



## *Parasites: The Colony Within Part II*

### **Types of Parasites**

In the last issue of H.E.R.B. TIME, we discovered that 98% of the world's population has parasites of some sort. These parasites can cause an array of illnesses that are not so easily detected. In this issue we are going to discover the different types of parasites that are capable of plaguing us, how they invade our systems, and how we might get rid of them.

### **ROUNDWORMS**

This parasite is common around the world, especially in warmer climates. Twenty-five percent of the people in the world are thought to be infected with this worm. In the southeastern parts of the U.S., up to 64 percent of the people may carry this parasite. It is most common where there are areas of poor sanitation. These worms are large, about the size of a pencil. Humans may be infected with many worms at one time. The infection begins with the ingestion of the eggs which are usually present in contaminated soil, or on fruits and vegetables grown in infected soil. Children are easily infected by eating dirt or putting soiled hands into their mouths. Children are usually more infected than adults.

One female worm may release 200,000 eggs per day. Once swallowed the eggs migrate out of the digestive tract into the blood and lymph, passing through various organs including the liver. Eventually the worms will end up in the lungs where they migrate into the trachea and are swallowed and returned to the intestines to mature. Occasionally worms may migrate into the eyes, brain, and ears causing extensive damage. In the intestines, the worms consume a large amount of food and give off their waste products. Each worm only lives for a couple of years. The worms may release a foreign protein which will cause the host to have an allergic response. Infected individuals may experience abdominal pain, lung infections, eye infections, blood sugar imbalance, weight loss and fatigue.

Roundworms create their own hydrogen peroxide so that their offspring will be plentiful.

### **HOOKWORM**

These worms drink large amounts of blood each day. People with this parasite show signs of anemia and malnutrition. During part of the worms' life cycle, these tiny worms must survive as a free living worm outside the body, which lives in the soil or water. This is where humans pick up the infection. We may also get the infection through eating fruit, vegetables or drinking water that is contaminated with this larval stage of the worm. The eggs of the worm are deposited in the soil through unsanitary defecation habits. The eggs then hatch and are free living in the soil. When humans are walking barefooted, or hand gardening, these worms burrow into the skin of the human host. As they burrow into the skin they cause an allergic reaction, ground itch, marked by blisters and itching skin. From here they pass into the circulatory system and eventually make their way to the lung. They then migrate into the trachea and are swallowed. They pass down the digestive tract where they attach to the walls of the intestine and drink blood. Once established, a worm may lay 30,000 eggs a day. The severity of each case is marked by the number of worms in the host's intestine and the nutrition state of the host. Symptoms of hookworm are slow and insidious. People become anemic, malnourished, listless, mentally slow, weak and lazy. They may have abdominal pains with nausea, indigestion, and diarrhea. Hookworms are the only worms with teeth.

### **GIARDIA**

Giardia is a single celled, pear-shaped protozoan that lives in the small intestine and sometimes the gall bladder. It is very common and can cause great discomfort and damage to the intestinal walls. Some cases may also show very mild symptoms. Diarrhea is the most common symptom, but malabsorption, light colored fatty stools, gas, abdominal cramps, lactose intolerance, folic acid and fat soluble vitamin deficiencies may also occur. The severity

of the symptoms varies with each case. Individuals become infected either through contaminated food or water containing the cysts or through hand to mouth contact with infected articles like clothes or diapers. Children are more affected than adults. **Giardia is very contagious** with a large number of cysts being passed in a small amount of feces. All stream and mountain water should be considered infected, because many animals besides humans may act as hosts. The cysts have also been found in municipal water supplies. Chlorination and filtering do not always kill the cysts. All questionable water should be either boiled or treated with iodine.

## **TAPEWORMS**

Tapeworms are long, flat, ribbon-like creatures. They are common in all parts of the world. There are many different species of tapeworms and man is easily a host. Tapeworms do not have a digestive system so they absorb through their skin. Inside humans, tapeworms live in the intestines where they absorb our nutrients, especially vitamin B-12 and folic acid, and give off dangerous waste products. People with tapeworm infections feel toxic, dizzy, and have unclear thinking, high and low blood sugar, hunger pains, poor digestion, allergies, are sensitive to touch, and have symptoms associated with pernicious anemia. These individuals have what is called “verminous intoxication”, resulting from the worm’s wastes. When the worm is rolled up it creates a ball under the right side of the ribs below the liver. Oftentimes tapeworm infections cause a sugar imbalance and people either gain or lose weight. Most tapeworms require an intermediate host besides humans and the worms are named accordingly.



## *Method of Physical Invasion*

**WATER** - In infested waters, mosquitoes and flies can pick up eggs and cysts and transmit them to humans. Sewage sites are also prime parasite reservoirs. Scuba divers and recreational swimmers need to be concerned about the parasite population in freshwater lakes, ponds, and rivers. Divers can become infected with giardia.

