

Eggs

Nutritional Value

- **Protein** HBV, Ovalbumin & Globulin (White), Livetin & Vitellin (Yolk)
- **Fat** Saturated, emulsifier Leicithin, Cholesterol (yolk)
- **Carbohydrate** **NONE**
- **Vitamins** B,A,D,E (B₁ B₂ B₁₂,)
- **Minerals** CALCIUM , IRON, PHOSPHOROUS, SULPHUR
- **Water** 74%

Culinary uses

- Binding
- Enriching
- Thickening
- On their own
- Coating
- Aerate
- Glaze
- Emulsify

Dietetic Value

- HBV protein for growth & repair (children & adolescents), meat alternative
- Saturated fat (yolk), Cholesterol, Easy to digest, low cholesterol restrict eggs
- Serve with a carbohydrate type food to balance meal
- Suitable for lacto-vegetarians
- Inexpensive
- Versatile – can be used for sweet & savoury
- Quick cooking time

Structure of an Egg

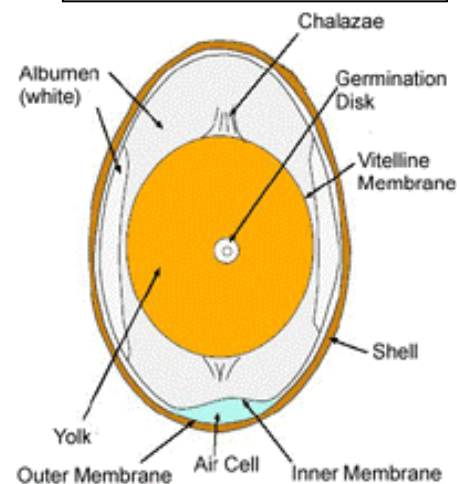
- Shell – 10%
- White – 60%
- Yolk – 30%

BUYING

- Best-before date
- Heavy for size
- Not cracked / broken
- Free range / organic
- Quality assurance label

STORING

- Refrigerator
- Pointed end down
- Away from strong smelling foods
- Egg white – airtight container
- Yolk covered in water



Grading & Labelling

- Graded according to size & weight
- Egg boxes must contain-
- Country of origin
- Registration of producer
- Class / Quality
- Use-by date
- Quality assured mark
- Name & address of producer
- Quantity
- Week number
- Storage instructions
- **CLASS A = Top quality**
- **CLASS B = Baking quality**
- **CLASS C = Industry only**

Write a short note on the

Egg Quality Assurance Scheme:



- Reduce risk of food poisoning
- Implemented by Dept of Agriculture & Food
- Hens tested & certified salmonella free
- Heat-treated feed
- Eggs **fully traceable**
- Farms inspected & monitored
- Awarded by An Bord Bia
- **[Logo on each egg + on box](#)**

Properties of Eggs

(1) **Coagulation**- white sets @ 60°C, yolk sets @65°C, protein denatured, curdling (overcooking)

(2) **Aeration** – whisking entraps air, friction sets foam, further cooking permanently sets foam (e.g sponge, soufflés, meringues)

(3) **Emulsifier** – leicithin, allows to immiscible liquids to join together (fat & sugar in cakes, oil & vinegar in mayonnaise)

Test for Freshness

1. Place eggs in salted water = fresh eggs sinks / stale egg floats
2. Crack egg on plate = well-rounded yolk, jelly-like white (fresh egg), Stale egg=flat yolk & watery