



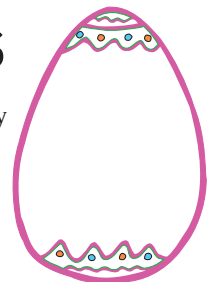
Ruffle Your Feathers

Poultry is domestic fowl, such as chickens, turkeys, ducks, ostriches, emus, quail, pigeons, pheasants, or geese, raised for meat or eggs. The most common poultry in Illinois are chickens and turkeys. Illinois has 2,367 chicken farms, as well as 370 duck farms, 280 goose farms, 80 pheasant farms, 60 quail farms, and 45 pigeon farms. Most ducks are raised inside and are used for their meat. Pheasants and quail are cared for as chicken broilers, but mostly in smaller flocks.



Decorated Eggs

The most famous egg decorator is probably Peter Carl Fabergé. He decorated eggs using crystal, gold, and other precious materials from 1884 to 1916. His beautiful eggs were used by czars as gifts to royalty.



An incubator is a box which maintains a constant temperature and is used to hatch eggs.

Chicken Chat

A female chicken that is raised for eggs is called a laying hen. Laying hens sit on the eggs for 21 days until they hatch. In large commercial chick production, large incubators are used to hatch chicks instead of laying hens.

Only fertilized eggs will hatch.

Chickens raised for their meat are called broilers or fryers.

Male chickens are called roosters. They have larger combs and wattles than hens and their feathers are more colorful.

Baby chickens are called chicks.

Some examples of breeds of chickens are White Leghorns, Rhode Island Reds, Plymouth Rock, Polish, Sussex, and Cochin.

Chickens swallow their food without chewing it and then it is ground up in their gizzard.

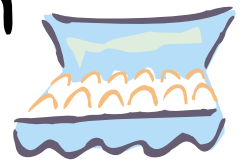
Chickens need grit in their diet to produce eggs.



Eggs on the Web

Learn more about chickens at the American Egg Board site (www.aeb.org) and the U of I Incubation and Embryonic Development Project site (www.urbanext.uiuc.edu/eggs/index.html).

Chicken Trivia



About 278 million laying hens produce approximately 6.1 billion dozen eggs per year in the United States. Illinois is ranked 25th for egg production among the United States.

The largest single chicken egg ever laid weighed one pound with a double yolk and double shell.

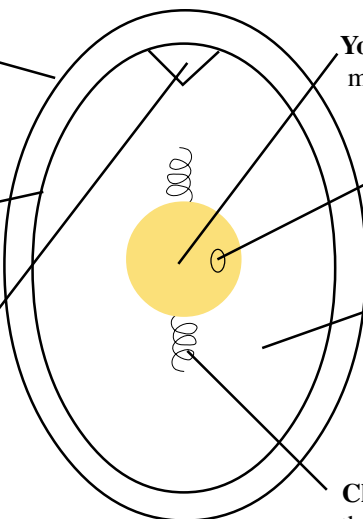
1 lb.

Chicken Egg Parts

Shell – Outer covering of the egg, composed largely of calcium carbonate, that provides protection to the rest of the egg.

Shell Membranes – Two paper-like membranes that are protective barriers against bacterial penetration.

Air Cell – Pocket of air formed at large end of the egg between the shell membranes that increases in size with age. This is caused by the contraction of the contents as the egg cools after laying.



Yolk – Yellow portion of the egg. The yolk is a major source of vitamins, minerals, and almost half of the protein.

Blastodisc – Location in which an embryo will develop if the egg is fertilized. If fertilized, it is called a blastoderm.

Albumen – Clear-like portion of the egg that is the major source of egg riboflavin and protein. It provides protein to the growing embryo and cushions the embryo during its development. It also protects against microbes.

Chalaza – Cord-like twisted strand in the albumen that anchors the yolk in the center of the egg.



Turkey Consumption

More and more consumers are recognizing the great taste and nutritional value of turkey. Since 1975 the consumption of turkey has increased by 218 percent! In 1998 per capita consumption for people in the United States was 18.1 pounds of turkey and 72.6 pounds of chicken.

Turkey Production

In 1999 United States turkey growers raised nearly 275 million turkeys. Illinois is ranked 13th for turkey production among the United States. Some turkeys are raised outside and some are raised in environmentally controlled barns where they are able to roam freely. These barns provide protection against predators, disease, and bad weather.

