# COMMUNICATION

# **Food Policy and Programs Branch**



Title: Egg Safety

This information is provided to advise food businesses about the safe purchasing, storing and handling of eggs and preparation of egg based products and to raise awareness about the potential risks associated with the poor handling of these products.

Many food poisoning outbreaks have been associated with foods containing raw or partially cooked eggs such as aioli, mayonnaise, hollandaise & Tartare sauce, custard, cheesecake and mousse that are made by the food business.

The external shell of eggs may contain harmful bacteria such as Salmonella. Salmonella is a bacteria that can be found in the intestines of birds and other animals. While eggs may not necessarily look or smell "off" they may be contaminated.

Cracked and dirty eggs pose a higher food safety risk. Eggs sold for retail and catering purposes must not be cracked or dirty because:

- Eggs that are cracked and/or dirty have a much higher chance of carrying bacteria and inturn, significantly increase the risks of food poisoning.
- If an egg shell is cracked (including fine hairline cracks), harmful bacteria can easily enter and grow inside the egg.
- Dirty eggs are a perfect environment for bacteria and as the eggshell is porous, bacteria can move through the shell and into the egg itself. These dirty eggs may also cause cross contamination within the food preparation area.

### **Purchasing Eggs**

When purchasing eggs:

- Check that eggs are clean and the shells are not cracked. Any cracked or dirty eggs received should be thrown away.
- Check that the name and address of the egg producer is on the carton or packaging as well as the best before date.
- Ensure that the eggs are individually stamped with the producer's or packer's unique identification.

Stamping does not guarantee food safety - it is how your business handles the eggs after purchase that is important.

It is an offence for a food retailer or distributor to sell or offer for sale cracked or dirty eggs. This offence should be reported to your council's local Environmental Health Officer or SA Health. Contact details for SA Health are located at the end of this information sheet.

### **Storing Eggs**

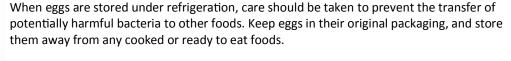
It is important to use eggs before the recommended best before date shown on the outside of the carton or packaging.

Eggs should be stored at a temperature of 15°C or less. It is recommended that eggs are stored under refrigeration to minimise the risk of harmful bacteria growing.



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### Handling Eggs

Always ensure you thoroughly wash your hands after handling eggs with warm water and soap and dry your hands with paper towel.

Prior to using eggs, always check if there are any cracked or dirty eggs. Do not try to clean dirty eggs by washing the eggs. The safest way to deal with dirty or cracked eggs is to throw them out.

Tips to prevent the transfer of potential harmful bacteria gathering on preparation surfaces include:

- Throw used eggshells into the bin immediately:'
- Avoid spillage of egg material onto preparation surfaces.
- Wash and sanitise preparation surfaces after handling eggs. If there has been spillage of egg material and before preparing other food.
- Any utensils or equipment used with egg should be thoroughly washed, sanitised and Dried.
- If separating eggs, it is recommended that a sanitised egg separator or gloved hands are
  used. Do not use bare hands or shells to separate eggs as harmful bacteria may be
  transferred from the eggshell into the egg material.

### **Preparing Egg Based Products**

Generally, eggs are either cooked or added to foods that need to be cooked such as cakes, quiches and frittata's. Harmful bacteria are killed by cooking in turn, minimising the risk of them being present in the final meal served.

There can be a high risk of harmful bacteria contamination and illness in customers if eggs are added to a food that will not be cooked or are only partially cooked - such as Mayonnaise, aioli, hollandaise & Tartare sauce, ice cream , protein drinks containing raw egg, cheesecake (cold-set), mousse, custard (cold set) tiramisu and meringue - particularly if they are made in-house.

Note: Refer to Issue 27C - Preparation of Raw Egg Products for more information on tips to minimise the risk of harmful bacteria being present in the final meal served. This information sheet can be found on line at www.health.sa.gov.au/pehs/food-index.htm.

### Where can I get more information?

More information can be obtained from the Environmental Health Officer at your local council or alternatively from SA Health.



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## **Title: Preparation of Raw Egg Products**

Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg products need to be aware of the associated risks of preparing raw egg products and ensure safe food handling practices are maintained at all times.

