

S'pore researchers studying longevity of Covid-19 in frozen, refrigerated food

An ongoing study by local researchers found that the Sars-CoV-2 virus, which causes Covid-19, could survive – in sufficiently high amounts – in frozen fish, chicken and pork for three weeks at refrigeration temperature.

Co-led by Dr Danielle Anderson, scientific director of the Duke-NUS Medical School ABSL3 laboratory, in collaboration with Professor Dale Fisher from the National University of Singapore's Yong Loo Lin School of Medicine, the study was conducted to test the “longevity and infectivity of Sars-CoV-2” in refrigerated and frozen food.

High amounts of the virus were used to infect salmon, chicken and pork sourced from local supermarkets.

The samples were stored at three different temperatures: 4 deg C (refrigeration temperature), -20 deg C (freezer temperature) and -80 deg C (deep freezer temperature generally used in labs to preserve the virus) respectively.

The samples were then harvested at specified time points reflecting food transport time-

lines. It was found that the virus was able to survive and remain infectious at refrigeration and freezer temperatures, that is, 4 deg C and -20 deg C respectively, for three weeks.

Hence, it is possible for the virus to survive transport and storage that occur in controlled settings with consistent temperature and humidity levels, comparable with a laboratory setting.

HANDLER RISK

The study also noted that an infected food handler could be an index case to a new outbreak and such an event – though unlikely – could still occur from time to time.

The team has recently been awarded a research grant from the World Health Organisation to further its study. It is now testing lower amounts of virus on food packaging to replicate transmission occurring through an infected worker contaminating the food or its packaging.

It is also studying the possibility of infection by consuming food that has been contaminated with the Covid-19 virus.

- THE STRAITS TIMES



The study found the virus was able to survive and remain infectious in food at refrigeration (4 deg C) and freezer temperatures (-20 deg C) for three weeks. TNP FILE PHOTO