

Comprehensive Parasitology Profile

sample type: **STOOL**

The **Comprehensive Parasitology Profile** is a thorough analysis to detect the presence of intestinal parasites, as well as beneficial intestinal microflora, imbalanced flora, and bacterial or fungal possible pathogens. This stool test can help reveal hidden causes behind acute or chronic conditions that develop from parasitic infection or dysbiosis.

Susceptibility to Parasite Infection:

It is generally assumed that travel to a Third World country or the occasional camping trip are prerequisites for acquiring a parasite infection. Owing to a combination of extensive worldwide travel, increasing immigration to the United States, day care centers and other sources of easy transmission, anyone is now susceptible. Diarrheal diseases, in fact, (bacterial as well as parasitic) constitute the greatest worldwide cause of morbidity and mortality.

Pathogenicity:

Various organisms are increasingly recognized for their potential pathogenicity. For example:

- **Giardia lamblia** is the leading cause of intestinal parasitic infection in the United States. Only a few decades ago it was not considered pathogenic.
- **Cryptosporidium**, a well-known pathogen in animals, was only recently identified as a human pathogen.
- **Blastocytis hominis** is the most frequently observed fecal parasite. Its level of pathogenicity continues to be controversial.

Pathogenicity, in general, appears to vary depending on the parasite itself, host susceptibility, and the microbiological environment in which the parasite lives.

Symptoms of Infection:

The **most common symptoms** of parasite infection are **diarrhea** and **abdominal pain**. Other symptoms may include flatulence, anorexia, weight loss, fevers, chills, blood or mucus in the stool, and fatigue.

Systemic Complaints:

We generally think of parasite infection as causing acute gastrointestinal symptoms. An increasing number of parasite cases feature **systemic complaints** not traditionally associated with parasites, such as:

- Urticaria
- Reactive arthritis
- Chronic fatigue, asthma and constipation in individuals who are immunocompromised or whose intestinal flora is chronically imbalanced.

Diagnosing Parasitic Infections:

The diagnosis of parasitic infections depends on the laboratory, with detection rates dramatically increasing with more sophisticated procedures. Genova Diagnostics'

Comprehensive Parasitology Profile uses the most technologically advanced procedures to accurately identify a wide range of protozoal parasites, including amoebae, flagellates, ciliates, coccidia and microsporidia.

Specimens are carefully analyzed by highly-trained technicians using computer-enhanced microscopy, new staining procedures, and advanced immunoassay techniques. These accurate detection methods allow for increased detection rates, intensifying the awareness of the important relationship between parasitic infection and a broad spectrum of illnesses.

- **Analytes:**
Comprehensive Parasitology—Fecal bacterial and yeast cultures Sensitivities as appropriate
Microscopic parasite exam
EIA for *E. histolytica*, *Giardia* and *Cryptosporidium*
Parasitology—Fecal microscopic exam, with or without EIA for *Giardia* and *Cryptosporidium*

- **Specimen Requirements:**
Comprehensive Parasitology—5cc random stool, purge or swab in each vial (SAF, Cary/Blair);
Parasitology—5cc random stool, purge, or swab in each vial (SAF)

- **Before Taking this Test:**
 - Avoid anti- or pro-microbials, laxatives, and anti-diarrheals (for 3 days)
 - Avoid or reduce anti-inflammatories, digestive enzymes and most pain relievers (for 2 days)
 - See instructions inside test kit for details

Comprehensive Parasitology



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Asheville, NC 28801
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Patient: **SAMPLE PATIENT** **Order Number:**
 Age: 53 Completed: June 29, 2007
 Sex: F Received: June 26, 2007
 MRN: Collected: June 21, 2007

This test reveals important clinical information about::

- A broad range of parasite infection related to gastrointestinal and systemic conditions, identified by trichrome staining, computer-enhanced microscopy, and **Optimized Parasite Recovery** techniques
- Enhanced detection of *Giardia*, *Cryptosporidia*, and *Entamoeba histolytica* infection, by advanced **enzyme immunoassay (EIA)**
- Levels and types of yeast and bacteria cultured in the stool, including beneficial bacteria and imbalanced, possibly pathogenic, organisms

Microbiology

Bacteriology

Beneficial Bacteria

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

Additional Bacteria

alpha haemolytic Streptococcus	NP		(4+)
gamma haemolytic Streptococcus	NP		(3+)
Citrobacter freundii	NP		(3+)

Mycology

*NG *NG

Additional Tests (if ordered)

Inside	Outside	Reference Range
Not Ordered		Negative
Campylobacter specific antigen		
Not Ordered		Negative
Enterohemorrhagic Escherichia coli Shiga-like Toxin		

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
*NG			
No Growth	Non-Pathogen	Potential Pathogen	Pathogen

Commentary

Lab Comments

Partial panel ordered. 06/26/07 PE

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

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For test kits, clinical support, or more information contact:

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More detailed publications with references are also available: www.GDX.net