

Suzy's World

Egg - Why does an egg have a shell?

Fact

- An egg has a shell to protect what's inside – the yolk and egg white or a baby chick.
- A hen is not a mammal so it doesn't give birth to live babies it lays an egg instead.
- It takes about 20 days for the chick to grow or develop inside a fertilised egg once it has been laid.



Do you know

- After an egg is laid the hen's body has a couple of hours rest then it begins producing the next egg.
- Usually the eggs we eat are unfertilised eggs – they will never grow into baby chicks.
- An egg takes about 24-26 hours to develop in the hen's body.
- Last year a family in Auckland bought a tray of eggs and every single egg was a double yolker (which means each egg had two yolks)

1

How an egg develops

- An egg starts as a tiny cell smaller than you can see. It starts growing in the hen's ovary.
- It moves through the oviduct which is a special passage inside the hen and as it moves it gets bigger and bigger.
- When it reaches the Infundibulum it's ripe and ready to be fertilised. (not every egg gets fertilised – the fertilised ones become baby chicks and an unfertilised egg stays as the egg white and yolk that we eat).
- The egg then moves into the Magnum where it stays for 2-3 hours while the clear egg white develops. (Its called Albumen).
- Then a thin membrane, a bit like a skin, grows around the egg white in the Isthmus.
- And then the egg moves into the Uterus where it spends about 20 hours while the shell develops. The shell develops in layers of calcite around the membrane.
- When the shell is hard enough and thick enough the hen pushes it out underneath her tail into a nest.

Suzy's World

Experiments you can do

Take a close up look at a raw egg.

What you need: (Someone to help you)

a clean bowl

a clean slotted spoon with smooth edges around the holes

a clean butter knife

What you do:

Carefully crack the egg with the knife. Remove the broken end of the shell carefully and then slowly tip the egg out onto the spoon. Keep the egg close to the spoon when you do this so the yolk doesn't rush out and break.

The egg white should slip through the holes in the spoon so you can see how the egg yolk sits in the membrane.

Poke a hole in the membrane with the knife and let the yolk run into the bowl.

When you're finished you can use the egg in your baking.



Other Investigations

What other animals or insects can you think of that lay eggs?

Find out what you can use empty eggshells for.

2

Jokes

What do you get if you cross a concrete mixer with a hen? A bricklayer!!!

From Calum and Jenna

Why didn't the chicken cross the road? Because he didn't want a joke made out of it!!

From Katie

Why did the blackbird cross the road? Because it was the chicken's day off.
from Madeline.