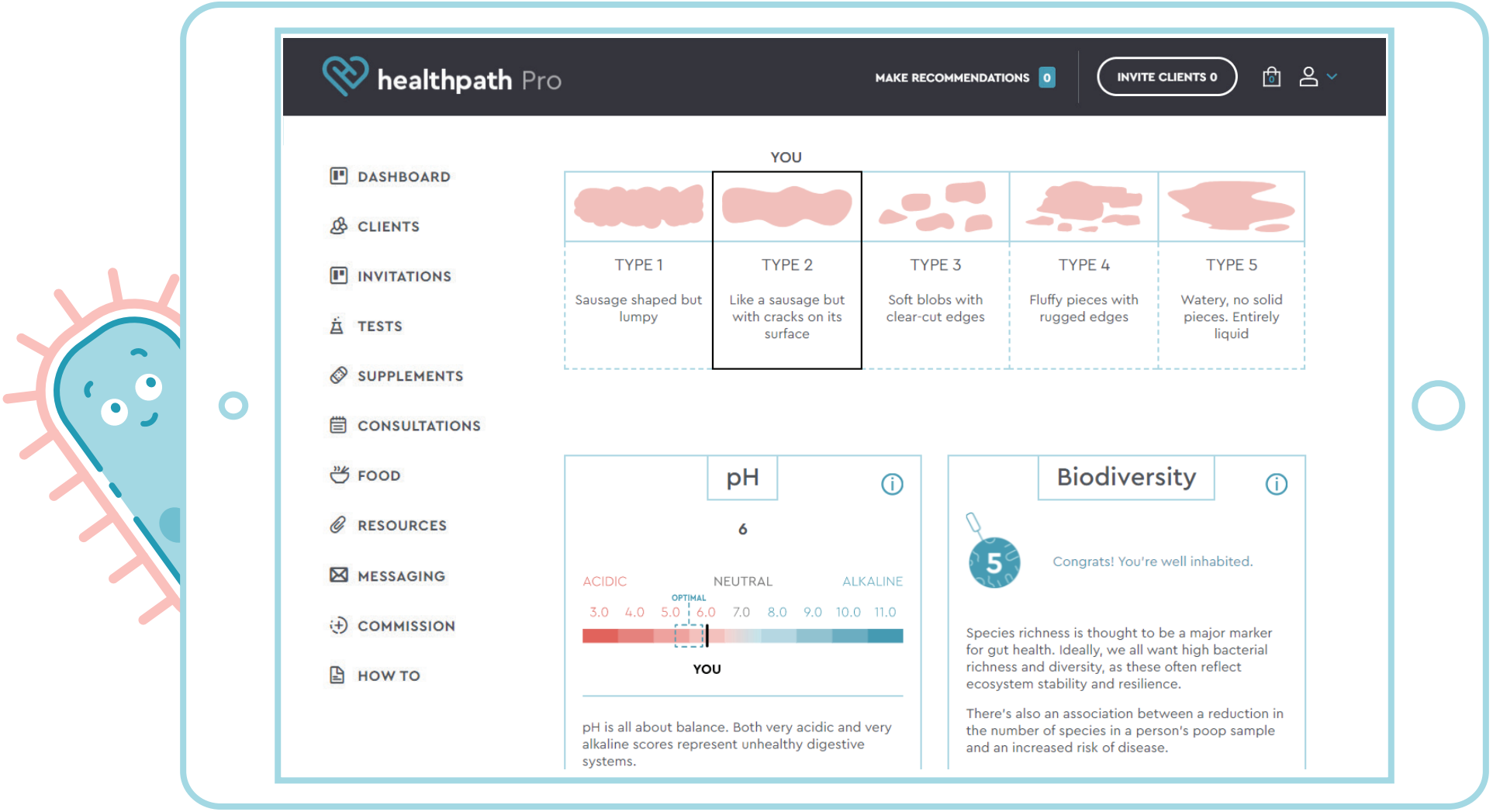
	GI Pro Essential	GI Pro Advanced
Yeasts		
Candida albicans	✓	✓
Candida krusei	✓	✓
Candida glabrata	✓	✓
Candida dubliniensis	✓	✓
Candida parapsilosis	✓	✓
Candida tropicalis	✓	✓
Candida lusitaniae	✓	✓
Parasites		
Pathobionts	✓	✓
Blastocystis hominis	✓	✓
Dientamoeba fragilis	✓	✓
Helicobacter AG	✓	✓
Pathogenic intestinal protozoa	✓	✓
Giardia lamblia	✓	✓
Entamoeba histolytica	✓	✓
Cryptosporidium species	✓	✓
Cyclospora cayetanensis	✓	✓

