



## Shell Egg Handling Guidelines

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America's egg farmers are working hard to ensure a safe and secure supply of liquid, frozen and dried egg products for their food manufacturing and foodservice partners. In some operations, it may be a short-term option to temporarily switch to shell eggs.

If you choose to hand-break shell eggs in your facility, keep in mind the following food safety guidelines and regulatory requirements per the egg breaking information outlined in the Code of Federal Regulations 9CFR 590.522 and the Egg Products Inspection Act ([www.fsis.usda.gov/epia](http://www.fsis.usda.gov/epia)).

We also suggest contacting your local state health department for additional shell egg handling guidelines that may apply to your state.

### **FACILITY – Before you begin breaking eggs.**

- All individuals breaking eggs must wash their hands thoroughly with odorless soap and hot water each time they begin breaking eggs. Hands must be dried with single-use paper towels. Cloth towels are not permitted. All individuals should wear food-safe gloves during egg breaking operations.
- The egg breaking area must be kept dust-free, and free from flies, insects and rodents.
- The floor must be kept clean and reasonably dry during breaking operations.

### **OPERATIONS – How to break eggs.**

- Each shell egg must be individually broken into a small cup or vessel in a sanitary manner to minimize contact between exterior shell surface and edible portion of the egg.
- The content of each egg must be visually examined for imperfections prior to being emptied into the storage container.
- Shell particles, meat and blood spots and other foreign material accidentally falling into the breaking cups shall be removed with a clean spoon or other clean utensil.
- Whenever an inedible egg is broken, the affected breaking equipment must be cleaned and sanitized. The contents of any cup or other liquid egg receptacle containing one or more inedible eggs must be disposed.
- Do not pool together multiple eggs with intact shells into a mechanical device to break them. This practice poses a food safety risk and does not allow examination of the internal contents of eggs on an individual basis.
- All equipment must be rotated with clean and sanitized equipment every 2 ½ hours.
- Per the Egg Products Inspection Act administered by USDA and FDA, you are required to break only clean, sound shell eggs. Break only graded eggs. Do not break nest-run or ungraded eggs.
- Discard any eggs with broken shells.



## **HANDLING – How to use and store eggs.**

- Wash utensils, equipment, and work areas with hot, soapy water before and after contact with eggs.
- Per USDA/FSIS store shell eggs and liquid eggs (eggs removed from their shell) at 40°F (4.4°C) or below, do not freeze.
- Per USDA/FSIS CFR 590.530, Liquid eggs (eggs removed from their shell) held for 8 hours or less must be stored at 45°F (7.2°C) or below, 40°F (4.4°C) or below if stored in excess of 8 hours. Do not freeze. Compliance with temperature requirements apply to liquid eggs shall be considered as satisfactory only if the entire mass of the liquid egg meets the requirements within 2 hours of breaking.
- Don't keep shell eggs and liquid eggs out of the refrigerator more than 2 hours.
- Per USDA requirements, liquid eggs must only be used at the location where the shell eggs were broken. Liquid eggs cannot be transported to another bakery or food preparation facility.
- Break eggs on a daily basis; break only enough eggs to accommodate the day's production needs.
- Refrigerate liquid eggs in covered stainless steel containers for no more than one day. Dispose any unused liquid eggs.
- Do not add liquid eggs to container of eggs that were broken on a different day.
- Adjustments to cooking/baking time may be needed to assure finished products are heated to a minimum internal temperature of 160°F (71.1°C).

## **Glossary**

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### **Code of Federal Regulations (CFR)**

Is an annual codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government.

### **Egg Products Inspection Act**

The Egg Products Inspection Act assures that eggs and egg products distributed and consumed by the public are wholesome, not adulterated, and properly labeled and packaged. Passed by Congress in 1970, the Egg Products Inspection Act is administered by the United States Department of Agriculture (USDA) and Food & Drug Administration (FDA) which imposes specific inspection requirements for two categories of eggs – shell eggs and egg products.

Per the Egg Products Inspection Act, you are required to break only clean, sound shell eggs. Break only graded eggs that meet U.S. Grade B or better standards. Do not break nest-run or ungraded eggs. If caught breaking eggs outside the requirements of the Egg Products Inspection act, you could be inspected by USDA/AMS and could face Civil Penalties if repeated violations occur.



### **USDA/FSIS**

United States Department of Agriculture Food Safety and Inspection Service  
[www.fsis.usda.gov](http://www.fsis.usda.gov)

### **USDA/AMS**

United States Department of Agriculture, Agricultural Marketing Service  
[www.ams.usda.gov](http://www.ams.usda.gov)

### **Clean & Sound Shell Eggs**

Any egg whose shell is free of adhering dirt or foreign material and is not cracked or broken.

### **Inedible Eggs**

Eggs of the following descriptions: black rots, yellow rots, white rots, mixed rots (addled eggs), sour eggs, eggs with green whites, eggs with stuck yolks, moldy eggs, musty eggs, eggs showing blood rings, and eggs containing embryo chicks (at or beyond the blood ring stage).

### **Nest Run Eggs**

Eggs that have not been washed, sized and candled for quality.

### **Ungraded Eggs**

Eggs that have not been candled for quality. Long ago, this quality check was done by holding a candle behind an egg. Most eggs pass on rollers over high-intensity lights, which make the interior of the egg visible. The size of the air cell and distinctness of the yolk outline are inspected. Eggs with imperfections such as cracked shells or blood spots would be visible during candling and would be removed prior to packaging.