

## Stomach Disorders and Corona | Is there a Relationship?

**Marwa Belal Omara\***

*Department of Veterinary Medicine/Medical Science, Cairo University, Egypt*

**\*Corresponding Author:** Marwa Belal Omara, Department of Veterinary Medicine/Medical Science, Cairo University, Egypt.

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### Abstract

Research suggests that a common symptom of COVID-19, stomach upsets, is overlooked. What is the relationship between stomach upsets and corona? What are the most prominent discoveries of scientists in this regard?

We review the answers to these questions and more in this article.

**Keywords:** *Stomach Disorders; Covid-19*



### Introduction

Fever, dry cough and shortness of breath are hallmarks of COVID-19, the disease caused by the coronavirus.

Some patients complain of stomach upsets during infection with corona, which makes their recovery more difficult.

### Are diarrhea and vomiting symptoms of corona?

A recent analysis of more than 200 people in three hospitals in Hubei - the province where the Corona virus originated in China - showed that nearly 1 in 5 infected people suffer from digestive disorders such as: diarrhea, vomiting and abdominal pain, and nearly 80% lose weight. appetite.

A study in China indicates that a third of mild cases of COVID-19 sufferers have diarrhea that lasts for an average of 5 days.

The first person infected with COVID-19 in the United States also experienced nausea and vomiting for two days before contracting diarrhoea.

One US study found that about 33% of patients experienced diarrhea, nausea and loss of appetite.

These symptoms result from other common causes, including stomach flu or food poisoning.

Digestive problems slow the recovery of people with COVID-19, and digestive symptoms may worsen with the severity of the disease.

### What is the relationship between stomach disorders and corona?

Corona virus destroys healthy cells, once the body is infected and copies itself multiple times in the cells.

COVID-19 primarily attacks the cells lining the airway; This leads to difficulty breathing and pneumonia.

But researchers believe the disease also damages the digestive system and liver tissue.

A recent study indicates that 53% of people admitted to hospital with COVID-19 have at least one gastrointestinal symptom.

According to a review published in February 2021, analyzing 25,252 patients, the most common gastrointestinal symptoms associated with COVID-19 include:

- Decreased appetite (19.9%).
- Loss of smell or taste (15.4%).
- Diarrhea (13.2%).
- Nausea (10.3%).
- Vomiting with blood or gastrointestinal bleeding (9.1%).

Another review published in late January 2021 found much wider ranges for symptom prevalence, such as:

- Diarrhea (9 - 34%).
- Nausea, vomiting or both (7 - 16%).
- Abdominal pain (3 - 11%).

### Stomach disorders due to corona include:

- Stomach acid reflux.
- Indigestion.
- Burping.
- Colon infections.
- Gastroenteritis.
- Gastrointestinal bleeding.
- Decreased bowel movement.
- Destruction of intestinal tissue.

A study in late 2020 found that about 20% of people infected with COVID-19 only had gastrointestinal symptoms.

These symptoms sometimes appear, before respiratory symptoms or fever, appear.

Studies show that gastrointestinal symptoms often occur during the early stages of infection.

### Interpretation of the emerging coronavirus on the stomach

Researchers are still discovering more about how infection with the Corona virus affects different parts of the body.

Scientists have discovered evidence that the Corona virus infects cells of the respiratory and digestive system, as well as cells in other body systems.

Most studies show that the coronavirus enters intestinal cells and respiratory cells using angiotensin-converting enzyme (ACE-2) as a receptor.

The ACE-2 receptor is present in cell membranes and helps regulate blood pressure by controlling levels of the angiotensinogen, a protein that narrows blood vessels and raises blood pressure.

The virus enters the intestinal cells after binding to the enzyme ACE-2.

Once the virus enters the cell, the virus begins to use the cells' own machinery to produce copies of viral proteins and RNA.

It includes RNA, the genetic material of the virus, which is the same as (DNA) in humans.

When the virus leaves an infected cell, cytokines are released, which are small proteins that play a role in inflammatory reactions.

This process causes digestive disorders.

Also, digestive disorders result when the virus destroys or damages the tissues of the digestive system, causing pain, nausea and diarrhea.

Some research shows that COVID-19 alters the gut microbiome, the community of microbes that normally live in the gut or stomach.

The virus travels through the portal vein, which carries blood from the digestive tract; This allows the virus to affect the vagus nerve, causing a feeling of nausea.

### How is the coronavirus transmitted?

The SARS-CoV-2 virus causes Covid-19 disease, and it spreads between people in many different ways.

The virus spreads from the mouth or nose of an infected person in small liquid particles, when they cough, sneeze, talk or breathe.

These particles range from large respiratory droplets to tiny mists.

Corona virus mainly spreads between people in contact with each other, within one meter.

A person becomes infected with COVID-19 when they inhale droplets or droplets containing the coronavirus, or come into contact with the eyes, nose, or mouth.

The virus spreads in poorly ventilated and crowded places because droplets remain suspended in the air, traveling more than one meter.

People become infected by touching surfaces contaminated with the virus, and then touching their eyes, nose, or mouth without cleaning their hands.

Increasing evidence indicates that the Corona virus can be transmitted to others through faecal-oral transmission; This means that a person may become infected by eating or inhaling droplets of infected stool.

Stool samples from the first person infected with the coronavirus in the United States contained viral particles.

Research suggests that people may excrete viral particles in their faeces after the virus is undetectable in the upper respiratory tract, such as the lungs, nose or throat.

### Gastrointestinal symptoms and stomach disorders associated with the coronavirus

Patients with gastrointestinal symptoms with COVID-19 are more likely to develop complications or negative health risks.

A study found that exposure to these symptoms increases the risk of acute respiratory distress syndrome.

Also, exposure to gastrointestinal symptoms increases the risk of undergoing procedures with significant health risks, such as non-invasive mechanical ventilation and endotracheal intubation.

A report published in October 2020 found that children with COVID-19 who had gastrointestinal symptoms were more likely to have severe and critical infections and heart failure.

Another study revealed that gastrointestinal symptoms increase the risk of acute illness and death in adults.

Those with COVID-19 and gastrointestinal symptoms are at greater risk of severe heart and kidney damage or death from disease.

### How do you protect yourself from infection with the coronavirus?

There are several precautions that you must maintain, to avoid contracting COVID-19 disease.

Commit to social distancing, staying at least one meter away from others, and avoiding contact.

Wear a three-layer mask.

Wash your hands frequently and before putting on and taking off the mask.

Avoid crowded, poorly ventilated and enclosed spaces.

Avoid touching surfaces, especially in public places [1,2].

Dear reader, I hope that you have found what you are looking for and have understood the relationship between stomach disorders and corona, and I would like you to adhere to the precautionary measures for your safety.

### Bibliography

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