	GI Pro Essential	GI Pro Advanced
Functional markers		
Calprotectin	✓	✓
Haemoglobin in faeces immunologically	✓	✓
Secretory IgA	✓	✓
Pancreatic elastase	✓	✓
Zonulin		✓
Digestive residues		
Determination of fat	✓	✓
Determination of nitrogen	✓	✓
Determination of sugar	✓	✓
Determination of water	✓	✓

In our GI Pro Ultimate Test, you will receive everything in the GI Pro Advanced, plus Helminths (worms).

	GI Pro Ultimate
Helminths	
Taenia species	✓
Taenia solium	✓
Taenia saginata	✓
Ascaris species	✓
Enterobius vermicularis	✓
Ancylostoma species	✓
Ancylostoma duodenale	✓
Hymenolepsis species	✓
Hymenolepsis nana	✓
Hymenolepsis diminuta	✓
Trichuris trichiura	✓
Necator americanus	✓
Strongyloides species	✓
Strongyloides stercoralis	✓
Microsporidia	✓
Enterocytozoon species	✓
Encephalitozoon species	✓

In your report, you will receive an overview of your gut health:



A detailed breakdown of in-range and out-of-range markers:

healthpath Pro

MAKE RECOMMENDATIONS 0

INVITE CLIENTS 0

DASHBOARD
CLIENTS
INVITATIONS
TESTS
SUPPLEMENTS
CONSULTATIONS
FOOD
RESOURCES
MESSAGING
COMMISSION
HOW TO

Tests > Ultimate Gut Health Test

Results - out of range

Notes | Overview | In range | Out of range | Next steps

Show detailed description Yes

DOWNLOAD LAB REPORT

PREV

NEXT

Bacterial distribution

Out of range

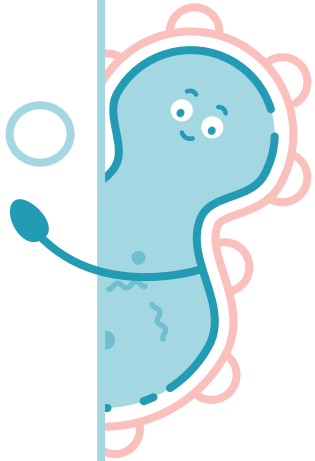
Actinobacteria — Borderline low

Actinobacteria help to maintain balance in the gut. They produce special substances called short-chain fatty acids, which reduce the pH within the intestines. A lower pH is a good thing because it helps to prevent the growth of bad bacteria.