**FOOD** - When parasites are in food (meats), they are almost always transmitted because of improper cooking or none at all. While it is true that the majority of food-borne infections come from animal sources, like pork, beef, lamb, fish, and seafood, vegetarians are not immune. Many plant foods, such as watercress, bamboo shoots, water chestnuts, etc., may contain parasites in some form. Leafy vegetables, notably lettuce, parsley, and celery, can become contaminated by fertilizers made from animal and human wastes in some countries. Vegetables need to be thoroughly washed in a Clorox bath or food grade hydrogen peroxide.

## **FOOD PREPARATION**

**HABITS** - Cutting boards, especially wooden ones, and knives and forks that come into contact with raw, uncooked flesh food —i.e., meat, fish, or lamb—should be disinfected after each item is prepared. The cutting board and silverware can cross-contaminate other foods such as fruits and vegetables.

**YOUR PETS** - Animals, just like humans, can become infected with parasites. Internally, contaminated water and food can spread the problem to our pets. Externally, animals become infected by parasites on their bodies, especially their fur, because of exposure to infected animal wastes. Forgetting to wash your hands even one time after handling or cleaning up after your animal can transmit the parasite to you. Animals are major carriers of disease, and most people are unaware of this fact. All pups are born with roundworm. Young puppies from three weeks to three months of age create the greatest environmental hazard because they excrete large numbers of roundworm eggs. Children, pregnant women, and those individuals with crippled immune systems may be the most adversely affected.

**TRAVEL** - Malaria is a ruthless killer, responsible for up to 2 million deaths per year in over 100 countries.

**WORKPLACE** - Infection is probable if you work in a hospital, pet shop, zoo, experimental lab, veterinary clinic, day-care center, your garden of which animals roam or sanitation company.

**ANTIBIOTICS** - Antibiotics kill bacteria indiscriminately, both the good and bad, upsetting the natural ecology of the gastrointestinal tract and vagina. This leads to yeast overgrowths and trichomonas vaginalis a microscopic parasite that causes foul-smelling vaginal discharge, burning sensation, and inflammation. It affects 50% of women in some parts of the United States.

# *Methods of Eradication*

Cleansing the body of parasites can be a “do-it-yourself” project, if you understand some of the detoxification symptoms you may experience. Parasites give off certain metabolic waste products, that our already weakening bodies have trouble disposing of. This giving off of toxic wastes is especially true when the parasites are dying off and being driven from their comfortable home. Nausea, gastrointestinal discomfort, and frequent trips to the bathroom are not uncommon.

Treatment of parasitic infection must be geared towards eradicating the parasites, rather than relieving the symptoms of infection.

The best treatment protocol for the most commonly occurring intestinal parasites—roundworm, pinworm, and tapeworm—entails the following five steps, which should be carried out in conjunction with an experienced Health Care practitioner who can guide you through the recovery process.

1. **Cleansing the intestinal tract.** No type of medication can effectively reach them until the mucus and encrusted waste matter overlying the worms is softened. This is accomplished through use of psyllium husks, or some type of colon broom product. Give someone with worms as much garlic as they can stand, then 2 days later give a laxative. Have them sit in a bucket of milk sufficient for covering the rectal area. Worms smell the milk and crawl out. Remain in the warm bath for about 1 hour until all the worms are out. This can be rather unpleasant.
2. **Modify the diet.** Poor nutrition will starve the parasite but will also weaken the host’s defense system. It is important to eat products that will have a shorter transit time through the bowel. Refined foods require a longer transit time allowing worms to remain longer.
3. **Administering effective substances to eliminate the parasites.** Such as fresh pineapple and papaya, pumpkin seeds, two cloves of raw garlic in the diet per day. Black walnut kills many types of worms. Take with a laxative herb such as senna **and** ginger to drive them from the bowel.
4. **Recolonize the gastrointestinal tract with friendly bacteria.** This is the final step to detoxify noxious substances. This is accomplished using *Lactobacillus acidophilus*, *bulgaris*, and /or *bifidus*.
5. **Eliminate parasite risk factors** by changing lifestyle, food and environmental habits.

## *In The News — Drinking Water Not Safe*

### **CRYPTOSPORIDIUM PARASITE**

In September of 1994, the following story appeared on TV: *City Officials have discovered that a tiny parasite, cryptosporidium, has become immune to chlorine, and has infested 50% of our drinking water. The eggs are so small that 33% slip through the testing process.* The TV broadcast went on to state that many large cities are infested, specifically mentioning San Francisco, Milwaukee, and New York.

*Cryptosporidium* creates flu-like symptoms. Some people are affected by stomach cramps and diarrhea. Both the old and young are affected more readily and have the potential for becoming critical much faster than the rest of the population.

These tiny critters have become resistant to chlorine, which is outdated in Europe, so it is recommended to have a formula to take while traveling there or abroad.