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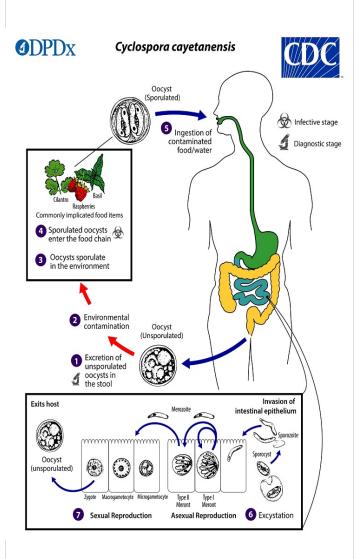
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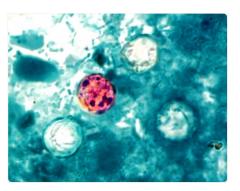
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Cyclospora cayetanensis Life Cycle



Cyclospora cayetanensis



Fact Sheet

Cyclospora causes a disease called cyclosporiasis

Cyclospora cayetanensis is a microscopic parasite that causes an intestinal illness in humans called cyclosporiasis. A person infected with C. cayetanensis will shed the parasite in his or her stool. Once shed, the parasite needs close to two weeks to mature in the environment to become infectious. People can become infected when they consume food or water contaminated with the mature parasite. C. cayetanensis can be found worldwide in water, humans, and food.

Cyclosporiasis symptoms

People who become ill from C. cayetanensis can experience symptoms including (but not limited to):

- Diarrhea
- Abdominal cramping and bloating
- Nausea
- Fatigue
- Weight loss
- Loss of appetite

Symptoms can start a week after exposure and can last for weeks to a month or longer if not treated. Some infected people do not show any symptoms, but can still pass the parasite in their stool.

Cyclosporiasis outbreaks

Cyclospora has caused outbreaks in the US among people who ate fresh produce that was contaminated with the parasite. Past outbreaks have been related to imported fresh produce:

- Raspberries
- Basil
- Snow peas
- Cilantro
- Salad mix (with romaine lettuce)

In more recent investigations, both imported and domestically grown fresh produce samples tested positive for *C. cayetanensis*.

How to test for Cyclospora

An infected person: Cyclosporiasis can be diagnosed by testing stool samples from the infected person.

Produce: The current FDA-preferred method for identifying *Cyclospora* in fresh produce is described in the *Bacteriological Analytical Manual* (BAM) in chapter19b.

Water: Currently there are no standardized or validated methods for testing *Cyclospora* in water. More research is needed to determine the most effective water sampling schemes.

How to reduce the risk of Cyclospora contamination

Cyclospora is not easily killed and can survive some antimicrobial treatments such as chlorine. Therefore, good management practices are the best ways to prevent produce contamination. Growers and farm personnel should:

- Be vigilant for potential sources of human waste in agriculture waters (e.g., sanitary systems, including portable toilets, septic systems, RV parks, and campgrounds)
- Provide and properly train farm crews on the care and use of restroom and handwashing facilities. Provide appropriate usage oversite
- Develop health and hygiene awareness programs for farm personnel
- Exclude ill personnel from handling all raw produce and food contact surfaces

For more information:

CDC - Centers for Disease Control and Prevention. (2019). CDC - Cyclosporiasis. Retrieved from https://www.cdc.gov/parasites/cyclosporiasis

Food and Drug Administration. Nutrition, CFSAN. (2018). Foodborne Pathogens - Cyclospora. Retrieved from https://www.fda.gov/Food/FoodbornelllnessContamina https://www.fda.gov/Food/FoodbornelllnessContamina https://www.fda.gov/FoodbornelllnessContamina <a href="http

Ortega, Y. R., & Robertson, L. J. (2017). Cyclospora cayetanensis as a Foodborne Pathogen.
Retrieved_from_https://books.google.com/books/about/Cyclospora Cayetanensis as a Foodborne P.html?id=vtSyDgAAQBAJ&printsec=frontcover&source=kp read b utton#v=onepage&g&f=false

https://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm553445.htm

