## **Structure of the Egg**

The egg is a biological structure intended by nature for reproduction. It protects and provides a complete diet for the developing embryo, and serves as the principal source of food for the first few days of the chick's life. The egg is also one of the most nutritious and versatile of human foods.



When the egg is freshly laid, the shell is completely filled. The air cell is formed by contraction of the contents during cooling and by the loss of moisture. A high-quality egg has only a small air cell.

The yolk is well-centered in the albumen and is surrounded by the vitelline membrane, which is colorless. The germinal disc, where fertilization takes place, is attached to the yolk. On opposite sides of the yolk are two, twisted, whitish cord-like objects known as chalazae. Their function is to support the yolk in the center of the albumen. Chalazae may vary in size and density, but do not affect either cooking performance or nutritional value.

A large portion of the albumen is thick. Surrounding the albumen are two shell membranes and the shell itself. The shell contains several thousand pores that permit the egg to "breathe."