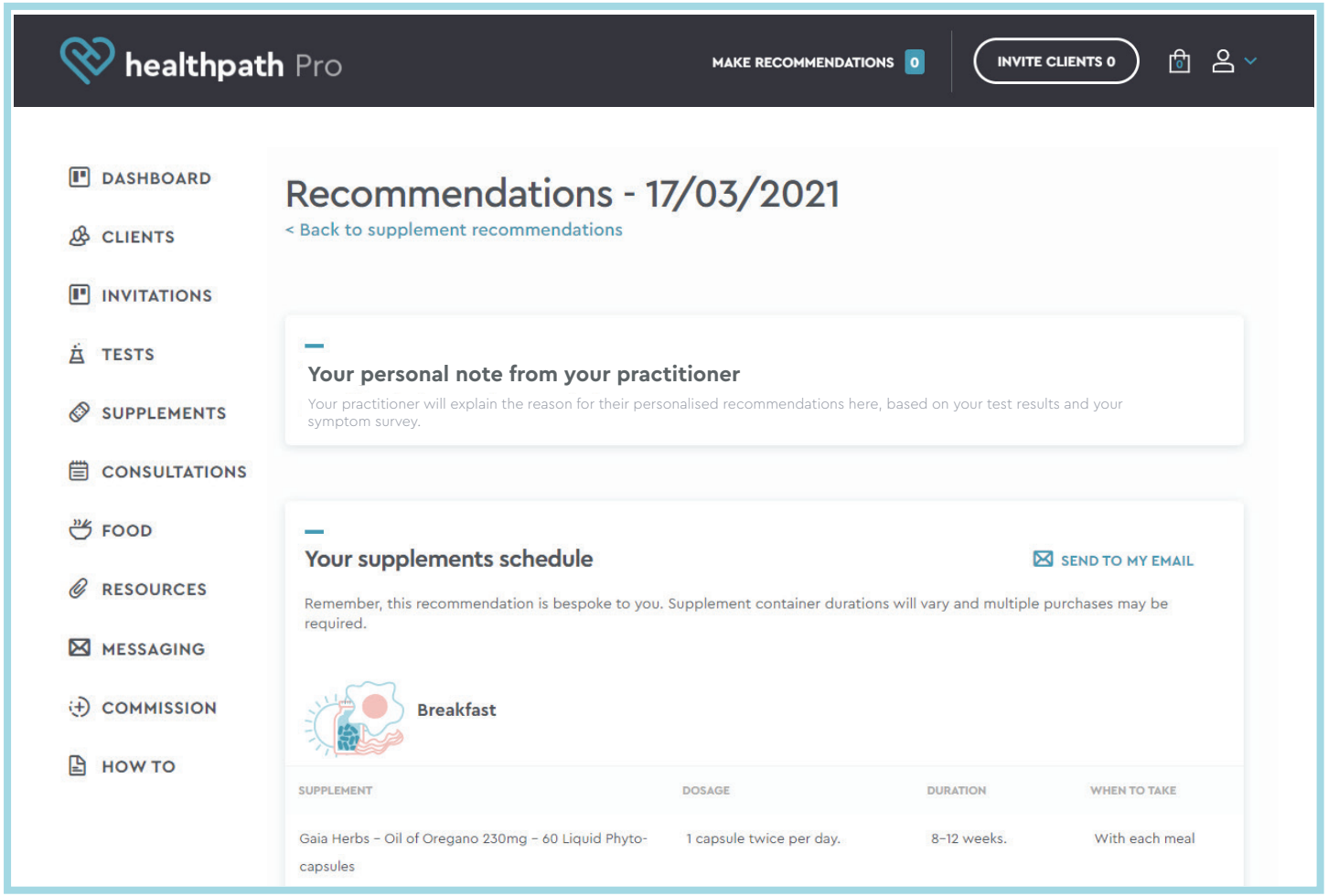
Low levels of Actinobacteria may predispose a person to intestinal inflammation. Low levels of Bifidobacteria (a type of Actinobacteria) are seen in IBS, IBD and colon cancer. Taking antibiotics can reduce Bifidobacteria.

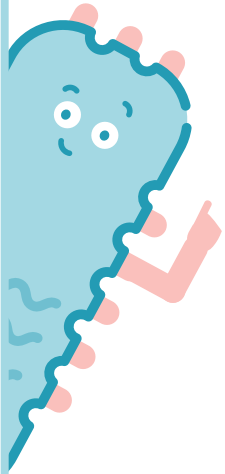
Verrucomicrobia — Borderline low

There's only one type of Verrucomicrobia found in human stools: Akkermansia muciniphila. This species correlates with a healthier, more diverse gut microbiome.



Supplement advice from your practitioner:





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External ID

Name	**Demo**	Date of Birth	**23.01.1964**	Order ID	**12630934**
First Name		Sex	Male	Order Date	10.12.2021
Sampling Date	10.12.2021 00:00	Validation Date		Findings Status	**Final Report**
Sample Material	FE	Validation on	10.12.2021	Findings Date	10.12.2021

Test	Result	Unit	Standard Range	Previous Result	Standard Method
GI Pro Advanced					
Molecular genetic microbiome analysis 3.0					
Stool Properties					
Colour	brown				FE NA) VISU
Consistency	mushy				FE NA) VISU
pH	6,5		5,8 - 6,5		FE NA) TESTS
Biodiversity					
Diversity	6,42		> 5		FE NA) MGSEQ

The bacterial diversity in the intestinal tract may vary considerably from person to person. Antibiotic therapies, infections, increasing age, unbalanced diets or smoking are causes of declining diversity.

Grad **6**

Enterotype					
Bacteroides					FE NA) MGSEQ

Human intestinal microbiomes can be differentiated into three Enterotypes. Enterotypes are defined by dominant bacterial clusters with distinct metabolic properties.

Enterotyp **1**

Dysbiosis index					

The dysbiosis index represents a measure of deviations within the microbiome. Depending on their relevance, all detected phyla, genera and species are considered.

