Difference Between Roundworm and Hookworm

Worms are parasites that reside in the bodies of higher organisms including humans. They live on the gastrointestinal system where they produce eggs and thereby increasing their population in the gastrointestinal tract. There are different types of worm parasites such as roundworms, tapeworms, hookworms, and whipworms. They cause different diseases related to the gastrointestinal tract. Roundworms are nematode parasites which live freely in the intestines and are curled or round in nature. Hookworms are nematode parasites which are latched or hooked on to the intestinal walls. Thus, the name hookworm is derived. The key difference between the roundworm and the hookworm is the manner in which they exist in the intestines.

The roundworm exists freely in the intestines whereas the hookworm remains latched on to the intestinal walls.

What is a Roundworm?

Roundworms are nematodes which belong to Toxocara species. They exist freely in the intestines of animals including humans. The roundworms range from 1 mm to 1 meter. They are parasitic to the host and result in the roundworm infection in the gastrointestinal tract. The parasite is transmitted through the ingestion of eggs of the parasite. The main sources of roundworm eggs are infected rodents, infected soil or infected milk. Once the eggs enter the digestive system through ingestion, they are hatched in the stomach. The eggs then form into larvae. The larvae then migrate into the intestines where they mature into adult roundworms.

The adult roundworms reside in the intestines where they lay eggs. The eggs are excreted via feces which has the ability to infect if ingested via contaminated food or water or soil. Thus, the infection is easily passed from mother to puppies or kittens. Therefore, dogs and cats are more prone to the roundworm infection than humans.

It is always advised to wash hands before and after using the washrooms and to wash hands before and after eating food in order to avoid the ingestion of the roundworm eggs. It is also important to wash hands after handling pets to avoid contamination with roundworm eggs. If the infection is manifested in humans, the several symptoms can be observed such as bloating of the belly, stools mixed with blood and mucus, loss of appetite, diarrhea, and lethargy.
The most common type of roundworm infection is termed as Ascariasis and affects many millions of people worldwide annually. The prevention is based on following good hygienic practices on a daily basis. The diagnosis of the infection is via performing a culture of stool samples to identify the roundworm eggs in feces. Medication includes oral medications which are given in regular doses.

What is a Hookworm?

Hookworms also belong to the nematode parasites and are one of the most common types of infection-causing worms. Hookworms belong to the genus *Ancylostoma*. The characteristic feature of hookworms is the mode of attachment they portray in the intestines. The hookworms as suggested by the name, are attached to the intestinal wall with a hook-like appearance, and remains latched to the intestinal wall. Hookworm infection is initiated by the ingestion of the hookworm larvae via contaminated soil or food. The larvae once inside the gut, travel to the intestines, where they mature into the hookworms. The mature hookworms, then reproduce in the intestines and produce eggs. These eggs are excreted via feces and contaminate soil which is a source of the infection.

Due to the hook-like attachment structures of the hookworm larvae, they can attach to the skin surfaces when contacted with infected soil. Hookworm infection is most often asymptomatic, but severe infection may result in diarrhea, anemia, lethargy and decreased strength.

The fatality of the hookworm disease is comparatively high as the hookworms feed on host blood. Thus, if the infection remains untreated, the host can develop severe conditions of anemia.
Oral medications are administered during hookworm infection in regular prescribed doses. The disease is diagnosed by examining the feces for hookworm eggs. It is important to maintain good health habits, including washing hands and feet after walking on soil and washing hands before and after meals. The infection can be prevented by creating awareness on public health.

What are the Similarities Between Roundworm and Hookworm?

- Both are nematodes.
- Both are parasites.
- Both reside in the intestines of animals including humans.
- Both cause an infection that could be prevented by following good hygienic health practices.
- Both infections can be diagnosed by examining feces for the presence of eggs of the nematode parasites.
- Both infections are treated using oral drugs administered in regular doses.

What is the Difference Between Roundworm and Hookworm?

<table>
<thead>
<tr>
<th>Roundworm vs Hookworm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundworms are nematode parasites which live freely in the intestines and are curled or round in nature.</td>
</tr>
</tbody>
</table>

Route of Entry
Roundworms enter through mouth due to ingestion of contaminated food or beverages.

Hookworms enter via mouth or skin.

<table>
<thead>
<tr>
<th>Stage of the Parasite when entering to the Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggs are the stage of the parasite which enters the host in the roundworms.</td>
</tr>
</tbody>
</table>

**Summary - Roundworm vs Hookworm**

Worm diseases are common in nature due to the high rate of contamination taking place in food, beverages, and soil. Roundworm and hookworm are two types of worms that reside in the intestines and cause digestive tract related diseases which can be treated via oral drugs. Roundworms freely exist in the intestines whereas the hookworms remain latched on to the intestinal wall. Hookworms can also enter through the skin. The infections can be prevented by following healthy hygienic practices and regularly vaccinating and performing a medical checkup on pets which are the most common carriers of the worm diseases. This can be described as the difference between roundworm and hookworm.

**Reference:**

1. “Roundworms.” University of Maryland Medical Center. [Available here](http://example.com)

**Image Courtesy:**

1. 'Ascaris Lumbricoides (roundworm)' by SuSanA Secretariat (CC BY 2.0) via Flickr
2. 'Hookworms' By Centers for Disease Control and Prevention's Public Health Image Library (PHIL), (Public Domain) via Commons Wikimedia

**How to Cite this Article?**


Copyright © 2010-2017 Difference Between. All rights reserved