Turkeys are mainly fed a balanced diet of corn and soybean meal with vitamin and mineral supplements mixed in. Turkey hens go through a 25-week laying cycle which produces about 80-100 eggs per hen. To raise a thirty-pound tom turkey it takes about 75-80 pounds of feed. It usually takes hens 14 weeks to reach maturity. It takes toms 18 weeks. Hens are processed and sold as whole birds. Toms are processed into products such as turkey deli meats, turkey franks, turkey sausage, tenderloins, and cutlets.



Turkey Talk

Wild turkeys are different than domestic turkeys. Domestic turkeys are the ones used for meat we buy at the grocery store. They look like the photo of white turkeys at the bottom of this page. Wild turkeys are larger and they look more like what you see drawings of around Thanksgiving.

Toms are male turkeys and hens are female turkeys.

Large groups of turkeys are called flocks. A baby turkey is called a poult.

Turkey eggs, which are larger than chicken eggs, are tan with brown specks.

Only tom turkeys gobble. Hen turkeys make a clicking noise.

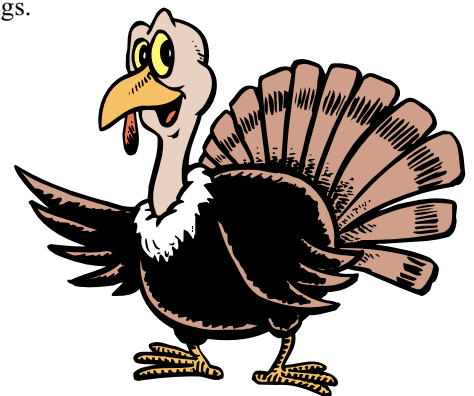
Wild turkeys can fly up to 55 miles per hour for short distances and can run 20 miles per hour.

Turkey Trivia

In 1863 President Lincoln proclaimed Thanksgiving a national holiday.

Each Thanksgiving in the U.S. approximately 675 million pounds of turkey are consumed. Ninety percent of homes consume turkey at Thanksgiving and fifty percent of homes consume turkey at Christmas.

When astronauts Neil Armstrong and Edwin Aldrin ate their first meal on the moon, their food packets contained roasted turkey and all of the trimmings.



The Bouncing Egg

Materials: One hard cooked egg, white vinegar, and a plastic container with a lid.

1. Without breaking the shell, examine the hard-cooked egg carefully. Record visual observations.
2. Place the egg in a plastic container. Cover completely with white vinegar and seal with lid. Predict what will happen in one hour, one day, and one week. Record predictions.
3. Observe the egg at the indicated times and record observations. The egg shell should have dissolved and the egg white and yolk should have become rubbery. After rinsing and drying the egg, record what happens when it is dropped. It should bounce.

Note: Do not eat the eggs.
Wash your hands after each observation .



Decorated Eggs

Have you ever wondered why we decorate eggs? Painted, edible eggs were given to a Chinese chieftain in 722 BC to celebrate Spring. In the 13th century, eggs with intricate religious symbols were common. Moravian and Ukrainian eggs are treasured for their geometric designs. They are often dyed with natural elements such as onion skins, walnuts, wild grapes, and berries. The most famous egg decorator is probably Peter Carl Fabergé. He decorated eggs using crystal, gold, and other precious materials from 1884 to 1916. His beautiful eggs were used by czars as gifts to royalty.



Incredible Non-Edible Eggs!



Eggs are also used for paints, shampoos, conditioners, animal feed, and vaccines. The feathers of poultry are used to stuff pillows and insulate clothing. Poultry manure is used for fertilizers.



Materials: Uncooked egg and hard cooked egg

1. Pick a partner. Have one of you get one uncooked egg and one of you get a hard cooked egg.
2. Have one person hold both eggs. Have the second person identify which egg is hard cooked and which egg is uncooked.
3. The person without the egg should now turn his/her back to the person holding the eggs.
4. The "egg holder" switches the eggs around as many times as desired.
5. Now have the other person turn around, and just by looking and touching, try to figure out which egg is uncooked and which egg is a hard cooked egg.

(One way to tell the difference: Hard boiled eggs spin easily because they are solid inside. Raw eggs wobble because they contain liquid.)