



Correspondence

Organic strawberry- Plausible vehicle of the hepatitis A virus transmission

Dear Editor,

During the past decade, the upward trend of consuming healthy foods that do not contain chemical additives has led to increased consumption of fresh organic fruits and vegetables. The incidence of food-borne outbreaks linked to contaminated fresh food is rising, particularly with the hepatitis A virus (HAV), one of the most regularly reported infections (46.1%) [1]. A total of 44,654 Hepatitis A cases in 37 states of the United States (US) have been reported since the outbreaks were first identified (up to June 10, 2022) [2].

In the USA, recently, 17 people got hepatitis A after eating organic strawberries, and 12 patients got hospitalized. On May 28, FDA announced this situation as a multistate Hepatitis A outbreak [3]. As of June 2, 2022, 10 laboratory-confirmed Hepatitis A cases and these have been investigated in 2 provinces of Canada: 6 in Saskatchewan and 4 in Alberta [4]. So, the question arises, "are the organic foods safe?" Several brands of organic food are under a magnifying glass. In mid-2018, 20 hepatitis A cases were diagnosed after consuming frozen strawberries produced in Poland [5]. Germany and Georgia, USA had also faced similar outbreaks of Hepatitis A [6,7]. Undoubtedly, strawberry is a crucial vehicle of Hepatitis A viruses.

Hepatitis A is a symmetrical RNA virus which is highly contagious and causes liver infections. According to WHO, this virus will spread in an uninfected person from an infected person through food and water [8]. So, there is a higher possibility that the persons handling these strawberries have hepatitis A.

Hepatitis A has no specific treatments, only supportive care. Prevention-wise, maintaining hygiene and sanitation is essential. Hepatitis A vaccination is also important. According to CDC, the best strategy to avoid infection is to get the entire two-dose series of hepatitis A immunization [9]. Also, pre-exposure and post-exposure prophylaxis (PEP) are essential.

Mass vaccination or mass PEP is highly recommended in the affected areas to combat this situation. In USA and Canada, all the organic strawberries should be sent to labs for quality testing, and the prominent companies will get more priority in testing. Imported strawberries should be checked in the labs. If someone has already bought organic strawberries, it's better not to consume them. If someone has ingested or gets symptoms like hepatitis A, they should consult the nearby health centre. Strawberry is a known vehicle of hepatitis A. Not only strawberry, raw scallops, frozen tuna, conventional blackberries, and pomegranate seeds are also known [10]. Fertilizers should also be checked in the labs. So, all the organic food should be certified by FDA or other government food departments before selling in the market. It's also not clear why strawberries and other fruits mentioned above are a good vehicle for Hepatitis A. Research is needed to find the answer to this question. The non-affected countries should also take these precautionous steps.

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In organic farming, hygiene and sanitation should be appropriately maintained. Product handling is essential. Regular health checkups of handlers are important. There should be a government website where the farmers and the product handlers will upload their regular health checkup reports, and artificial intelligence can quickly identify the affected handlers among them.

Proper protocol, screening and lab testing of foods are the primary ways to protect the world from the future outbreak of food-based Hepatitis A.

Ethical approval

Obtained.

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Author contribution

VJ conceptualised the idea. VJ,DM,MS has written the manuscript. VJ performed critical edits of the draft, and prepared the final version of this manuscript which was approved by all authors.

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Declaration of competing interest

None.

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