



Liquid Milk



Cheese



Butter & Ghee



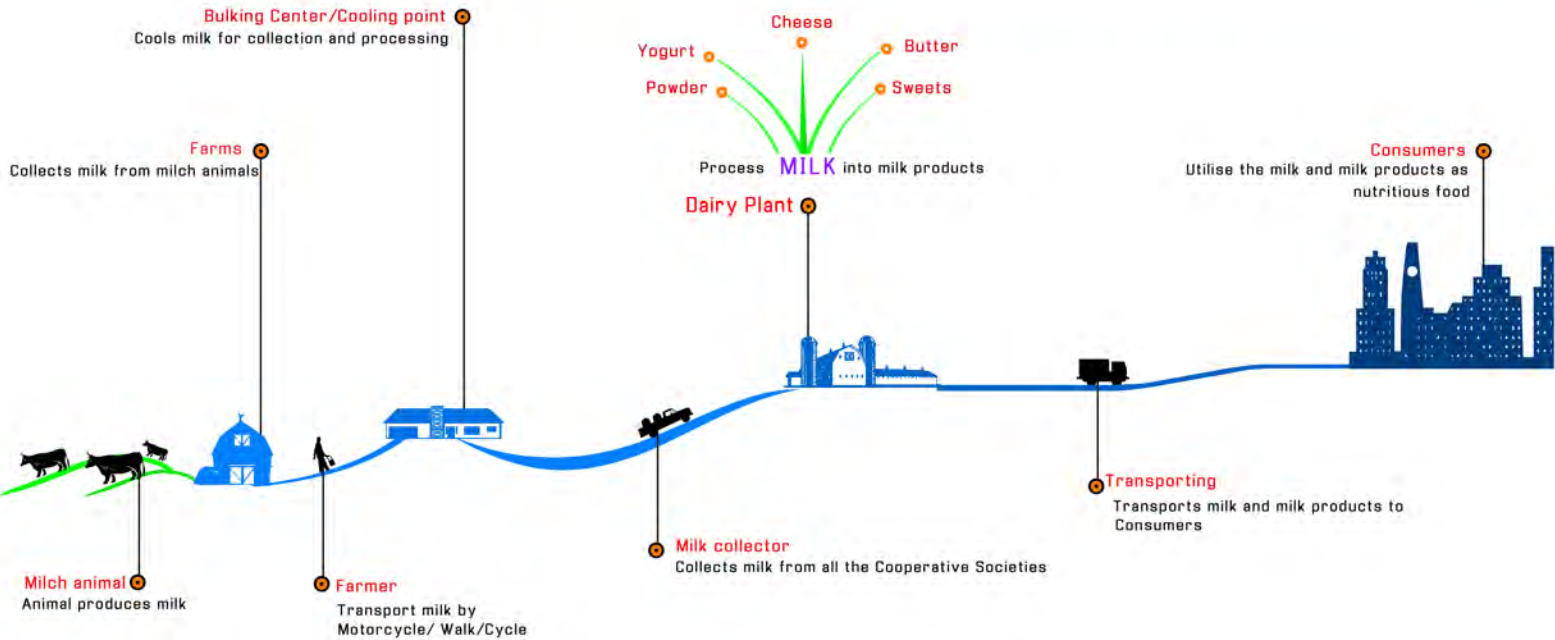
Frozen

FAO

Dairy products Toolkit

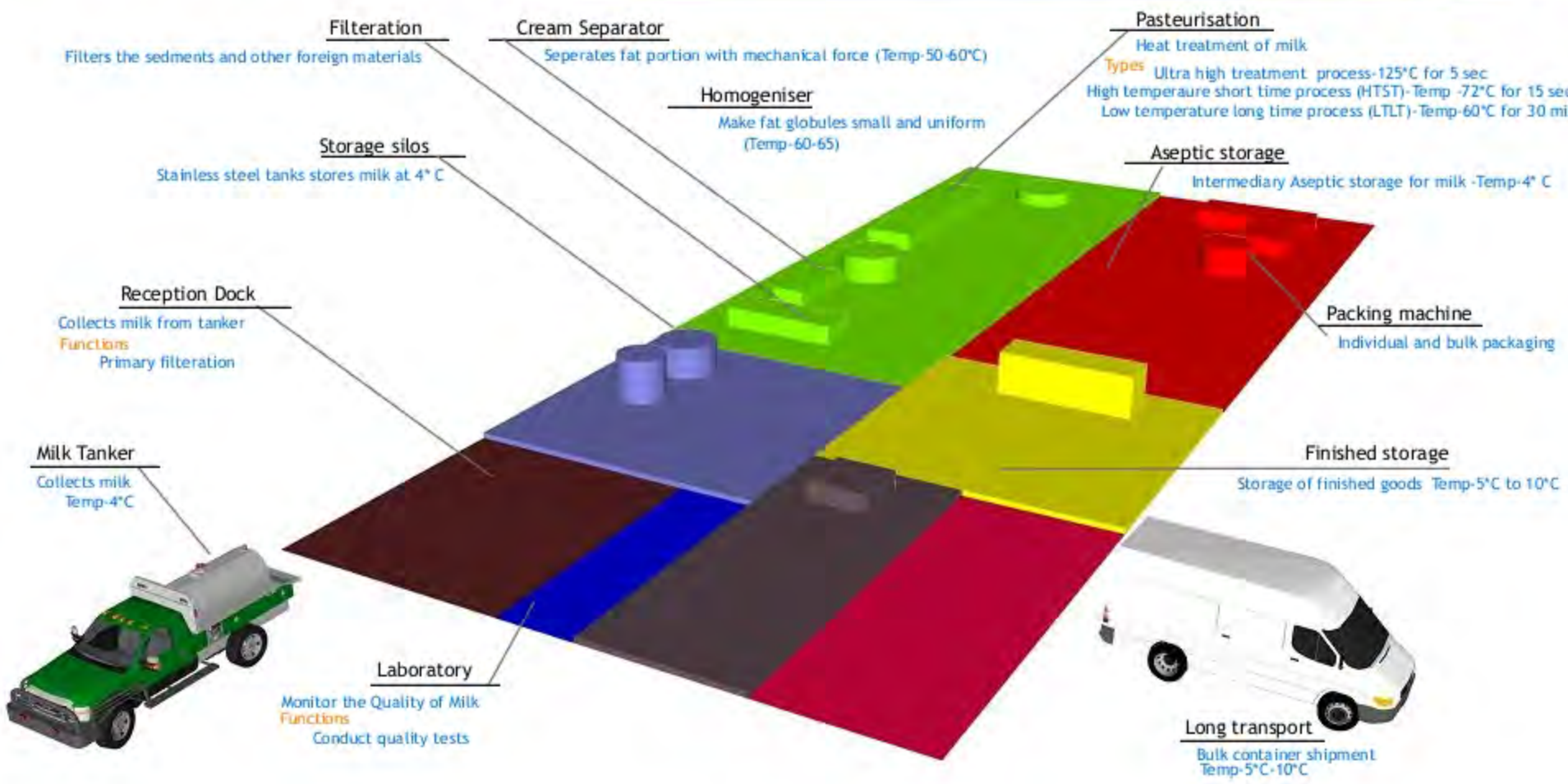
FAO Dairy Industry development

Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing. A milk product is a product obtained by any processing of milk, which may contain food additives and other ingredients functionally necessary for that processing. Milk is a perishable commodity and spoils easily at ambient temperatures. Milk processing can help to deal with seasonal fluctuations in milk supply and add value to milk. Transformation of milk to milk products can benefit entire communities with nutritious **Liquid Milk** and dairy products.

