

Exquisitely simple, yet enormously complex, the egg is one of nature's marvels. Within this volume are facts and figures, definitions and diagrams, graphs and even a few giggles—all related to various aspects of the egg. From air cell to yolk with such diverse topics as games and mythology, cooking tips and nutrient content tucked in between, the information is all arranged alphabetically by subject for ease of reference. We hope it adds to your understanding and enjoyment of The incredible edible egg.

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NUTRIENT DENSITY OF THE EGG
Percentage of Reference Daily Intake (RDI)*
Provided by 1 Large Egg

• VITAMIN A	_____	6%
• THIAMIN	_____	2%
• RIBOFLAVIN	_____	15%
• CALCIUM	_____	3%
• IRON	_____	4%
• VITAMIN D	_____	6%
• VITAMIN E	_____	3%
• VITAMIN B ₆	_____	4%
• FOLIC ACID	_____	6%
• VITAMIN B ₁₂	_____	8%
• SODIUM	_____	3%
• POTASSIUM	_____	2%
• PHOSPHORUS	_____	9%
• MAGNESIUM	_____	1%
• ZINC	_____	4%
• BIOTIN	_____	3%
• PANTOTHENIC ACID	_____	6%

*Based on a 2000-calorie diet. You may need more or less depending on your calorie needs.

AIR CELL The empty space between the white and shell at the large end of the egg.

When an egg is first laid, it is very soft. As it cools, the contents contract and the inner shell membrane separates from the outer shell membrane forming the air cell.

The candler uses the size of the air cell as one basis for determining egg grade. In Grade AA eggs, the air cell may not exceed 1/8-inch in depth and is about the size of a dime. In Grade A eggs, the air cell may not exceed 3/16-inch in depth. For Grade B eggs, there is no limit on air cell size.

As the egg ages, moisture and carbon dioxide leave through the pores in the shell, air enters to replace them, and the air cell becomes larger.

Although the air cell usually forms at the large end of the egg, it occasionally moves freely toward the upper point of the egg as the egg is rotated. This is then called a free or floating air cell. If the main air cell ruptures, resulting in one or more small separate air bubbles floating beneath the main air cell, it is known as a bubbly air cell.

You can see the air cell in the flattened end of a peeled, hard-cooked egg. —see *Candling, Composition, Grading, Peeling*

ALBUMEN Also known as egg white. Albumen accounts for about 55% of an egg's liquid weight, about 10% of its total weight. It contains more than half the total protein, niacin, riboflavin, iron, chlorine, magnesium, potassium, sodium and sulfur. The albumen consists of 4 alternating layers of thick and thin consistencies. From the yolk outward, they are: dense white, the inner thin white, the thick white and the outer thin white. Egg white tends to thin out as it ages because its protein changes character. That's why fresh egg