Salmonella in eggs

Salmonella bacteria stands out as the most commonly reported microbiological agent responsible for foodborne illness where eggs have been implicated as the cause. Salmonella infection is a type of gastroenteritis caused by Salmonella bacteria and is often associated with eggs and egg products.

Salmonella – Egg safety for food businesses

Recent food-borne illness outbreaks have been associated with foods that have been prepared using eggs or egg products. Raw eggs were used as an ingredient in foods that were not cooked further or not cooked for long enough. Examples of high risk foods include mayonnaise, aioli, custard, cheesecake, eggnog, deep fried ice-cream and mousse. Never use cracked or dirty eggs in the preparation of food. Dirty eggs may have harmful bacteria on the shell and their porous shell can allow bacteria to move inside the egg. However even eggs with clean, uncracked shells pose a risk if handled incorrectly. Cross contamination can also occur when handling eggs and ready-to-eat food.

High risk processes

Often large batches of food with raw eggs are made and kept in service refrigerators which are opened and closed regularly during busy periods, compromising temperature control. Repeated temperature abuse occurs when sauce dispensers or raw egg products are left out on a work surface for convenience during service, and regularly moved in and out of the refrigerator over a period of up to and over a week. Remember it is important never to leave raw egg products out of the fridge and if not consumed within a day to throw them out. Deep fried ice cream is intended only to crisp the outer layer of the coating, not to thoroughly cook the coating as this will melt the ice cream. The quick cooking in a wok or a deep fryer of the egg coated fried ice cream is inadequate to kill Salmonella. Remember it is important when using an egg wash to coat ice cream balls that the egg wash is used only once, never topped up or left at room temperature for more than two hours.

Don’t wash eggs

Egg shells become more porous when wet, making it easier for any bacteria on the shell to get inside the egg.
Storage of raw eggs
When storing eggs:
- egg and egg products should be stored under refrigeration, as this minimises the risk of harmful bacteria growing and extends the shelf life
- to avoid cross contamination, cartons that contain cracked eggs should be discarded and not reused for repacking eggs
- eggs should be used by their ‘best before’ date
- a clean separate container should be used for each batch of an egg product.

Handling of raw eggs
The following precautions should be taken when handling eggs:
- avoiding unnecessary handling of eggs
- hands should be washed and dried before and after handling eggs
- contact between the shell and the contents of the egg should be minimised when breaking eggs
- ensure utensils, equipment and other food contact surfaces such as benches are appropriately cleaned and sanitised after handling eggs and egg products.

Separating eggs
To minimise cross contamination egg shells should not be used to separate the egg whites from the yolk as any contaminant on the surface of the shell can be transferred to the contents. Separating the eggs using bare hands is also a risk as hands may become contaminated with Salmonella, resulting in cross contamination. Food businesses need to ensure there is no cross contamination between eggs or egg products and other food items.

For further information
Queensland Health has detailed information on food safety which can be accessed at: https://www.health.qld.gov.au/public-health/industry-environment/food-safety/default.asp
If you have any further questions relating to safe food handling, contact local government at: mail@goldcoast.qld.gov.au
Further information about the Australia New Zealand Food Standards Code is available at: http://www.foodstandards.gov.au/code/Pages/default.aspx

Contact
Gold Coast Public Health Unit
Environmental Health Officer
Phone: (07) 56879000
Email: EH_GOLDCOAST@health.qld.gov.au