

Egg Anatomy

SHELL

- The egg's first line of defence against the entry of bacteria.
- Can be white or brown, depending on the breed of hen; the nutritional value of the egg is the same.
- Approximately 17,000 tiny pores allow moisture and gases in and out.
- Odours can be absorbed through the shell, so eggs should be stored in their carton in the refrigerator.

SHELL MEMBRANES

- There are two membranes on the inside of the shell: outer and inner.
- One membrane sticks to the shell and one surrounds the albumen or egg white.
- The egg's second line of defence against bacteria.

EGG WHITE

(Albumen)

- Albumen is the egg white.
- Contains 3 g of protein, riboflavin and water.
- Represents 2/3 of the egg's weight.
- When a fresh egg is broken, the albumen stands up firmly around the yolk.

CHALAZAE

- A pair of spiral bands that anchor the yolk in the centre of the thick albumen.
- The fresher the egg, the more prominent the chalazae.

YOLK MEMBRANE

(Vitelline Membrane)

- Surrounds and holds the yolk.
- The fresher the egg, the stronger the membrane.

GERMINAL DISC

- Appears as a slight depression on the surface of the yolk.
- The entry for the fertilization of the egg.

YOLK

- The egg's major source of vitamins and minerals.
- Contains 3 g of protein and essential fatty acids.
- Represents 1/3 of the egg's weight.
- Colour ranges from light yellow to deep orange, depending on the hen's food. The nutritional value is the same.

AIR CELL

- Formed at the wide end of the egg as it cools after being laid.
- The fresher the egg, the smaller the air cell.

