

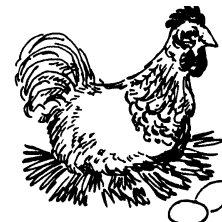


The University of Georgia

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COMMERCIAL EGG TIP . . .

FREQUENTLY ASKED QUESTIONS ABOUT THE EGG

As a small child while visiting my grand-parents farm, I found a very small egg (pee wee) in the chicken coup. My cousin, who was a little older than I was, informed me that this egg was laid by the rooster. As a Poultry Specialist I have been asked numerous questions about chickens and eggs. From experience, it is clear that over the years people have been misinformed about certain facts concerning the egg. Others have information that is now inaccurate due to advancement in technology. As we begin a new year I will answer some frequently asked questions and try to address misconceptions about the egg.

Where do pee wee eggs come from? Contrary to what I was told, pee wee eggs are not laid by roosters (since only hens can lay an egg!) or pigeons. Several factors influence the size of the egg the main one being the age of the hen. Pullets (young hens just beginning to lay) which are underweight at sexual maturity will lay pee wee eggs.

Should we wash the eggs when we get home from the grocery store? When the hen lays an egg it is covered with cuticle (bloom) that seals the pores in the egg shell. This helps to prevent bacteria from getting in the egg and also prevents moisture loss. At the commercial layer farm the eggs are washed. During this process the bloom is removed. In order to restore the protection, the eggs are sometimes coated with edible mineral oil.

Is the color of the egg an indication of the nutritive value of the egg? While egg shell and yolk color vary, they are not determinants of egg flavor, quality, nutritive value, cooking characteristics or shell thickness. The breed of the hen determines the color of the shell. For example, white feathered hens with white ear lobes lay white shelled eggs and red feathered hens with dark ear lobes lay brown shelled eggs. The color of the yolk depends on the diet the hens were fed. Diets that are high in yellow-orange pigment (such as feeds with corn or alfalfa) will yield brighter yellow yolks while diets that contain ingredients such as wheat or barley will produce lighter colored yolks

Are the blood spots in eggs an indication of a fertile egg? Eggs which are produced on the commercial layer farms are infertile. A hen will lay an egg whether or not she has been mated by a rooster. The blood spots which are sometimes observed when an egg is broken are not an indication of a fertile egg. It is caused by the rupturing of a blood vessel during the formation of the egg. Electronic candlers are used to detect eggs

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with blood spot or meat spots. When observed they are removed, but some are missed by the machines during the process and can end up in the grocery store.

How are double yolk eggs formed? During the process of egg formation a yolk is released from the ovary. This is known as ovulation. The ovary contains yolks in a hierarchical manner. That is, they are at different stages of development and the most mature one will ovulate first. Occasionally, more than one yolk is at a similar stage of development. Because of the length of time the egg stays in the different areas of the reproductive tract, the second yolk will catch up with the first yolk before the shell membrane and the shell is placed around the yolk and albumin.

Are there really organic eggs? Organic eggs are eggs obtained from hens which are fed diets that include ingredients which were grown without pesticides, fungicides, herbicides or commercial fertilizers. The nutrient content of the eggs are not affected by whether or not the ration is organic.

Are the eggs produced by the back-yard hens lower in cholesterol than commercial eggs? Eggs produced by backyard hens and fertilized eggs do not have lower levels of cholesterol than eggs bought in the grocery stores. In the past people have been discouraged to eat eggs on a regular basis due to their high cholesterol content. Recent research has shown that today a large grade "A" egg contains almost 1/3 less cholesterol than its counterpart ten years ago. This could be because the methods previously used to determine cholesterol in eggs overestimated the levels. If you want to avoid the cholesterol that is in the egg, simply remove the yolk, the egg white is cholesterol free

Is it safe to consume eggs raw? Warnings have been issued against consuming raw or lightly cooked eggs. This is due to potential transmission of food-borne pathogens which may be present in the raw egg, specifically the yolk. The pathogen of interest is Salmonella which can be transferred to the yolk via the ovary of the hen.

Can floating eggs in salt water be used to test the freshness of the egg? Placing eggs in salt water is not a reliable way to determine the freshness of the egg. A brine test is sometime used to test the density of an egg or the shell thickness. The freshness of the egg can be determined by the size of the air sac. This can be observed candling of the egg.

Do hens lay an egg each day? This is highly unlikely since the entire process of egg formation (oviposition) from the release of the yolk to the laying of the egg takes approximately 25-27 hours.

Which came first, the chicken or the egg? Unfortunately I do not have the answer for that one, but I hope that the questions that have been answered have shed some light on the mysteries of the egg.

Reference: some of the information was obtained from the Eggyclopedia.
American Egg Board



Claudia Dunkley

Extension Poultry Scientist

Extension County Coordinator/Agent

****Consult with your poultry company representative before making management changes.****

“Your local County Extension Agent is a source of more information on this subject”