

What types of milk can you choose to use?

How much does milk cost?

How can milk be stored?

How much fat is there in milks of different types?

What are milk replacers?

# Know your ingredients:

## MILK

What are the nutrients in a glass of milk?

What is added to Condensed milk?

What is lactose?

What does homogenised milk mean?

Is all dairy milk the same?

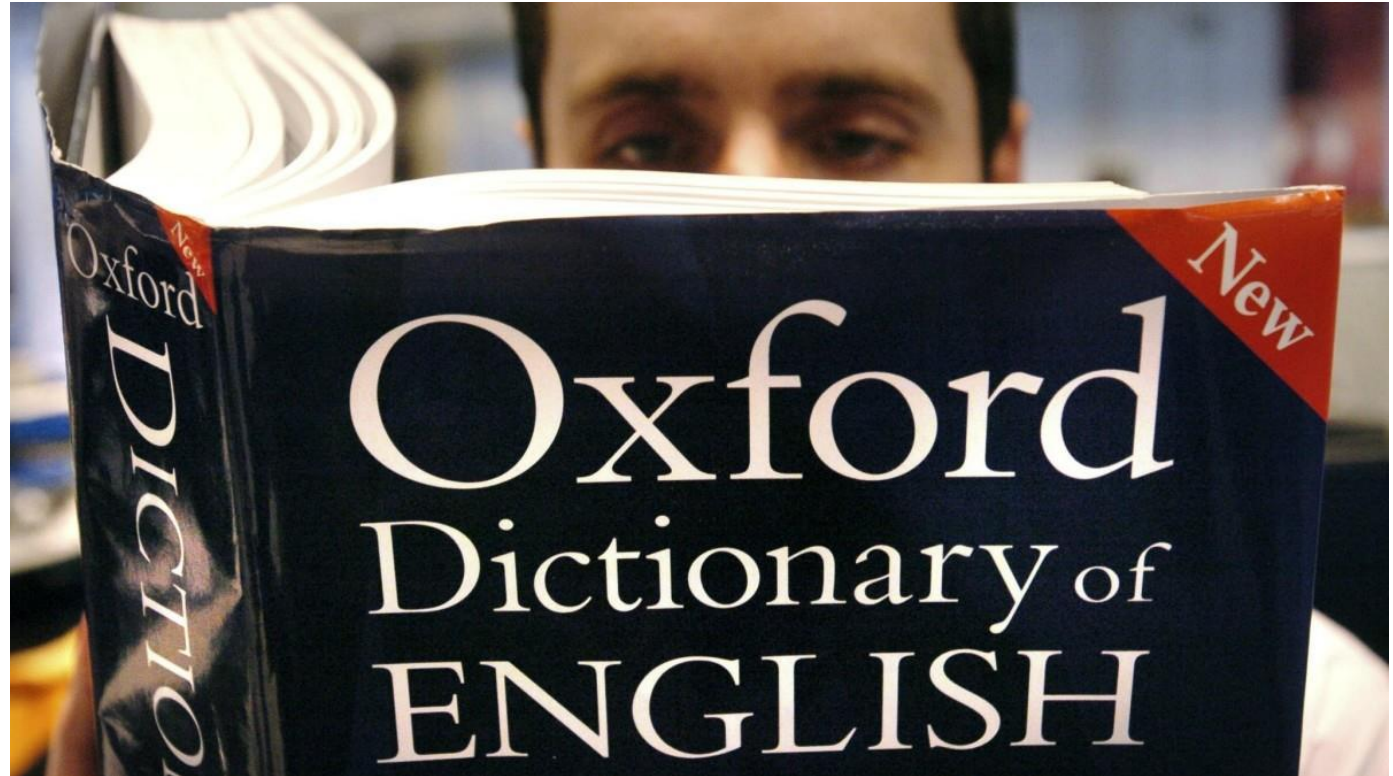
What is gold top milk?



Across Britain and Northern Ireland, milkmen and women rise at the crack of dawn to deliver fresh milk and other dairy products directly to people's homes.

# Pasteurised and Homogenised

What do we mean by these 2 words?? Use dictionary to find out



# MILK delivered to your door

## Whole milk

Pasteurised

4g fat per 100ml & 68kcal

Saturated fat = 2.8g per 100g

Full fat milk



## Semi skimmed

1.7g fat & 49 calories per 100ml

Pasteurised

Red and silver foil top



## Skimmed milk

0.1g fat per 100ml & 34 kcal

Pasteurised

Blue and silver foil top



## 1% milk

1 g of fat per 100ml & 41 kcal

Pasteurised

Homogenised

Half the fat of semi skimmed milk



## Organic milks:

Organic from certified dairy herds

Whole milk option or semi-skimmed

Aqua foil tops

Pasteurised

But not always homogenised



## Gold top milk

5% fat content

5g fat per 100ml & 78kcal

Channel Island Milk from

Jersey and Guernsey cows

Gold foil top





# Supermarket milk



# Supermarket milk

## Plastic containers

Red Tractor

Pasteurised

Homogenised

Whole milk ( blue cap)

Semi-skimmed milk (green cap)

Skimmed ( red cap)



## Long life

Sold non-refrigerated at ambient (room) temperature

Usually comes in boxes

3 months shelf life unopened

As fresh milk once opened

UHT treatment

Homogenised

Pasteurised

Whole milk (blue)