Businesses should try to use alternatives to raw eggs in foods which are not cooked. Alternatives include commercially produced dressings and sauces, or pasteurised egg pulp.

If businesses continue to use raw eggs in foods, then food safety controls must be adopted. There are many controls that can be implemented to help minimise the risk of harmful bacteria being in foods.

Many food poisoning outbreaks have been associated with foods containing raw or partially cooked eggs, including:

- Sauces and dressings such as mayonnaise, aioli, hollandaise and Tartare sauces.
- Desserts made without a cooking step such as tiramisu, cheesecake (cold-set), meringue, mousse, custard (cold-set), fried ice-cream batter, some ice cream and gelato made inhouse.
- Drinks such as protein drinks containing raw egg.

### Safer Alternatives

Raw egg products made with pasteurised egg pulp are safer than those made from raw eggs as it eliminates the associated egg handling risks. Pasteurisation destroys harmful bacteria such as *Salmonella*.

- For foods that traditionally contain raw or lightly cooked eggs (e.g. mayonnaise, hollandaise sauce, mousse), use commercially prepared foods instead of making these foods from raw eggs.
- Use pasteurised egg pulp instead of raw eggs as an ingredient in foods that traditionally contain raw or lightly cooked eggs.

### **Food Safety Tips**

Below are recommendations on how to prepare and store raw eggs products safely.

#### 1. Process

- Ensure you use a standard recipe and process. It may be useful to have your process and recipe checked by an expert food technologist.
- Use ingredients such as lemon juice or vinegar to acidify the raw egg product to a pH value at or below 4.6. Acidifying raw egg products and storing them under temperature control is crucial for the safety of these products. This should be done using a standard recipe or checking with a pH meter/strip.
- Immediately refrigerate the raw egg product at or below 5°C where possible or ensure that the 2hr/4hr rule is adopted: http://www.health.sa.gov.aulpehsIFood/2hour-4hourrulepdf.



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#### 2. Shelf Life

It is best to make raw egg products fresh every day in small amounts, not in bulk. If products need to be made in bulk, minimise the amount of time that prepared raw egg products are out of the fridge. A small amount sufficient for that meal period should be decanted using a clean utensil. Throw out any remaining amounts decanted at the end of the meal period.

Products made in bulk should be date marked and closely monitored for batch control. It is the food businesses responsibility to determine the shelf life of the product. Any food safety issues associated must be considered when determining a use by or best before date. It may be useful to have your process and recipe checked by an expert food technologist to validate the shelf life of your products.

#### 3. Temperature

Ideally store all prepared raw egg products under refrigeration at or below  $5^{\circ}$ C. Temperature is easier to maintain when products are stored in multiple small containers, rather than one large container. This will also help you minimise handling the products more than necessary

Where it is not possible to keep the refrigerated during the meal period, the 2 hour/4 hour rule must be followed: <a href="http://www.health.sa.gov.aulpehslFood/2hour-4hourrulepd">http://www.health.sa.gov.aulpehslFood/2hour-4hourrulepd</a>

#### 4. Sanitation and hygiene

- Start with clean and sanitised equipment, containers and utensils.
- Do not top up empty containers or transfer the remains of a container to a fresh container
- Only use a fresh utensil with a fresh container.
- Thoroughly clean and sanitise any food blenders, equipment, storage containers after use when empty. Particular care may need to be taken with hard-to-reach spots such spouts or under sealing lips
- The most common sanitisation method for killing food poisoning bacteria is the use of chemicals, however heat can also be used. Food businesses must make sure that any chemical sanitiser is 'food grade' - safe for food contact surfaces and that Manufacturers instructions are followed.

#### 5. Purchasing, handling and storing eggs safely

Don't use dirty or cracked. It is illegal for food businesses to sell dirty or cracked eggs. Ensure that the egs are individually stamped with the producer's or packer's unique identification. Use safe food handling practices when using eggs to prevent transfer of harmful bacteria into foods.

**Note:** Refer to Issue 27B - Egg Safety for more information on tips on safe egg handling practices. This information can be found online at: <a href="https://www.health.sa.gov.au/pehslfoodindex.htm">www.health.sa.gov.au/pehslfoodindex.htm</a>.

### Where can I get more information?

More information can be obtained from the Environmental Health Officer at your local council or alternatively from SA Health.

