

In the Beginning...

The 21 day journey from egg to chick

At Laying Prior to laying, while still forming in the hen, the egg is fertilized. The male cell (sperm) combines with the female cell (ovum) to form a single cell that is capable of developing into an embryo.

Once laid, the cooler conditions prevent cell division and embryo growth and the egg remains in this state until suitable incubation conditions are applied (heat, humidity & ventilation).

Incubation

Day 1

- 16 hours First sign of resemblance to a chick embryo
- 18 hours Appearance of alimentary tract
- 20 hours Appearance of vertebral column
- 21 hours Beginning of nervous system
- 22 hours Beginning of head
- 24 hours Beginning of eye

Day 2

- 25 hours Beginning of heart
- 35 hours Beginning of ear
- 42 hours Heart beats

Day 3

- 60 hours Beginning of nose
- 62 hours Beginning of legs
- 64 hours Beginning of wings

Day 4

- Beginning of tongue

Day 5

- Formation of Reproductive organs and differentiation of sex

Day 6

- Beginning of beak

Day 8

- Beginning of feathers

Day 10

Beak starts to firm

Day 13

Appearance of scales & claws

Day 14

Embryo moves into a position suitable for breaking shell

Day 16

Scales, claws & beak become firm and horny

Day 17

Beak turns towards air cell

Day 19

Yolk sac begins to enter body cavity

Day 20

Yolk sac completely drawn into body cavity. Embryo occupies almost all of the space in the egg except the air cell

Day 21

Chick hatches

*Reference: Mississippi State University Cooperative Extension Service
"Avian Embryo"*