Semi-skimmed (green)

Skimmed milk (red)

Sterilised



# ARLA milks

## Cravendale milk B.O.B

### Cravendale milks

- Range of milk types - whole, semi-skimmed and skimmed
- Keeps fresh for longer (up to 3 weeks unopened) 7 days opened refrigerated
- Filtered - microscopic ceramic filters remove souring bacteria
- NOT UHT

Semi  
skimmed



Whole  
milk

Skimmed

### B.O.B milk

Arla BOB - Skimmed milk  
that tastes like semi

Almost fat free

0.4g per 100ml & 41kcal

Skimmed dairy milk

Enriched with milk protein

Pasteurised

Homogenised

Filtered





# Milk in cans

## Dried skimmed milk

Skimmed dried milk powder

Evaporated by spray drying or by freeze drying

Needs rehydration (adding water) to make milk

Stores without refrigeration

Long shelf life (see BB date)

Lighter in weight than fresh milk equivalent

Enriched with vitamin A and vitamin D



## Evaporated milk

Whole milk evaporated  
(water reduced by 60%)

Canned (cooked) heat processed

Contains lactose

No added sugar

Homogenised

Vitamin D added



## Condensed milk

As evaporated but with added sucrose (sugar)

54g sugar per 100g

Canned & heat processed

Milk thickens and browns  
slight (caramelisation)



# Milk alternatives /replacers

Oat milk  
Enriched with vitamins  
Fat from rapeseed  
Fat 1.5 g  
Plant based  
Also available as 'cream'  
Can be sweetened  
**(NOT gluten free)**



**NON MILK**  
substitutes made  
from oats, nuts  
or soya plants

Soya milk  
Made from soya beans  
Can be sweetened  
Low fat  
Plant based  
**Contains soya and allergen**



Almonds milk  
Enriched with vitamins  
Carob gum stabilisers  
Not nutritious enough for young children  
Dairy free  
**Contains nuts**



# Lactose intolerance



Lactose intolerance is a common digestive problem where the body is unable to digest lactose, a type of sugar mainly found in milk and dairy products.

The severity of your symptoms and when they appear depends on the amount of lactose you have consumed.

## What causes lactose intolerance?

- The body digests lactose using a substance called lactase. This breaks down lactose into 2 sugars called glucose and galactose, which can be easily absorbed into the bloodstream.
- People with lactose intolerance do not produce enough lactase, so lactose stays in the digestive system, where it's fermented by bacteria.
- This leads to the production of various gases, which cause the symptoms associated with lactose intolerance.
- Depending on the underlying reason why the body's not producing enough lactase, lactose intolerance may be temporary or permanent.
- Most cases that develop in adults are inherited and tend to be lifelong, but cases in young children are often caused by an infection in the digestive system and may only last for a few weeks.



# What nutrients does milk supply?

31%

## OF OUR RECOMMENDED DAILY CALCIUM\*

Needed for maintenance of normal bones. It also helps muscle and nerve function, normal blood clotting and maintenance of teeth.

14%

## OF OUR RECOMMENDED DAILY PROTEIN\*

Contributes to the maintenance of normal bones and muscle, and growth in muscle mass.

35%

## OF OUR RECOMMENDED DAILY RIBOFLAVIN\*

Also known as vitamin B2, it helps us make the most of the energy we get from our food and is good for our skin.

74%

## OF OUR RECOMMENDED DAILY VITAMIN B12\*

Helps us feel less tired, benefits our immune system and contributes to the release of energy from food.

23%

## OF OUR RECOMMENDED DAILY VITAMIN B5\*

Also known as Pantothenic acid. Contributes to the reduction of tiredness and fatigue.

41%

## OF OUR RECOMMENDED DAILY IODINE\*

Contributes to the production of thyroid hormones and thyroid function.

28%

## OF OUR RECOMMENDED DAILY PHOSPHORUS\*

Contributes to the maintenance of normal bones and normal teeth.



\* 200ml glass semi-skimmed milk

# Why is milk so important in the diet?

## 7.2g Protein

- maintenance of normal bone
- muscle growth and maintenance
- normal bone growth and development in children

## 247mg Calcium

- normal growth and development of bones
- maintenance of normal bones
- maintenance of normal teeth
- normal blood clotting
- normal energy-yielding metabolism
- normal muscle function
- process of cell division
- normal neurotransmission

## 62µg Iodine

- normal growth of children
- normal energy-yielding metabolism
- maintenance of normal skin
- normal functioning of the nervous system
- normal cognitive function
- normal production and function of thyroid hormones

## 321mg Potassium

- normal functioning of the nervous system
- maintenance of normal blood pressure
- normal muscle function

## 0.49mg Vitamin B2

- normal energy-yielding metabolism
- maintenance of normal skin
- normal functioning of the nervous system
- maintenance of normal vision
- normal iron metabolism
- maintenance of normal red blood cells
- reduction of tiredness and fatigue

## 1.9µg Vitamin B12

- normal energy-yielding metabolism
- normal red blood cell formation
- process of cell division
- normal immune function
- normal psychological function
- reduction of tiredness and fatigue

## 194mg Phosphorus

- normal growth and development of bone
- maintenance of normal teeth
- normal function of cell membranes
- normal energy-yielding metabolism

## 3.5g Fat

- low in fat