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Feathered Facts


Volume 2, Issue 1 January 2015

UF | IFAS Extension | Baker County

Extended 'Ask the Expert'

Happy New Year! It is my pleasure to welcome everyone to the beginning of 'Volume 2' of *Feathered Facts*, the UF | IFAS Poultry Newsletter. This issue is an extended version of our 'Ask the Expert' section. In this issue, you will find answers to some of the most common questions that are received about poultry. Later issues this year will include articles on various topics including disease, husbandry, management, nutrition and others. Please remember that you can send your questions in via our email (baker@ifas.ufl.edu) and previous issues of *Feathered Facts* can be found [here](#). Please look for hyperlinks within the newsletter that will take you to additional information. I look forward to the coming year and answering your questions about poultry.

Sincerely,




Michael A. Davis, Ph.D.
UF | IFAS Extension, Baker County

General Poultry Questions & Answers

Q: What is the average lifespan of a chicken?

A: Chickens can live for several years if their living conditions are correct. It is not uncommon for a chicken to live 6 to 10 years. However, commercial laying chickens are usually only kept for 2 to 3 years.

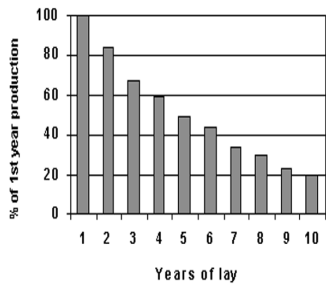
Q: How old are chickens when they begin to lay eggs?

A: Under ideal conditions (nutrition, day length, housing & management), hens should begin to lay somewhere around 20 weeks of age. There may be some hens who start a little earlier or a little later than the average.

Q: My hen just hatched some baby chicks. What is the male/female distribution? How can I tell if my the chicks are male or female?

A: Under normal conditions, a random mating will result in a 50:50 ratio of male to female offspring. Determining the sex of just hatched chicks is very difficult. There are some crosses that result in differences in feather length of male and female chicks, but these are accomplished under controlled conditions. In most cases you will have to wait until the chicks are older to determine their sex.

Incubation, Embryology and Egg Q&A



Hens can live for many years and produce eggs for much of that time. However, their productivity will decrease over time. For additional information, please click [here](#).

In chickens, it is the female that determines the sex of the baby chick, not the male as in humans.



Food Safety is important for adults and children. The Partnership for Food Safety Education has created many tools to help educate children about food safety. Visit their website [here](#).

Q: Which part of the egg develops into the baby chick, the yolk or the white?

A: Actually, neither the yolk or the white develop into the baby chick. There is a group of cells located on top of the yolk called the germinal disc. In an unfertilized egg, the cells look like a small, pale dot. In a fertilized egg that has been incubated for a few hours, the disc has a doughnut shape. It is these cells that eventually become the baby chick. The egg white contains many antibacterial elements that help protect the developing embryo, while the yolk is the nutrient source.

Q: Will a double-yolked egg develop into twin chicks?

A: No. While both germinal discs may start to develop inside the egg during incubation, there is not enough room inside the shell to support the development of two chicks. Even if they are fertilized, double-yolked eggs almost never hatch out; and if they do, only one chick will have developed.

Q: I've heard that a small change in incubation temperature will influence the sex of the hatching baby chicks. Is this true?

A: The incubation temperature has no influence on the sex of the chick that hatches. In chickens, the chromosomes that determine sex are ZZ for male and ZO for female (compared to XX for female and XY for male in humans). It is the combination of these chromosomes that determines the sex of the chick.

Q: Which is better for you nutritionally, a brown-shelled egg or a white-shelled egg?

A: There is no difference in the nutritional properties of eggs based on shell color. This is also true for fertilized vs. non-fertilized eggs. Hens that are fed a similar diet will produce eggs with a similar nutrition profile no matter the color of the shell or if the egg is fertile. It is possible to slightly manipulate some nutritional properties of eggs by changing the diet of the hens, but this has to be done carefully. Simply put, an egg is an egg, insofar as the nutritional properties are concerned.

