

# Parasites



***We all have parasites!*** The parasitic load however can vary greatly from person to person, environment to environment. A healthy body can tolerably host a small degree of some of these uninvited invaders, but some, even in small numbers, can be extremely dangerous.

Parasitic diseases in humans are caused by protozoans and helminthes. *Entamoeba histolytica* is, possibly, the most pathogenic amoeba for humans. Humans are the primary host for this pathogen.<sup>1</sup> Many of these collectively innocent-looking creatures can be devastatingly deadly at the worst, but even in a “best-case” scenario, they are still robbing YOU of needed nutrients, energy, and overall health.

## **SLOW RECOVERY**

If someone is experiencing difficulty recovering with any substantial therapy, there may be a presence of parasites. Parasites can prevent recovery from any illness – without ever showing any obvious symptoms or appearing in a fecal sample.



## **PROBLEM OF DETECTION AND DIAGNOSIS**

Parasites can often go entirely undetected by ordinary diagnostic tests. Because they can usually be so firmly embedded within the intestine or specific organs, it could take up to as many as 10 purged stool tests to find a single specimen. Parasites can also produce symptoms that may be very similar to those of a specific disease or illness and cause a patient to be misdiagnosed.

A few symptoms caused by parasites often misdiagnosed as disease are:

- Chronic fatigue syndrome, yeast infection, allergy, depression, arthritis, environmental illness, and more.
- This huge variety in symptoms that result from parasites is often a cause for frequent misdiagnosis.



<sup>1</sup> Human Parasites, Barbara Krumhardt, Ph.D., <http://www.dmacc.edu/instructors/human.htm>

## WHY PARASITES GO UNDETECTED

- During certain stages of their life cycle, parasites may migrate through muscles, viscera or blood to vital organs where they create symptoms which resemble other forms of disease so closely that they are usually misdiagnosed.
- Many parasites are undetectable in feces because they release and emerge only when dead.
- Symptoms of parasite infestation are usually indistinguishable from symptoms of disease caused by microbes.
- It is almost impossible to detect parasites migrating through the heart, lungs, liver, thymus, and pancreas; sometimes the only sign of an infected organ is poor function.



## HOW DO WE HELP CONTROL PARASITES?

There are many steps that can be taken to help reduce and prevent daily exposure to parasites. Some of them are:

- Wash hands with soap before eating anything. Microscopic cysts and eggs from pets, snails, and humans are everywhere.
- Soak fruits and vegetables 10 minutes in a Clorox bath (one-half teaspoon for each gallon of water). Then rinse and soak in plain water for another 10 minutes. This can vary a few minutes: less for soft produce (berries and mushrooms); more for hard.
- All meat must be cooked to medium (not medium rare). MICROWAVES DO NOT KILL WORMS IN MOST CASES.
- Two or three cloves, sucked or freshly pulverized before meals, kills many kinds of parasite eggs (not the adults or other stages, however).
- Ceviche, pickled herring, steak tartare and other raw food products carry living parasites, both adults and eggs. If you eat them, they may go undetected and drain the immune system, preventing recovery from cancer and other diseases.
- Experiment with any parasite frequencies available via a selected frequency instrument. Tapeworms have been often been reported in stool shortly after using parasite frequencies.\*



*\*Note: It may not be possible to know or target every type of parasite that someone may harbor. However, reducing the overall parasitic load should provide significant relief in most cases.*

## The Major (most common) Parasites of Interest <sup>2</sup>

### Protozoans

<b><i>Entamoeba histolytica</i></b>	Amoebic dysentery, bloody stools, and diarrhea with abdominal pain. The organism may digests its way through the intestinal wall and invades other organs and the viscera. This form may be fatal.
<b><i>Balantidium coli</i></b>	Diarrhea
<b><i>Giardia lamblia</i></b>	Diarrhea and abdominal pain, along with a chronic fatigue syndrome
<b><i>Trypanosoma brucei</i></b>	Sleeping sickness
<b><i>Plasmodium sp. (sporozoan)</i></b>	Malaria

### Helminthes

***Ascaris lumbricoides*** A parasitic nematode (roundworm). *A. lumbricoides* invades the gastrointestinal tract after consumption of its eggs in contaminated food or drink or from fomites. *A. lumbricoides* migrates from the intestines to the lungs via the bloodstream. It is then swallowed and returned to the small intestine, where it reproduces. A high parasite load can cause nutritional deficiencies, especially in those consuming marginal diets.

***Enterobius vermicularis*** This pinworm is spread by consumption of the egg in contaminated food. It reproduces in the intestinal tract, with adult female laying her eggs on the anus.

***Trichuris trichiuria*** Heavy parasite loads may result in dysentery in the host.

***Fasciola hepatica*** The liver fluke, has a complex life cycle, “normally” requiring water snails as intermediate hosts. Humans and mammals acquire the organism via cyst from contaminated foods. The cysts release immature flukes that migrate to the liver and gallbladder. A high load of the parasite may obstruct various organ functions.

***Taenia sp.*** Tapeworms or cestodes are consummate examples of parasitism. Their bodies are reduced to mostly reproductive organs. The "head" of the worm, the scolex, holds on to the intestinal wall. Behind the "head" are proglottids, the pieces of the segmented body of the parasite, which are mainly composed of ovaries and testes. The most mature proglottids are found near the "tail" of the flattened worm; these release eggs. Larvae may migrate to other tissues and form cysts. They may interfere with the function of the affected organ if the parasite load is high.



*“Parasitic diseases have an enormous health, social, and economic impact and are a particular problem in tropical regions of the world. Diseases caused by protozoa and helminths, such as malaria and schistosomiasis, are the cause of most parasite related morbidity and mortality, with an estimated 1.1 million combined deaths annually. The global burden of these diseases is exacerbated by the lack of licensed vaccines, making safe and effective drugs vital to their prevention and treatment. Where drugs are available, their usefulness is being increasingly threatened by parasite drug resistance.”<sup>3</sup>*

**Electronic modalities may be the ONLY answer to this increasingly developing worldwide issue!**

<sup>2</sup> This is an abbreviated summary of a list with micrograph photos compiled by Dr. Barbara Krumhardt, Ph.D. in *Human Parasites*, <http://www.dmacc.edu/instructors/human.htm>

<sup>3</sup> *International Journal for Parasitology: Drugs and Drug Resistance*, Volume 4, Issue 2, August 2014, Pages 95–111, Drug Repurposing and Human Parasitic Protozoan Diseases