

BACCALAUREAT GENERAL ET TECHNOLOGIQUE

EPREUVE SPECIFIQUE MENTION « SECTION EUROPEENNE OU DE LANGUE ORIENTALE » Académie de Nantes, binôme : Anglais/SVT

Thème 3A – Le maintien de l'intégrité de l'organisme

Germs in food that make you sick

Salmonella is the most commonly reported bacteria responsible for foodborne illness outbreaks and is usually associated with eggs and egg products.

With the help of the documents, explain how does Salmonella get inside eggs? Give ideas to demonstrate why infections are most likely to occur in young children?

How did US eggs get infected?

25 August 2010

WITH more than half a billion eggs recalled, the US Food and Drug Administration is investigating the source of the country's biggest ever outbreak of salmonella poisoning.

A quadrupling in the usual number of cases of infection with a strain of *Salmonella enteritidis* in May alerted the US Centres for Disease Control (CDC) in Atlanta to a possible outbreak. The trail led the CDC and FDA to two Iowa farms now under investigation [...]

Although the CDC initially linked around 2000 cases of food poisoning with the outbreak, it is thought 40 times as many people may have been infected.

https://www.newscientist.com/article/mg20727753-400-half-a-billion-eggs-recalled-in-us-salmonella-outbreak/

200 Million Eggs Recalled: How Does Salmonella Get into Eggs, Anyway?

By Rachael Rettner, Senior Writer April 16, 2018



Symptoms of *Salmonella* infection include diarrhoea, fever and abdominal cramps that occur between 12 and 72 hours after infection [...] Symptoms of the infection usually last four to seven days, and most people recover without treatment. But in some cases, the diarrhoea can be so severe that a person needs to be hospitalized. Severe *Salmonella* infections are most likely to occur in young children, older adults and people with weakened immune systems [...]

With eggs, *Salmonella* contamination often happens inside the chicken itself, said Benjamin Chapman, an associate professor and food safety specialist at North Carolina State University. That's because Salmonella bacteria can colonize the ovaries of the chicken and get inserted into the egg during egg formation, he said. That means that even eggs that appear normal could have *Salmonella* lurking inside.

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Contamination could also occur after the eggs are laid. This happens because chickens can carry *Salmonella* in their intestines and shed the bacteria in their poop, which could get on the outside of the eggs during nesting, Chapman said. As such, to reduce the risk that *Salmonella* will be present on the outside of the egg, the U.S. Department of Agriculture requires that eggs be washed before they are sold.

https://www.livescience.com/62318-how-salmonella-gets-in-eggs.html

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