



Selecting Eggs for Show ¹

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Carefully read the rules and regulations for the show in which you plan to enter your eggs. Some shows may require that the eggs are produced by your chickens, while other shows may allow you to purchase eggs. In most poultry shows, white or brown chicken eggs can be entered. All eggs are entered as a single dozen. Each dozen will be judged on the basis of exterior and interior egg quality. There are usually separate classes for white and brown eggs.

There may also be separate classes for large and medium eggs. A large egg must weigh at least two ounces.

Each egg is judged for its individual quality, and the final placing depends on the uniformity of the dozen. For details on both external and internal egg quality, refer to Fact Sheet PS-24, "Egg Quality".

Egg Collection

Collect eggs often, preferably two or three times a day. This will reduce the possibility that they will get dirty or cracked. Frequent collection also helps to maintain interior egg quality.

Clean the eggs as soon as possible. A slightly dirty egg may be brushed off or rubbed with fine grain sandpaper. A seriously dirty egg may be rinsed

in water that is slightly warmer than the egg (cooler water may force bacteria through the shell into the egg). Spraying shells with a thin film of mineral oil will help maintain egg freshness. It seals the pores, thus reducing evaporation of moisture from the egg. Make sure each egg is dry before it is placed in the carton.

Egg Storage

Store eggs in clean cartons. Orient eggs with their pointed end downward. Refrigerate eggs as soon as possible. An egg kept at room temperature ages about the same amount in a day as a refrigerated egg ages in a week.

Egg Quality

Interior

As with exterior quality, the interior quality of the eggs will be judged according to USDA standards (see Table 1).

You can check the interior quality of your eggs by holding them up to a flashlight in a darkened room. Eggs that are stale or of poor quality will have a large air cell and the yolk will be more visible and mobile.

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A meat or blood spot will show up as a dark or foreign substance in the albumen.

When a stale egg or an egg of poor quality is broken out, the egg white (albumen) will spread or flatten out. The yolk will be flat and very easily broken. Eggs of good quality will have a firm, thick albumen that is compact and upstanding. The yolk will stand up and be round in appearance.

Floating an egg in plain water lets you estimate air-cell size without candling. A fresh egg will settle to the bottom of the container and rest horizontally. The larger air cell of a one-week-old egg will cause the big end of the egg to rise up slightly from the container bottom. An egg that is two to three weeks old will settle to the bottom of the container vertically, big end upward. The large air cell of a very old egg causes the egg to float.

Exterior

Exterior egg quality will be judged on the basis of texture, color, shape, soundness, and cleanliness according to USDA standards (see Table 2). The shell of each egg should be smooth, clean, and free of cracks. The eggs should be uniform in color, size and shape.

Some of the common defects in exterior egg quality include: lack of uniformity, dirty eggs, extremely small or large eggs, odd-shaped eggs, and cracked or rough shells.

Table 1. Summary of USDA standards for interior egg quality.

Quality factor	AA Quality	A Quality	B Quality	Inedible
Air cell	<=1/8" in depth	<=3/16" in depth	>3/16" in depth	doesn't apply
Egg white	clear, firm	clear, may be reasonably firm	clear, may be weak and watery	doesn't apply
Yolk	outline slightly defined	outline may be fairly well defined	outline clearly visible	doesn't apply
Blood/Meat spots	none	none	blood or meat spots aggregating <=1/8" in diameter	blood or meat spots aggregating >1/8" in diameter

Table 2. Summary of USDA standards for exterior egg quality.

Quality Factor	AA or A Quality	B Quality	Dirty
Stain	- Clean - May show small specks, stains or cage marks that do not detract from general clean appearance of the egg - May show traces of processing oil	- Slight or moderate localized stains - < 1/32 of shell or - scattered stains <1/16 of shell	- Prominent stains - Moderate stains covering >1/32 if localized and - 1/16 of the shell if scattered
Adhering dirt or foreign material	None	None	Adhering dirt or foreign material (1.0 mm in area or greater)
Egg shape	Approximately the usual shape	Unusual or decidedly misshapen (very long or distorted)	
Shell texture	May have rough areas that do not materially affect shape or strength	- Extremely rough areas that may be faulty in soundness or strength - May have large calcium deposits	
Ridges	Slight ridges that do not materially affect shape or strength	May have pronounced ridges	
Shell thickness	Free from thin spots	May show pronounced thin spots	
Body checks	Free from body checks ¹	May show pronounced body checks ¹	

¹ Body-checked eggs may have: 1) fracture lines which are visible to the naked eye; or 2) have ridges or bulges associated with the area of shell which was fractured during calcification but the fracture lines are not visible unless candled. If the fracture lines are visible to the naked eye, then the egg is a Grade B. If the lines are not visible to the naked eye, then the size of the ridges or bulges must be considered regarding egg shape in order to determine the grade of the egg.