Q: I've heard that eggs from Araucana chickens have no cholesterol. Is this true?

A: This is not true. Eggs from Araucana chickens contain cholesterol in approximately the same amount as other chicken eggs.

Q: What causes blood spots in eggs? Are these eggs safe to eat?

A: Finding an egg with a blood spot is rare in commercial eggs (as they are discarded), but you may find these occasionally in eggs from backyard flocks. Blood spots are caused by the rupture of a blood vessel that carries materials to the yolk as it develops within the hen. As the yolk is being deposited into the reproductive tract the vessel ruptures and leaves a spot of blood on the yolk. Blood spots do not indicate that an egg is fertile. These eggs are safe to eat as the blood spot can be removed with the tine of a fork or the tip of a knife. You may also occasionally find eggs with meat spots. These are typically found in the albumen, or white of the egg. A meat spot is a small piece of the reproductive tract that has sloughed off during egg formation. Eggs with meat spots are also safe to eat. The meat spot can be removed in the same way as a blood spot.

Poultry Meat and Egg Products Q&A

Q: Why do poultry have light and dark meat?

A: As with other animals, different muscles in poultry perform different tasks. This leads to different muscles being used at varying rates. Muscles that are used a lot and over long periods of time require a lot of oxygen to perform well. There is a compound in these muscles that helps to store oxygen for use called myoglobin. It is similar to the hemoglobin that is found in blood. While storing oxygen, this molecule has a red color. Muscles that are used extensively have a lot of myoglobin, thus resulting in their reddish, darker color. Muscles that are used less do not have much myoglobin and are lighter in color. This is why chickens and turkeys have dark meat in the legs and thighs (muscles which get used a lot) and light meat in the breast and wing (muscles that don't get used a lot). In fowl that fly, such as ducks, there will be dark meat in the breast area.

Q: Are hormones used to produce poultry meat?

A: No. Hormones are not fed to or administered to commercial poultry. Federal law prohibits the use of hormones in poultry meat and egg production. The rapid growth rates, high egg production and feed efficiencies that are seen in today's poultry are the result of selective breeding, excellent nutrition and good husbandry practices. Please note that poultry product labels cannot contain claims such as "No Hormones Added" unless it is followed by a statement that says "Federal regulations prohibit the use of hormones" as this practice is against federal law.

Q: Why do some chickens in grocery stores have yellow skin while others have white skin?

A: The yellow color of some chicken skin is caused by ingestion of yellow and orange pigments in the poultry feed. Corn is an example of a feed ingredient that has yellow pigments. These pigments are absorbed from the feed and produce the yellow skin. This can also happen in egg production as you may see eggs that have a stronger or lighter yellow color. There is no nutritional difference in the poultry meat or egg from this difference in pigmentation.

Q: How long will table eggs stay fresh?

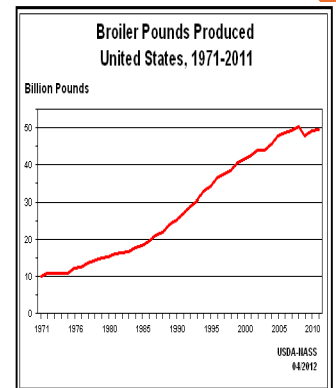
A: Fresh eggs can be stored in refrigerated temperatures (40°F to 45°F) for 4 to 5 weeks after the packaging date that is on the carton. Hard-boiled eggs should be kept in the refrigerator for not more than 1 week after they have been cooked.

Q: How long can I keep fresh poultry meat? What about frozen poultry meat?

A: All fresh meats, including poultry, should be frozen or consumed within 1 to 2 days after they are purchased. Poultry meats that are frozen will retain their quality for 3 to 6 months in the freezer.

Q: On the poultry label, what do the terms "Fresh", "Frozen" and "Hard Chilled" mean?