0 5 10 15 20 25 30

Index **10**

NA) RECHN

Ratio					
Firmicutes/Bacteroidetes	**1,73**	Quotient	< 1,5		FE NA) RECHN
Phyla					
Actinobacteria	1,7	%	1,0 - 5,0		FE NA) MGSEQ
Bacteroidetes	**28,6**	%	30 - 60		FE NA) MGSEQ
Firmicutes	49,4	%	30 - 60		FE NA) MGSEQ
Fusobacteria	0,0	%	0,0 - 1,0		FE NA) MGSEQ
Proteobacteria	**8,9**	%	1,5 - 5,0		FE NA) MGSEQ
Verrucomicrobia	1,9	%	1,5 - 5,0		FE NA) MGSEQ
Other	9,5	%			FE NA) MGSEQ

FE=stool

* cooperate analytics (R), A) accredited, NA) not accredited

Name	Demo	Date of Birth	23.01.1964	Order ID	12630934
First Name		Sex	Male	Order Date	10.12.2021

Test	Result	Unit	Standard Range	Previous Result	Sample Material / Method
Bacteria Phyla - most important genera and species					
Actinobacteria					
Bifidobacterium	1,2 x 10^10	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Bifidobacterium adolescentis	81	%			FE NA) MGSEQ
Bifidobacterium longum	16	%			FE NA) MGSEQ
Equol producing bacteria	**4,3 x 10^9**	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Adlercreutzia spp.					FE NA) MGSEQ
Eggerthella lenta					FE NA) MGSEQ
Slackia spp.					FE NA) MGSEQ
Bacteroidetes					
Bacteroides	**1,5 x 10^11**	CFU/g faeces	> 1,5 x 10^11		FE NA) MGSEQ
Bacteroides uniformis	15	%			FE NA) MGSEQ
Bacteroides ovatus	12	%			FE NA) MGSEQ
Prevotella	4,0 x 10^10	CFU/g faeces	> 1,0 x 10^10		FE NA) MGSEQ
Firmicutes					
Butyrate producing bacteria					
Total bacteria count	3,0 x 10^11	CFU/g faeces	> 1,2 x 10^11		FE NA) MGSEQ
Faecalibacterium prausnitzii	8,4 x 10^10	CFU/g faeces	> 5,0 x 10^10		FE NA) MGSEQ
Eubacterium rectale	3,7 x 10^10	CFU/g faeces	> 1,0 x 10^10		FE NA) MGSEQ
Eubacterium hallii	3,3 x 10^10	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Roseburia spp.	5,0 x 10^10	CFU/g faeces	> 2,0 x 10^10		FE NA) MGSEQ
Ruminococcus spp.	4,1 x 10^10	CFU/g faeces	> 3,0 x 10^10		FE NA) MGSEQ
Coprococcus spp.	3,0 x 10^10	CFU/g faeces	> 2,0 x 10^10		FE NA) MGSEQ
Butyrivibrio spp.	2,1 x 10^10	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Clostridia					
Clostridia total bacteria count	2,7 x 10^9	CFU/g faeces	< 4,0 x 10^9		FE NA) MGSEQ
Clostridia Cluster I	1,0 x 10^5	CFU/g faeces	< 2,0 x 10^9		FE NA) MGSEQ
Clostridium histolyticum	< 1,0 x 10^5	CFU/g faeces	< 2,0 x 10^9		FE NA) MGSEQ
Clostridium perfringens	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^8		FE NA) MGSEQ
Clostridium sporogenes	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^8		FE NA) MGSEQ
Other Firmicutes					
Christensenellaceae	5,6 x 10^9	CFU/g faeces	> 1,0 x 10^9		FE NA) MGSEQ
Dialister spp.	< 1,0 x 10^5	CFU/g faeces	< 4,0 x 10^10		FE NA) MGSEQ
Cl. butyricum	6,5 x 10^8	CFU/g faeces	> 1,0 x 10^8		FE NA) MGSEQ
Fusobacteria					
Fusobacterium	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^7		FE NA) MGSEQ
Verrucomicrobia					
Akkermansia muciniphila	**1,9 x 10^9**	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Proteobacteria					
Pathogenic or potentially pathogenic bacteria					
Haemophilus spp.	**2,2 x 10^9**	CFU/g faeces	< 1,0 x 10^9		FE NA) MGSEQ
Acinetobacter spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Proteus spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Klebsiella spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Enterobacter spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ

FE=stool

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Name	Demo	Date of Birth	23.01.1964	Order ID	12630934
First Name		Sex	Male	Order Date	10.12.2021