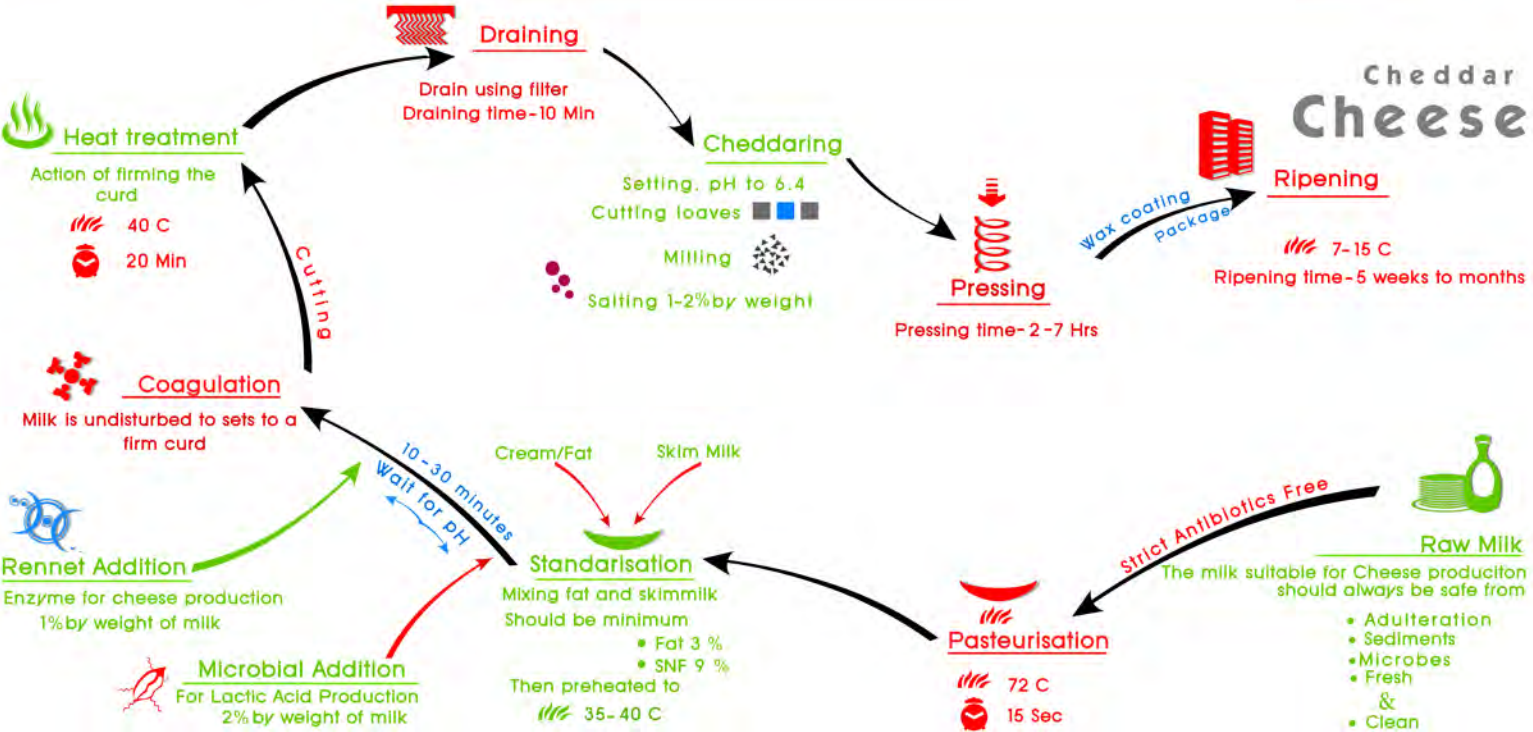


FAO Liquid Milk Production

Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing. Milk product is a product obtained by any processing milk, which may contain food additives, and other ingredients functionally necessary for that processing. Milk is perishable commodity and spoils very easily with less care so the need of instant processing is inevitable. Milk processing can help to deal with seasonal fluctuation in milk supply. Transformation of milk to milk products can benefit entire community with pure and fresh **Liquid Milk**



