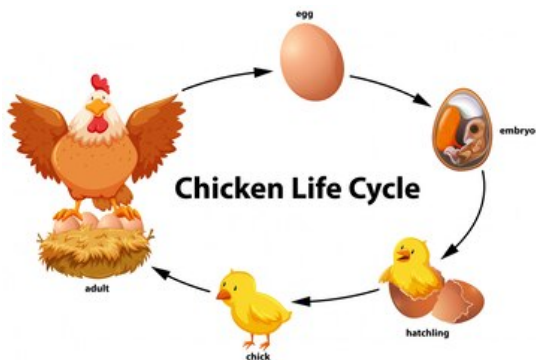


Cluck, Cluck, Hooray! The Amazing Egg Adventure!



Hi there, little scientists! Ever wondered how a baby chick starts its life inside an egg? Let's dive into the exciting world of chicken eggs and their amazing journey!

The Egg-straordinary Egg:

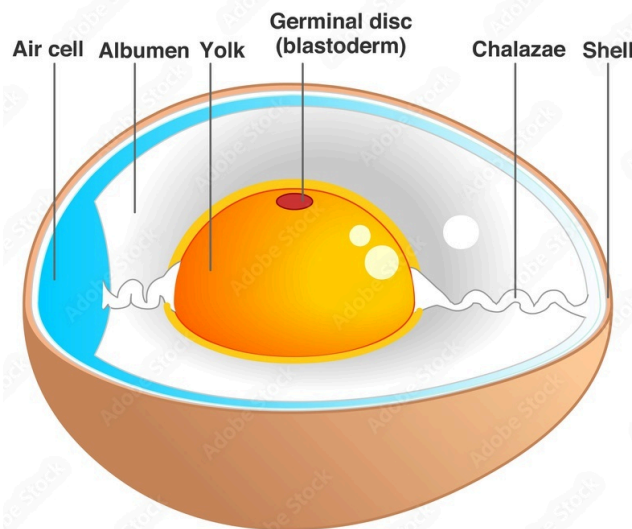
- **What's Inside?**

- The **yolk** is the yellow part. It's like a super-powered lunchbox for the growing chick!
- The **albumen** (the white part) is like a comfy cushion and provides even more food and protection.
- The **shell** is a hard, protective case with tiny holes (pores) that let air in.

- **Fertilized vs. Unfertilized:**

- A **fertilized egg** is like a tiny house with a baby chick growing inside. This happens when a rooster and hen have a special meeting.
- An **unfertilized egg** is just a yummy breakfast! It won't turn into a chick.

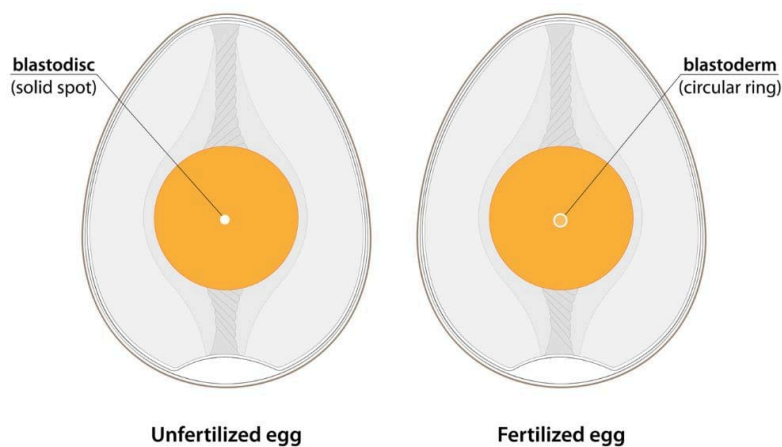
Anatomy of Egg



What Is Egg Fertilization?

- Chickens lay eggs whether a rooster is around or not, but not all eggs can turn into chicks. For a chick to grow, the egg must be **fertilized**.
- Fertilization happens when the **rooster (male chicken)** meets the **hen (female chicken)**. The rooster provides **sperm**, and the sperm joins with the hen's **egg cell** inside her body.
- Once the egg is fertilized, it's ready to grow into a chick!

Chicken egg fertility identification



Fun Fact: Without a rooster, eggs will still have a yolk and whites—but no chick inside.

The Warm and Cozy Incubator:

- **What is Incubation?**
 - Incubation is like giving the egg a warm hug! It needs to stay at just the right temperature (around 99.5°F or 37.5°C) for the chick to grow.
 - In nature, a mother hen sits on her eggs to keep them warm.
 - People use incubators to control the heat and humidity.
- **Turning Time!**
 - Eggs need to be turned a few times a day to keep the chick growing healthy. This stops the chick from sticking to the shell.

Why Do Eggs Need Warmth?

The embryo inside the egg needs to stay warm to grow properly. Hens keep their eggs warm by sitting on them in a nest, or people use machines called **incubators**. If the eggs get too cold, the embryo stops growing.

What Happens Inside the Egg?

Once the egg is laid and kept warm (either by the hen or in an incubator), an incredible transformation begins!

From Tiny Dot to Fluffy Chick

Day by Day:

- Inside the egg, the tiny chick starts to grow. It gets bigger and bigger, developing feathers, a beak, and tiny feet.
- After approximately 21 days, it's Hatching time!



Day 1: The fertilized egg starts to form an **embryo**—this is the very beginning of a baby chick.

Days 2–6: The embryo grows tiny parts like a beating heart, head, and spine. The chick's body is taking shape!

Days 7–14: The chick develops wings, legs, and eyes. Inside the egg, it looks like a tiny bird now!

Days 15–20: The chick's feathers grow, and it absorbs nutrients from the egg yolk to get strong and ready to hatch.

Day 21: The chick is fully formed, and it's time for it to break out of its shell. Yay!

Peep, Peep, Hooray!

- The baby chick uses a special "egg tooth" on its beak to peck a hole in the shell.
- It pushes and wiggles until it finally breaks free!
- The chick is wet and tired at first, but soon it will be fluffy and ready to explore.

Embryo Fun Facts!

- The chick starts breathing inside the shell before hatching—it has a little pocket of air!
- It communicates with other chicks through tiny chirps while still in the egg.

Day 1 to Day 21 of a baby chick growing inside an egg



How Can You See the Embryo Inside?

There's a cool trick called **candling**! Here's how:

1. Shine a flashlight through the eggshell carefully in a dark room.
2. Look for signs of the embryo—like veins, movement, or even the shape of the chick! *Ask an adult for help while candling eggs.*

Fun Chick Facts!

- Baby chicks are called **chicks**!
- Chicks can walk and eat almost as soon as they hatch.
- They love to eat cracked corn and drink fresh water.
- They need a warm place called a brooder, to keep them safe and warm when they are very small.