Test	Result	Unit	Standard Range	Previous Result	Sample Material / Method
Serratia spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Hafnia spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Morganella spp.	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^6		FE NA) MGSEQ
Citrobacter spp.	< 1,0 x 10^5	CFU/g faeces	< 5,0 x 10^8		FE NA) MGSEQ
Pseudomonas spp.	< 1,0 x 10^5	CFU/g faeces	< 5,0 x 10^7		FE NA) MGSEQ
Providencia spp.	< 1,0 x 10^5	CFU/g faeces	< 5,0 x 10^7		FE NA) MGSEQ
H2S production					
Sulphate reducing bacteria	**5,0 x 10^9**	CFU/g faeces	< 2,0 x 10^9		FE NA) MGSEQ
Desulfovibrio piger	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^9		FE NA) MGSEQ
Desulfomonas pigra	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^9		FE NA) MGSEQ
Bilophila wadsworthii	< 1,0 x 10^5	CFU/g faeces	< 2,0 x 10^9		FE NA) MGSEQ
Histamine producing bacteria					
Histamine producing bacteria	< 1,0 x 10^5	CFU/g faeces	< 5,0 x 10^8		FE NA) MGSEQ
Oxalate degrading bacteria					
Oxalobacter formigenes	1,3 x 10^9	CFU/g faeces	> 1,0 x 10^8		FE NA) MGSEQ
Archaea					
Methanogens					
Methanobrevibacter spp.	2,6 x 10^7	CFU/g faeces	< 1,0 x 10^8		FE NA) MGSEQ
Immunogenicity / Mucus production					
Immunogenically effective bacteria					
Escherichia coli	**5,2 x 10^5**	CFU/g faeces	10^6 - 10^7		FE NA) MGSEQ
Enterococcus spp.	**< 1,0 x 10^5**	CFU/g faeces	10^6 - 10^7		FE NA) MGSEQ
Lactobacillus spp.	2,6 x 10^5	CFU/g faeces	10^5 - 10^7		FE NA) MGSEQ
Mucin production / Mucosal barrier					
Akkermansia muciniphila	**1,9 x 10^9**	CFU/g faeces	> 5,0 x 10^9		FE NA) MGSEQ
Faecalibacterium prausnitzii	8,4 x 10^10	CFU/g faeces	> 5,0 x 10^10		FE NA) MGSEQ
Mycobiome: relevant yeasts					
Candida albicans (CA)	**4,1 x 10^3**	KBE /g Stuhl	<1,0 x 10^3		FE NA) QPCR
Candida krusei (CK)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Candida glabrata (CG)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Candida dubliniensis (CD)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Candida parapsilosis (CP)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Candida tropicalis (CTp)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Candida lusitaniae (CL)	<1,0 x 10^3	KBE /g Stuhl	< 1,0 x 10^3		FE NA) QPCR
Parasites					
Pathobionts					
Blastocystis hominis	positive		negative		FE A) MOLEK
Dientamoeba fragilis	positive		negative		FE A) MOLEK
Pathogenic intestinal protozoa					
Giardia lamblia	positive		negative		FE A) MOLEK
Entamoeba histolytica	negative		negative		FE A) MOLEK
Cryptosporidium species	negative		negative		FE A) MOLEK
Cyclospora cayetanensis	negative		negative		FE A) MOLEK
Special Request					
Haemoglobin in stool immunological	<10	µg/g	< 10		FE A) ELISA

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Name	**Demo**	Date of Birth	**23.01.1964**	Order ID	**12630934**
First Name		Sex	Male	Order Date	10.12.2021

Test	Result	Unit	Standard Range	Previous Result	Sample Material / Method
Calprotectin	<17,90	mg/l	< 50		FE A) ELISA
Secretory IgA	**167,0**	µg/ml	510 - 2040		FE A) ELISA
Pancreatic elastase	423,39	µg/g	> 200		FE A) ELISA
Zonulin	13,82	ng/ml	< 55		FE A) ELISA
Gastro diagnostics					
Helicobacter AG	negative		negative		FE A) CLIA
Digestive Residues					
Quantitative determination of fat	**5,80**	g/100g	< 3,5		FE NA) PHOT
Quantitative determination of nitrogen	0,50	g/100g	< 1,0		FE NA) PHOT
Quantitative determination of sugar	2,10	g/100g	< 2,5		FE NA) PHOT
Quantitative determination of water	80,70	g/100g	75 - 85		FE NA) PHOT

FE=stool

* cooperate analytics (R), A) accredited, NA) not accredited