



## Microbiology bulletin 12

July 2014

### FSA hail Food Safety Week a success

Monday June 16<sup>th</sup> heralded the Food Safety Agencies Food Safety Week where the agency sought to spotlight the risks associated with Campylobacter and raw poultry.

There was a specific campaign highlighting the dangers of cross contamination by washing raw chickens under a running tap in the kitchen.

The FSA revealed some startling (and rather worrying) statistics;

72% of the population have never heard of Campylobacter.

44% of the population still wash raw chickens.

Campylobacter is the most common foodborne pathogen, with about 280,000 cases every year.

Poultry meat was the food linked to the most cases of food poisoning, with an estimated 244,000 cases every year.

The FSA website hosts a short video which gives examples of people who have been affected not only by gastroenteritis but also have suffered from the long term pernicious side effects of Campylobacter such as Guillian-Barre syndrome and Irritable Bowel Syndrome.

The campaign has the title ACT, which stands for Acting on Campylobacter Together.

The FSA strapline “**spread the word-not the germs**” is incumbent on all of us who work in Food Microbiology.

### Bacillus cereus septicemia infections linked to contaminated baby formula.

The tragic fatalities associated with a batch of contaminated feed being administered to babies in 22 hospitals in the south of England in June illustrates the fact that bacteria which are generally regarded as being only capable of causing mild food poisoning can prove devastating when presented with an immunocompromised and vulnerable host.

Investigations are still ongoing but indications show that cases have been strongly linked with a number of batches of a particular form of intravenous liquid called parenteral nutrition which was given to the babies. This contains a variety of nutrients that are delivered directly into the babies’ bloodstream when they have problems ingesting food via their mouth.

This case has similarities to the Pseudomonas infection which killed 3 premature babies in the Royal Jubilee Hospital in Belfast in January 2012.

It is worth remembering that whether an individual succumbs to infection lies as much with the immune status and susceptibility of the

host as with the pathogenicity and virulence of the infecting organism.

### **Food Standards Agency publish Annual Report of Incidents**

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In 2013, the Food Standards Agency was notified of 1,562 food and environmental contamination incidents in the UK, which was similar to the previous year (1,604).

Microbiological contamination accounted for the largest number of recorded incidents (21%).

The annual number of microbiological incidents has been increasing each year, more than doubling (from 147 to 322) between 2006 and 2013.

Contamination of paan leaves, mainly from Bangladesh, India and Thailand (as mentioned in several of last year's micro bulletins) accounted for 41 of the 101 Salmonella incidents.

UK shellfish monitoring uses *E. coli* as a hygiene indicator. This detected 37 of the 57 *E. coli* incidents in 2013. Most of the non-shellfish *E. coli* incidents relate to pathogenic STEC-producing strains.

Of the 46 Listeria incidents in 2013, at least 37 were associated with the pathogenic species *L. monocytogenes*.

More information can be found on the Food Standards Agency website.

### **Chia seeds and Salmonella**

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Chia seeds are becoming increasingly popular. They were given the novel food status by the EU in 2009 and can be used in bread, or may be added to other foods as a topping such as in smoothies or breakfast cereals.

However, investigations are continuing into 80 Salmonella illnesses linked to chia powder in the U.S. and Canada. So far, 21 people in the U.S. have been infected with *Salmonella newport* or *Salmonella hartford* and the Public Health Agency of Canada is investigating 59 similar cases.

### **Report published into the Scottish Hydro 0157 outbreak**

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The outbreak of *E coli* 0157 which affected 22 people attending the arena in January this year (as mentioned in the February bulletin) was due to undercooking of beefburgers at the venue according to a report by NHS Greater Glasgow and Clyde.

### **Salmonella and Chocolate**

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There have been many Salmonella outbreaks over the years linked to the consumption of contaminated chocolate. Whilst looking at a compilation of incidents I was reminded of an outbreak in 1982 which affected 245 people in the UK linked to imported Italian chocolate bars. *Salmonella napoli* was isolated from the Rocky Junior and Tommy Junior bars.

I was working at Leeds Public Health Laboratory at the time and it was my first involvement in a nationwide outbreak situation.

It serves as a reminder (not just of my advanced age) but how Salmonella can survive and be present in products which the majority of the population would consider as low risk.

A 2002 outbreak of *Salmonella oranienburg* in Germany affected 439 people and 37 people contracted *Salmonella montevideo* in the UK in 2006; both outbreaks resulted from consuming contaminated chocolate.