

Coronavirus unlikely to be passed on through fresh produce /March 2, 2020

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Key points:

- Coronavirus is unlikely to be passed on through fresh produce.
- Coronavirus may survive up to three hours on dry inanimate surfaces, and several hours on hands, tissues, and other surfaces, although this depends on the nature of the surface, environmental conditions etc.
- Reduce the risk of transmission by strictly following good personal hygiene practices along with good agricultural practices.

What is Coronavirus?

Coronaviruses are a family of viruses that usually cause respiratory illness. They include viruses that cause the common cold and seasonal flu, as well as more serious illnesses like Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS).

Can coronaviruses survive outside the body, on food and on other surfaces?

Most viruses from the respiratory tract (such as corona, coxsackie, influenza, SARS or rhino virus) can persist on surfaces for a few days. Although more data is needed to determine how long 2019-nCoV can survive on surfaces, we know that coronavirus can survive up to three hours on dry inanimate surfaces, and several hours on hands, tissues, and other surfaces. However, this is variable and dependent on influencers such as surface type, temperature, and relative humidity.

Can the virus be passed on through fresh produce?

Coronaviruses are thought to be transmitted through respiratory droplets, contact with infected secretions, and fecal-oral transmission. We know through experience with SARS and MERS that people are not infected with these viruses through fresh produce and it is unlikely 2019-nCoV is passed on through fresh fruit and vegetables. As with other viruses, Coronaviruses need a host (animal or human) to grow in, so they cannot replicate in fresh produce. It is not clear if a person can contract 2019-nCoV by touching a surface or fresh produce with 2019-nCoV on it and then touching their mouth, nose, or possibly their eyes. As always, good personal hygiene along with good agricultural practices should be followed strictly.

What is the tolerance of coronaviruses to inactivation by heat or cold/freezing?

Although it is still not certain what time and temperature combinations will inactivate 2019-nCoV, cooking thoroughly would be sufficient to achieve desired amount of reduction. For freezing and cool storage, as with other viruses, the virus may be able to live for months or years when the temperature is below freezing. We know that current industrial practices applied to frozen products demonstrate limited efficacy for reducing the viral load. The public should boil their frozen product before consumption.

How to reduce risk?

Infected food handlers could introduce the virus to fresh produce by coughing and sneezing, or through hand contact, unless they strictly follow good personal hygiene practices along with good agricultural practices.

The World Health Organisation (WHO) advises that standard recommendations to reduce exposure to and transmission of a range of illnesses are maintained. These include:

- proper hand hygiene
- cough/cold hygiene practices
- safe agricultural practices
- avoiding close contact, when possible, with anyone showing symptoms of respiratory illness such as coughing and sneezing

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Her research focuses on understanding the environmental persistence of foodborne viruses and bacterial pathogens and developing strategies for prevention and control of foodborne illnesses.

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