



Producing Raw Egg Foods Safely





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FOOD LEGISLATION

The food laws in Australia prohibit the sale of eggs with dirty or cracked shells because this increases the risk of contamination and foodborne illness.

To protect consumers from the risk of foodborne illness, businesses need to comply with Standard 3.2.2, Division 3, Clause 7 – Food Processing.

Authorised officers assess safe food handling practices of a business, including the use, preparation and sale of raw egg products.



FOOD STANDARDS CODE

All food businesses need to meet the requirements of the Australia New Zealand Food Standards Code (Food Standards Code) to ensure they follow safe handling practices.

To protect consumers from the risk of foodborne illness, businesses need to comply with **Standard 3.2.2, Division 3, Clause 7 – Food Processing:**

1. A food business must

- a) Take all practicable measures to process only safe and suitable food; and
- b) When processing food
 - Take all necessary steps to prevent the likelihood of food being contaminated; and
 - Where a process step is needed to reduce to safe levels any pathogens that may be present in the food – use a process step that is reasonably known to achieve the microbiological safety of the food.

2. A food business must, when processing potentially hazardous food that is not undergoing a pathogen control step, ensure that the time the food remains at temperatures that permit the growth of infectious or toxigenic microorganisms in the food is minimised.

RAW EGG GUIDELINES

The Raw Egg Guideline provides food businesses with:

- Specific safety steps for the preparation of raw egg foods, and
- Guidance on how to meet food safety regulations.

It is a requirement to comply with the guideline if you make raw egg foods.



WHAT IS A RAW EGG FOOD?

Raw egg foods are ready-to-eat foods that contain raw egg, that have not been processed to reduce bacteria levels to safe levels e.g. acidifying or cooking.

Uncooked raw eggs are used for a variety of food products, due to their creamy texture and flavours in foods.

Examples include:

- Sauces and spreads made with raw egg
e.g. mayonnaise, aioli, egg butter
- Desserts made without an effective cook step
e.g. tiramisu, mousse, fried ice cream
- Drinks containing raw egg
e.g. shakes, smoothies.



RAW EGG PRODUCTS NEED SPECIAL CARE



Salmonella is the most common type of bacteria associated with foodborne illness outbreaks in Australia.

The pathogen Salmonella is known to be present on the surfaces of eggs and improper handling can lead to raw egg products becoming contaminated.

Mishandling of eggs and egg-based products are a significant contributor to foodborne illness in Australia, and in NSW.

Salmonella, may be found on the shell surfaces of whole eggs, which then contaminates the food, or cross contaminates other foods.

FOOD SAFETY RISKS

Factors that contribute to foodborne illness outbreaks caused by Salmonella and food that is sold which contains raw egg:

- Contamination of egg contents by Salmonella from the shell
- Failure to process (through acidification or heat) raw egg foods sufficiently to remove any Salmonella risk
- Failure to clean and sanitise equipment and food contact surfaces
- Temperature abuse (i.e. storage above 5°C)
- Keeping beyond recommended storage life (maximum 24 hours) at refrigerated temperature.



ACIDIFYING RAW EGG PRODUCTS

Acidifying egg products with vinegar, lemon juice or another acidifying ingredient, can help stop the growth of Salmonella.

The acid present in vinegar or lemon juice will lower the pH which inhibits or slows the growth of bacteria present, but it will not kill bacteria.

Acidifying involves:

- Using vinegar, lemon juice or acidity regulator
- Ensure the pH is 4.2 or below
- Checking pH with pH meter or pH paper for safe food handling practice.

CROSS CONTAMINATION CONSIDERATIONS

Unhygienic practices by food handlers during preparation of food containing egg have been a contributing factors for the risk of salmonellosis.

Being an animal sourced food, eggs can come into contact with faecal matter during primary production.

The Food Standards Code 2.2.2 prohibits the sale of cracked or dirty eggs. It also requires that eggs are to be individually stamped by the producer for tracing purposes.



CLEANING AND SANITISING

Cleaning and sanitising are separate procedures.

Definitions from the Food Standards Code:

Cleaning: A process that removes visible contamination such as food waste, dirt and grease from a surface, usually using water and detergent.

Sanitising: A process that destroys micro-organisms, reducing the numbers present on a surface to a safe level.

NOTE: Best practice is to apply a chemical sanitiser, only after thorough cleaning.



SANITATION AND HYGIENE

Equipment and utensils:

- Clean and sanitise kitchen equipment before and after each use
- Do not top up batches of sauces
- Use separate containers for each batch of food
- Keep kitchen surfaces and utensils clean and dry
- Take all practicable measures to prevent unnecessary contact with ready-to-eat food.



STEPS TO MAKE RAW EGG PRODUCTS SAFE TO EAT:

Receiving eggs:

- Use clean, un-cracked eggs
- Purchased from a reputable supplier
- Individually date stamped.

Handling and storage:

- Whole eggs refrigerated at or below 5°C
- Store raw egg products at or below 5°C
- Used by the 'best-before' date
- Do not store liquid raw eggs
- Make raw egg product daily in small tubs and not in bulk
- Discard any raw egg product after 24 hours.



RAW EGG ALTERNATIVES

It is recommended food businesses consider safer alternatives to raw egg use, including:

- Using safer commercially produced alternatives where available for dressing, sauces and spreads
- Substituting raw egg with pasteurised eggs in foods that do not undergo a control step, such as acidifying or cooking
- Pasteurised egg products includes egg yolks, egg whites and liquid whole eggs, that are readily available.

FURTHER RESOURCES

- **NSW Food Authority – Raw egg guidelines**
www.foodauthority.nsw.gov.au/sites/default/files/_Documents/retail/raw_egg_guidelines.pdf
- **NSW Food Authority – Safe use of raw egg products**
www.foodauthority.nsw.gov.au/help/safe-use-of-raw-egg-products
- **NSW Food Authority – Safe Preparation of raw egg products**
www.foodauthority.nsw.gov.au/sites/default/files/_Documents/retailfactsheets/safe_preparation_of_raw_egg_products.pdf
- **Food Standards Australia New Zealand – Public health and safety of eggs and egg products in Australia**
www.foodstandards.gov.au/publications/documents/eggs_healthandsafety.pdf



For more information or advice, please contact
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Visit – www.ryde.nsw.gov.au/FoodSafety