

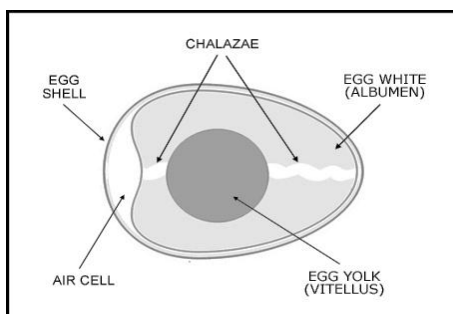
Eggs

Why should we include eggs in the diet?

They are:

- a cheap source of protein, iron and calcium
- versatile – have many uses
- easy to cook and they cook quickly
- easy to digest - suitable for all ages (young children, elderly etc)

Structure of Eggs:



Nutritional Value

	Amount	Type	Function
Protein	13%	High Biological Value	Growth & repair of cells; production of hormones, enzymes & antibodies
Fats	12%	Saturated (in the yolk)	Heat & energy
Carbohydrates	0%		None presents so should be served with foods containing carbohydrates eg scrambled eggs on toast
Vitamins	1%	Vit B Vit A Vit D	Healthy nerves and also provides energy Needed for growth, healthy skin & membranes, healthy eyes Healthy bones & teeth
Minerals	1%	Calcium & phosphorus Iron	Healthy bones & teeth Production of haemoglobin for healthy blood
Water	73%	Found in the egg white mainly	Carries nutrients & oxygen to all cells in the body <u>or</u> Helps remove waste from the body via urine

Culinary Uses of Eggs

Savoury egg dishes:	Quiche Omelette	Baking:	Sponge cake Fairy cakes
Cooked on their own:	Boiled Fried	Desserts:	Pavlova Custard
Glazing:	Scones Apple tart	Coating:	Egg & Breadcrumbs Batter
Binding:	Burgers Fish cakes	Emulsions:	Mayonnaise
Garnishing:	Salads		

Buying & Storing Eggs

Buying	Storing
<ul style="list-style-type: none">• Check use-by date• Check grade• No cracks or dirt• Correct size• Heavy for size• Rough shell• Organic eggs (chickens roam freely) may be more expensive	<ul style="list-style-type: none">• Store in fridge• Pointed end down• Use before use-by date• Use in rotation• Store away from strong smelling foods

How do you know if eggs are gone off or stale?

- There is an **air space** in eggs between the shell and the membrane (see diagram on previous page)
- In **fresh eggs this air space is small** but as an egg gets older the air space gets bigger
- This is because the **water in the egg white slowly evaporates** through the shell
- When **more air** is in the egg it is **lighter** – therefore it **will float** when put into a container of water

Using eggs:

- **Use eggs at room temperature**
- **Cook** egg mixtures **gently**
- **Cool hot mixtures slightly** before adding to eggs (always add warm liquids to cold eggs – not the other way around)
- **When whisking egg whites** ensure the eggs are **fresh** and **no traces of egg yolk or fat** in the mix

The first 3 points will help to ensure eggs do not curdle. **Curdling** occurs when the protein separates from the liquid and forms little lumps in the mixture. It is usually caused by temperature which is too high.

Effects of cooking (heat) on eggs:

- **Protein sets or coagulates**
- **Overcooking** or very high temperatures will cause **curdling**
- **Lightly cooked** eggs are **easy to digest** – overcooking will cause them to be indigestible
- Poached, scrambled or boiled eggs are easier to digest than fried eggs

Who should avoid raw eggs & why:

- Children
- Pregnant women
- Elderly
- People who are ill

Reason: Raw eggs may contain bacteria called **salmonella** – this may cause **food poisoning** & these people have poor immune systems

Batters

A mixture of flour, eggs & liquid eg milk – they would be beaten well as the raising agent is air

Culinary uses of batters:

Thin batter	Pancakes, Yorkshire pudding
Thick batter	Coating foods eg fish

Custard

A mixture of milk & eggs cooked gently so the egg thickens the milk.

Culinary uses of custard:

Dessert:	Apple Crumble & Custard
Savoury dish:	Quiche