

Patient: **SAMPLE**  
**PATIENT**

DOB:

Sex:

MRN:

**2304 Comprehensive Parasitology Profile - Stool**

Methodology: MALDI-TOF MS, Automated and Manual Biochemical Methods, Vitek 2® System Microbial identification and Antibiotic susceptibility, Microscopic Examination, EIA and Macroscopic Evaluation.

**Microbiology**

**Bacteriology**

**Beneficial Bacteria**

Lactobacillus species		(*NG)
Escherichia coli		(4+)
Bifidobacterium		(4+)

**Additional Bacteria**

alpha haemolytic Streptococcus	NP	(4+)
gamma haemolytic Streptococcus	NP	(3+)
Geotrichum capitatum	PP	(3+)

**Mycology**

Candida species	PP	(4+)
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**Additional Tests (if ordered)**

**Campylobacter specific antigen ♦**

Negative  Reference Range Negative

**Enterohemorrhagic Escherichia coli Shiga-like Toxin ♦**

Negative  Reference Range Negative

Human microflora is influenced by environmental factors and the competitive ecosystem of the organisms in the GI tract. Pathological significance should be based upon clinical symptoms and reproducibility of bacterial recovery.

**Microbiology Legend**

*NG	NP	PP	P
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No Growth	Non-Pathogen	Potential Pathogen	Pathogen

**Commentary**

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or as treatment recommendations. Diagnosis and treatment decisions are the practitioner's responsibility.

Human microflora is influenced by environmental factors and the competitive ecosystem of the organisms in the GI tract. Pathological significance should be based upon clinical symptoms and reproducibility of bacterial recovery.

Sufficient amounts of Bifidobacteria and E. coli appear to be present in the stool, however Lactobacilli is below optimal levels. Ample amounts of E. coli have been associated with a balanced gut flora. The "friendly bacteria",



## Commentary

Lactobacilli and Bifidobacteria, are important for gastrointestinal function, as they are involved in vitamin synthesis, natural antibiotic production, immune defense, digestion, detoxification of pro-carcinogens and a host of other activities. Ideally, levels of Lactobacillus and E. coli should be 2+ or greater. Bifidobacteria being a predominate anaerobe should be recovered at levels of 4+.

A 4+ quantity of Candida is substantially greater than normal. While yeast are identified in a great many fecal specimens, this amount represents an overgrowth condition. If it is suspected that systemic complaints may be caused by the presence of yeast, Candida serology and an assessment for intestinal permeability might be considered.

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**2003 Comprehensive Parasitology Profile**

*Methodology: Microscopic Examination, EIA and Macroscopic Evaluation.*

**Parasitology**

**Microscopic Exam Results**

Methodologies used for the Ova & Parasites examination are sedimentation concentration of specimens followed by analysis by iodine wet mount and Trichrome stain permanent smear.

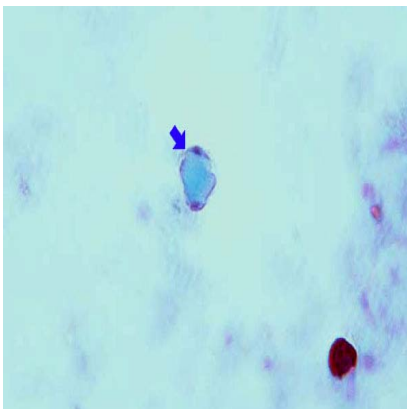
Blastocystis hominis: Many  
Dientamoeba fragilis: Moderate Trophozoites

**Parasitology EIA Tests**

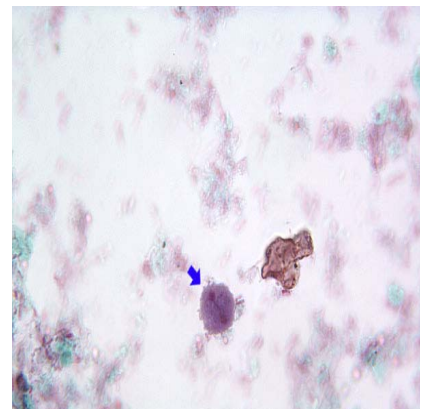
	Inside	Outside	Reference Range
<b>Cryptosporidium</b> ♦	<input type="text" value="Negative"/>	<input type="text"/>	Negative
<b>Giardia lamblia</b> ♦	<input type="text" value="Negative"/>	<input type="text"/>	Negative
<b>Entamoeba histolytica</b> ♦	<input type="text" value="Negative"/>	<input type="text"/>	Negative

Representative photograph of organism(s)

Blastocystis hominis



Dientamoeba fragilis trophozoites





## Macroscopic/Direct Exam for Parasites (if ordered)

### Commentary

Reported quantitation values were derived from a concentration of the sample(s) submitted and represent an "average" value.

Literature suggests that >90% of enteric parasitic infections may be detected in a sample from a single stool collection. Increased sensitivity results from the collection of additional specimens on separate days.

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*Blastocystis hominis* is considered by most authorities to be a pathogen. Transmission is fecal/oral, usually through contact with contaminated food or water. *Blastocystis* often lodges in the intestinal mucosa, making eradication difficult. Symptoms may include nausea, vomiting, sleeplessness, lassitude, anorexia, pruritis, irritable bowel or fever, although asymptomatic infections can occur. It has also been reported in association with many chronic conditions including chronic fatigue and reactive arthritis. Three forms have been identified, with the vacuolated form being the most frequently seen in fecal specimens.

*Dientamoeba fragilis* is a pathogenic flagellate. Transmission is by direct ingestion of the trophozoite, via contaminated water. The organism usually resides in the cecum and proximal colon. Symptoms may include diarrhea, abdominal tenderness, weight loss, fatigue, blood in the stool and eosinophilia, although asymptomatic infections can occur.