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Food Premises Guideline for Pooling Eggs Safely

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In Collaboration with:

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First Nations Health, Fraser Health, Island Health, Interior Health,
Northern Health and Vancouver Coastal Health

INTRODUCTION

Eggs are a nutritious food with many health benefits and can be an important part of a balanced diet. However, they are a raw animal food and must be handled accordingly to minimize any potential food safety risks. This guideline is intended to help reduce foodborne illnesses caused by *Salmonella* Enteritidis (SE) that may be associated with foods prepared in food premises made from eggs that are pooled.

BACKGROUND

SE is a significant cause of foodborne illness in BC. Eggs have been associated with several foodborne illness outbreaks caused by SE in BC and in Canada. Both the outside and the inside of eggs can become contaminated with SE even when the egg “looks normal”. The outside can become contaminated from the chicken and the environment. More importantly, the inside of the egg can also become contaminated with SE when the egg is formed inside the hen. During food preparation, if an SE contaminated egg is combined or pooled with other eggs, the contamination spreads to the entire batch of pooled eggs. As a result, the chance of SE illnesses increases greatly, especially if the pooled eggs are mishandled and/or not adequately cooked. This guideline is intended to lower public health risks associated with pooled eggs.

DEFINITIONS

“**approved supplier**” means a supplier of food who only distributes food from approved sources and who has been approved to distribute food by a responsible regulatory agency.

“**egg**” means the shell egg of avian species such as chicken, duck, goose, guinea, quail, ratites, and turkey.

“**graded egg**” means a shell egg that has been examined, graded and packaged at a provincially licenced and federally registered egg-grading station.

“**pooling eggs**” means the breaking and combining of multiple (more than one) eggs into a container. The subsequent pooled eggs could be mixed or remain unmixed. They can then be used or cooked as-is, OR used as an ingredient in a menu item.

“**pasteurized eggs**” means eggs that have been commercially pasteurized (heat treated) in order to reduce the risk of foodborne illness in menu items that are not cooked or are only lightly cooked. They may be available as liquid egg products, in dry form, or pasteurized in the shell.

GUIDELINE

The use of pooled eggs is only allowed under these conditions:

-  The pooled eggs are for a single dish that will be fully cooked for immediate consumption by one person (i.e. one person's omelette or one person's scrambled eggs), OR,
-  The pooled eggs will be cooked to an internal temperature and holding time as prescribed in the table below, OR,
-  The pooled eggs are an ingredient in a food that will then be cooked to an internal temperature and holding time as prescribed in the table below.

Pasteurized eggs or pasteurized egg products must be used instead of pooled eggs if these conditions are not met.
Pooled eggs must NOT be used in raw (uncooked) foods that are ready-to-eat (e.g., tiramisu)

Examples of dishes that are commonly prepared with pooled eggs:

-  Scrambled eggs
-  Omelettes
-  French toast
-  Sauces
-  Meringues that are cooked

Raw egg dishes where pasteurized eggs must be used:

-  Tiramisu
-  Caesar salad dressing
-  Egg nog and egg white cocktails
-  Uncooked meringues (e.g. French meringue)

Other local Health Authority requirements may apply and must also be addressed (e.g., posting consumer advisories, or documenting proper egg cooking and handling steps in a food safety plan). Please contact your local Health Authority for these requirements.

Examples of pasteurized eggs:

-  Pasteurized shell eggs
-  Liquid eggs – liquid albumen (whites) or liquid yolks
-  Processed whole eggs with or without stabilizers

Minimum Internal Temperature* and Holding Times* for Cooking Pooled Eggs or Foods Containing Pooled Eggs

Minimum Internal Temperature °C (°F)	Minimum Holding Time
63°C (145°F)	3 minutes
66°C (150°F)	1 minute
68°C (155°F)	17 seconds
70°C (158°F)	Less than 1 second (instantaneous)

***Pooled eggs cooked in a microwave oven must be heated to a minimum internal temperature of 74°C (165°F) and allowed to stand covered for at least 2 minutes before serving**

1. Handling of Pooled Eggs

-  Only buy graded eggs from an approved supplier. Do not use ungraded eggs or any eggs that are dirty or cracked. Ungraded eggs, dirty or cracked eggs have a higher risk of being contaminated with SE.
-  Only use eggs that have time left on their “Best Before Date”. Discard expired eggs past their best before date.
-  Eggs must be stored at 4°C (40°F) or colder until needed.
-  Eggs must only be pooled just prior to cooking.
-  Only pool the required number of eggs for the dish being prepared.
-  All batches of pooled eggs must be used as soon as they are pooled.
-  Do not store pooled eggs.
-  Pasteurized eggs and egg products may be stored provided that the manufacturer’s recommended handling and storage instructions are followed.

2. Cleaning and Hygiene After Handling Eggs

-  Hands must be washed thoroughly for 20-30 seconds with soap and warm water immediately after handling eggs.
-  Containers, equipment, dishes, utensils, and food contact surfaces must be washed thoroughly and properly sanitized after contact with eggs.

3. Managing Eggs as Ingredients

DO	DON'T
 Purchase eggs from approved suppliers	 Serve ready-to-eat foods containing raw eggs
 Refrigerate eggs	 Serve beverages containing raw egg whites or egg yolks
 Replace raw eggs in ready-to-eat recipes with pasteurized eggs or Remove those menu items from service	 Serve undercooked eggs
 Cook all eggs and pooled eggs to minimum time and temperature (e.g. 66°C for 1 min)	 Store or re-use pooled eggs the next day

REFERENCES

BC *Public Health Act*, [Food Premises Regulation. B.C. Reg. 210/99](#)

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