A: "Fresh" is a term that is allowed on a poultry label if the meat has never had an internal temperature below 26°F. Poultry that is labeled "Hard Chilled" has had an internal temperature below 26°F, but not below 0°F. If poultry is labeled as "Frozen" or "Previously Frozen", then it has had an internal temperature below 0°F.



Increase in the pounds of broiler meat produced in the United States over the past 40 years. For more information on the commercial US poultry industry, please click [here](#) and [here](#).

Never thaw frozen meat at room temperature. This can lead to potential bacterial growth. For more information, click [here](#).



An example of the seal placed upon meat and poultry products by the U.S. Department of Agriculture, Food Safety Inspection Service after they have passed inspection for wholesomeness.

Questions to Consider Before You Start Raising Poultry

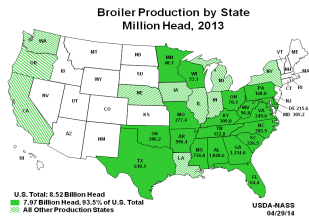
Even though the United States enjoys the safest and one of the least expensive food supplies in the world, you have probably noticed that the price that you pay for food is going up. Perhaps this has led you to wonder if raising a small poultry flock for meat and/or eggs would be a good alternative for you rather than buying these products at your local grocer. The fact is, if you want to make money in an enterprise like this, you will most likely need a fairly large flock. Florida does have a "Limited Poultry and Egg Operation Rule" that details the specifics of selling poultry and/or eggs from a small poultry operation. The rule can be found [here](#). An explanation of the rule and FAQ from FDACS can be found [here](#) and [here](#), respectively. There is also a write-up about the rule in a previous edition of *Feathered Facts* which can be found [here](#).

The answers that you provide to the questions below will help you to determine if raising a small flock of poultry is right for you.

Questions to consider:

- Are there specific zoning laws that allow or prevent you from raising poultry at the location that you desire?
 - Many municipalities have started to allow flocks of a certain size to be raised and housed in non-agricultural zoned areas. These allowances vary at the town, city and county levels. Please make sure to check with your local zoning office for the rules in your area.
- Is there someone available to take care of the birds on a daily basis?
 - Raising a small flock can involve a good bit of labor; and there is no time off from the chores on the weekends and holidays. Please take this into account if you are planning to start a small flock.
- Do you have the necessary housing and equipment or will you have to purchase these items?
- Are the facilities that you plan to use designed in such a way that they will prevent nuisances such as noise, odor and insects from affecting you and your neighbors?
 - Please note that in addition to specific zoning laws concerning poultry, there may be laws or ordinances that concern noise and odor. Please make sure to check these ordinances as well if you have neighbors close by. It is also advisable to talk to your neighbors about plans that you may have so that they are not surprised by the appearance of a flock of chickens next door.

Please remember that you can also consult with your County Extension Agent about plans that you may have for a small poultry flock.



Commercial broiler production is centered around the Southeastern United States. The top six broiler producing states in 2013 were Georgia, Alabama, Arkansas, North Carolina, Mississippi and Texas. For more information about poultry production and economic data please click [here](#) and [here](#).

Salmonellosis is more common in the summer than in the winter. There are more than 2,500 serotypes of *Salmonella* spp. Known. For more information, click [here](#).

University of Florida | Institute of Food and Agricultural Sciences

Baker County Extension Service



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Hours: M—F 8:30am to 5:00pm (Closed Noon to 1:00pm for Lunch)

Extension programs are open to all people regardless of race, color, age, sex, handicap or national origin. In accordance with the Americans with Disabilities Act, any person needing a special accommodation to participate in any activity, should contact the Baker County Cooperative Extension Service at 1025 West Macclenny Avenue, Macclenny, FL 32063 or telephone (904) 259-3520 no later than five (5) days prior to the event for consideration of the request. Hearing impaired persons can access the foregoing telephone by contacting the Florida Relay Service at 1-800-955-8770 (voice) or 1-800-955-8771 (TDD).