

# GIARDIA LAMBLIA: SMALL ORGANISM WITH A BIG IMPACT!

Tabassam Fatima<sup>1</sup>, Muhammad Zaid<sup>1</sup>, Shahzaib Khawar<sup>1</sup>, Hassan Fayyaz<sup>1\*</sup>

1. Riphah International University, Lahore, Pakistan.

\*Corresponding author: [hassan51bnm@icloud.com](mailto:hassan51bnm@icloud.com)

## ABSTRACT

In this article we discuss about the intestinal parasites known as giardia lamblia. This is small in size but have big effect on human as well as in animals. Proper treatment and prevention is applied to limits it's influence on human and animal health

### Introduction:

Giardia lamblia is a microscopic organism that causes discomfort with giardiasis. It is small in size but if it grows causes big issues in the environment. Understanding its life cycle, transmission or treatment we develop a plan that regulate its existence.

### Lifecycle:

G. lamblia goes through two life stages: a trophozoite, which is a less fragile form, and a cyst which is a more stable form. Like a powerful shield, the cyst aids G. lamblia's survival in challenging environments. Unclean water or food is the cause of cyst spreads. These cysts survive the journey through our stomach when we ingest them and transform into trophozoites, the active type that causes problems. These trophozoites remain in our stomachs, causing issues and repeating the cycle. (2)

### Transmission

G. lamblia likes to move from one person to another through poop. This often happens when water or food gets mixed up with poop. So, dirty water and not-so-clean habits can help it spread. We need to be careful about both dirty water and passing it to others directly (3).

### Treatment

When giardiasis happens, we use special medicines like metronidazole and tinidazole to fight against it. Along with medicines, drinking lots of clean water is important to help the body recover. Eating simple and easy-to-digest foods also makes it easier for the stomach during recovery. If you're feeling unwell, it's important to see a doctor quickly so they can help you get better faster (5).

### Clinical signs and complications of Giardiasis

If you have Giardia, you might experience symptoms like stomach cramps, bloating, gas, losing weight, and feeling tired. Sometimes, people have the infection but don't show any signs (7). When you get infected with Giardia, it can cause problems like ongoing diarrhea, trouble absorbing nutrients, and losing weight. Even after treatment, some people still have stomach issues (6, 8).

### Control measures

To stop G. lamblia from causing disease, cleaning water better, keeping things tidy, and washing hands well can help a lot. Also, telling people about it and regularly checking water sources are important to prevent Giardia from spreading secretly. Remember, washing hands, especially after using the toilet, is a simple but powerful way to keep it in check (4).

### Conclusion

Despite its microscopic size, Giardia significantly impacts health. Addressing its adaptability, transmission methods, and resistance to common cleaning approaches requires a strategic plan. Proactive measures such as water purification, personal hygiene, and early treatment are key to mitigating the health consequences of Giardia infection.

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