



### Salmonella infections linked to frozen chicken products

The Food Standards Agency (FSA) and Public Health England (PHE) are investigating a rise in the number of patients infected with two strains of *Salmonella enteritidis* which is thought to be linked to the consumption and handling of frozen raw breaded chicken products.

It has been reported that 327 people have been ill in England, 32 in Scotland, 26 in Wales and 5 in Northern Ireland.

A high proportion (43%) of cases are children aged 16 years old or younger. This may be due to the fact that this age group is the target demographic and may be more likely to consume the affected products.

The two agencies warned people to take care when handling and cooking of products such as nuggets, goujons, dippers, poppers and kiev, and the FSA have published precautionary advice on cooking frozen raw breaded chicken products.

Earlier this month, the FSA (and their counterpart in Ireland) published details of a recall of Aldi Roosters Southern Fried Poppin' Chicken and Roosters Breaded Poppin' Chicken because they might contain Salmonella.

It has been reported that *Salmonella enteritidis* and *Salmonella infantis* were found in imported frozen processed chicken which was manufactured in Poland.

The EU legislation 2073/2005 states that Salmonella should be absent in meat preparations made from poultry even when the product undergoes a subsequent cooking step.

Whilst the risks from undercooking or cross contamination is evident (as detailed above), a target criteria of absence of Salmonella in this type of product may be unattainable, and perhaps a more realistic criteria should be considered. If large amounts of Salmonella are detected in raw meat then this may point to associated slaughter, storage and hygiene issues, but the occasional detection of Salmonella in this product matrix should not be unexpected.

This may account for the dual strategy of the FSA which is to try to identify the affected batches of product, but (more importantly) educate the public in safe practices when handling and cooking raw frozen chicken products.

### Frozen cooked mussels also recalled due to the presence of Salmonella

Last week the Food Standards Agency also issued a recall alert for another frozen product, but this time it is for cooked Mussels sold by Sainsburys due to the possible presence of Salmonella.

### Two separate outbreaks of Salmonella in France linked to the consumption of horse meat

Santé publique France has provided more details on two outbreaks linked to consumption of horse meat in summer and autumn.

In the first outbreak (caused by *Salmonella newport*), 20 people were ill between July and August, and in late summer/autumn at least 33 people have been infected with *Salmonella typhimurium*.

Both outbreaks have been linked to the consumption of raw/undercooked horse meat.

Traceability surveys concluded that the meat had been imported, but it was not able to determine its exact origin.

### Danish Shigella outbreak

The highly infectious *Shigella sonnei* typically has a person to person spread and is responsible for many outbreaks of gastroenteritis in schools and pre-school institutions such as nurseries, but it has been reported that this organism was the cause of a recent foodborne illness in Denmark due to a contaminated batch of fresh mint.

More than 40 people were ill and 13 people were hospitalised after consuming the affected product which was purchased at food markets and local retailers.

Fresh mint can often be added as a garnish to cooked products and salads.

Foodborne outbreaks of *Shigella spp* are not common in Denmark (or in the UK), and are most often acquired in connection with travel abroad. Previous outbreaks in Denmark have been associated with the consumption of imported baby corn and sugar snaps.

## Incidence of *Listeria* spp in frozen vegetables

Following the European wide outbreak of listeriosis that affected 54 people in six countries and caused 10 deaths in 2015 to 2018, which was associated with the consumption of frozen sweetcorn produced in Hungary, a study was commissioned into the incidence of *Listeria* in frozen vegetables in the UK.

It was found that out of 1,050 frozen fruit and vegetable samples that were tested, *Listeria monocytogenes* or other *Listeria* spp were detected in 167 samples, and *Listeria monocytogenes* was present in 10 percent of all the frozen vegetables which were sampled.

The report's authors stated that there must be education of consumers on the risks from non-ready-to-eat foods and this may be enhanced with clearer labelling. They also claimed that there is a need to communicate with food manufacturers to mitigate against cross-contamination within the food chain and prevent non-RTE ingredients being put into RTE foods such as sandwiches or smoothies which do not have a heating step.

## Independent review of hospital food published

An Independent Review of NHS Hospital Food was announced by Health and Social Care Secretary Matt Hancock last year following the listeriosis outbreak caused by sandwiches supplied to several NHS hospitals in the summer of 2019.

The report (which has been published today), includes a number of recommendations to improve food safety. These recommendations include having dedicated food safety specialists in each trust, hospitals implementing robust food safety management systems, and a compulsory function to report concerns across the entire hospital food chain. The report concludes that crucially, NHS Trusts must also recognise that they are food business operators and responsible for ensuring that the food they provide is safe.

The report stated that *"Manufacturers should take stringent actions to control colonisation of food production environments and reduce, as much as possible, contamination of foods from these sites. Microbiological testing does not assure food safety but will provide verification of the effectiveness of the food safety management system. Analytical test methods must be used to detect the presence of Listeria monocytogenes in 25g samples and not just above the 100 cfu/g limit. Although some level of tolerance of the bacterium has to be accepted, rigorous actions must be taken in response to detection of the bacterium, including reviews of: manufacturing practices, factory hygiene, and suppliers. Where persistent contamination is detected, this should be regarded as a failure of the food safety management system in preventing contamination"*.

It is reassuring that the report acknowledges that a zero tolerance of *Listeria* is simply not feasible in most food manufacturing environments, as this approach can sometimes lead to *Listeria* detections not being released due to fears that this may impact on financial contracts. As expressed in the report, it is hoped that more realistic targets will lead to more openness and transparency.

The report goes on to state that *"high street retailers and supermarkets often set their safety standards much higher than the legal minimum and audit much more frequently. The NHS should not accept lower levels of safety assurance than the private sector, particularly as it is serving the most vulnerable consumers. Therefore, we recommend that the NHS raises standards for food safety audits of high-risk food manufacturers so that they give confidence that the legal and contractual requirements are met"*

The panel did consider the case for withdrawing high-risk items such as sandwiches and salads from patient menus but they concluded that if patient choice on the menu is restricted, visitors may bring in sandwiches or salads from outside the hospital for patients; with or without the ward staff's knowledge which may be higher risk, especially if the items were stored at incorrect temperatures.

Although the contributors to the report included the FSA, Public Health England, representatives from the NHS and a number of catering and food industry associations, no direct representatives from the sandwich or food manufacturing sector were credited as being openly involved in compiling the report.

## Tragic botulism incident in Russia

I end this month's bulletin with a truly heart-breaking illustration of the potent lethality of the *Clostridium botulinum* toxin.

International press has today reported the tragic story of two children from St. Petersburg, Russia, who spent three days at home with their dead parents. The couple's children thought that the two were just "sleeping" for a long time.

When Alexander Yakunin, 30 and his wife, Viktoria, 25, failed to attend a family reunion, relatives called their home and their five-year-old daughter answered the phone. In the call, the girl said that she was taking care of her one-year-old brother, and that her mother and father had been "sleeping" for a long time, and that the father had gone all dark. The children's aunt went to the apartment and found the couple dead in bed. The suspected cause of death is food poisoning after consumption of a homemade pickle preserve contaminated with botulinum toxin. According to the police, an open jar of pickles given to the family by Alexander's grandfather was found in the kitchen.

The children are now being cared for by relatives