

FRESH EGGS SAFETY

Extension

April 2024



Selling Eggs

Before selling eggs, review the following recommendations outlined in current regulations by the Wyoming Department of Agriculture (WDA)

- Safely Selling or Buying Locally Produced Eggs
 - Chapter 15
 - Chapter 4, section 7
- <u>Minimum requirements for Selling Eggs after</u> <u>Candling and Grading</u>

The Bloom

Whether you choose to wash your eggs or not is up to your own personal beliefs or state regulations. If eggs are washed, they **MUST** be refrigerated.

Egg shells are made up of mostly calcium carbonate crystals, they can have as many as 8,000 pores in them which is perfect to allow bacteria inside.

Before an egg is laid the chicken coats the egg with a protective coating called the "bloom".

The bloom helps to keep bacteria, moisture, and gases out of the egg. It also keeps the egg fresher longer. Unwashed eggs with the bloom still intact can sit on the counter for two weeks without going bad.

The bloom can easily be washed off with water, but once it has been, the egg is no longer protected from bacteria, moisture, and gases because the pores are now exposed.

Reduce Contamination

Bacteria can enter eggs through pores on the shell when laid in dirty/ contaminated areas. To reduce this:

- Gather eggs frequently, at least twice daily, if possible, at noon and evening.
- Keep the nests clean, clean nests usually result in cleaner eggs.
- Collect eggs in an easy-to-clean container, like a coated wire basket or plastic egg flat.
- Do not stack eggs too high. If you stack them too deep, there is an increased risk of broken or cracked eggs.

How to Clean Eggs

- Do not cool eggs rapidly before cleaning;
 when cooled, the shell will contract and pull dirt and bacteria into the pores.
- Eggs with soil or debris can be cleaned with fine sandpaper, a brush, or emery cloth.
- If eggs need to be washed, wash and rinse eggs in warm to hot water
 - Water temperature between 90°-120°F is preferred; hot tap water is usually 120°F.
 - The water should be at least 20 degrees warmer than the egg. If freshly laid, use a temperature on the higher end of the range. Eggs are generally 105°F when laid.
 - Warm water helps the egg contents expand and prevents bacteria from being pulled through the pores.
- Wash off any visible contamination. Wash the eggs individually, and do not soak them in the water. Rinse with slightly warmer, clean water than what the eggs were washed in.
- Dry eggs off with a clean towel; do not let them air dry.
- If you would like, you can use an unscented soap or detergent to help with this process.
 Frangrance soaps should be avoided as eggs can absorb the fragrance and develop an odd flavor.
- Try to avoid cleaning eggs in the kitchen sink to prevent contamination. If that is not possible, disinfect all surfaces and the sink after you are done cleaning.
- Refrigerate the eggs, small end down, at 45°F or below. Refrigeration helps preserve the internal quality and reduce potential bacterial growth.

Sources:

Bunning, M. (2021). Home-Produced Chicken Eggs. Colorado State University Extension.

Clauser, P.J. (2009). <u>Proper Handling of Eggs: From Hen to Consumption. Virginia Cooperative Extension.</u>

Dittmar, R. (2022). Selling Yard Eggs in Texas. Texas A&M Agrilife Extension.

Wyoming Department of Agriculture. (2023). <u>Safely Selling or Buying Locally Produced Eggs.</u>

Sanitize

After washing and rinsing the eggs, you can choose to sanitize them.

- Make a solution of 1 Tablespoon bleach to 1 gallon of water; this is about 200 ppm.
- Dip the eggs completely in the solution, then remove them and rinse them off.
- Dry the eggs with a clean towel and store them in the refrigerator at 45°F or below.

Storage

- Eggs stored in a carton in the refrigerator should hold their optimal quality for at least four weeks.
- Storing eggs with the small end down will keep the air sac separated from the yolk, slowing moisture loss and protecting freshness.
- Date the storage carton or container and use the older eggs first.

Cooking

Consumers should store their eggs in the refrigerator until used. Never eat raw eggs.

The U.S. Department of Agriculture recommends that all eggs and egg dishes be cooked until the yolks are firm or to a minimum internal temperature of 160°F. Use a food thermometer to measure the temperature.

When preparing recipes that call for raw or undercooked eggs, use pasteurized eggs or egg products.