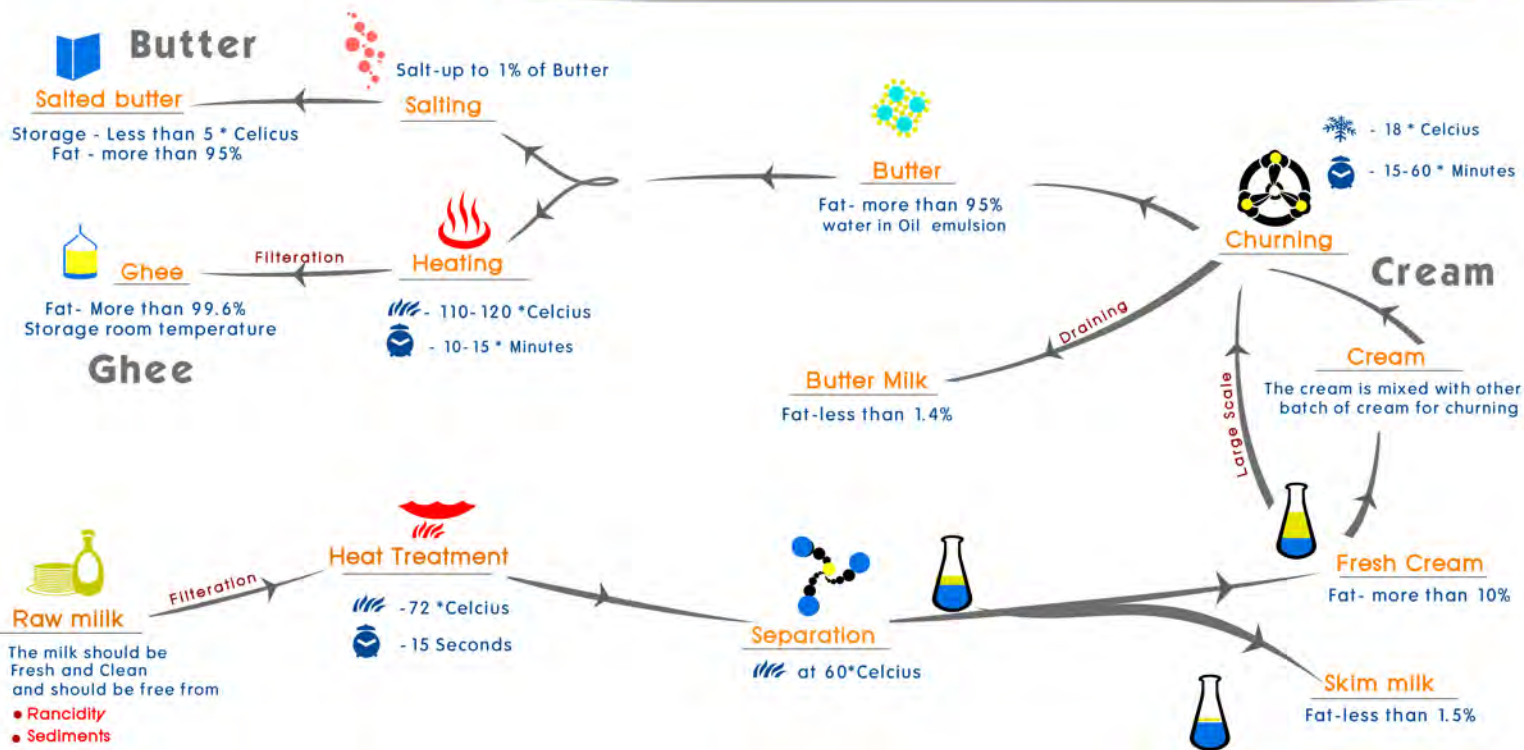
Cheddar is a ripened hard cheese in conformity with The General Standard of Cheese (Codex Stan 283-1978). The body has a near white or ivory through to light yellow or orange colour and a firm-textured (when pressed by thumb), smooth and waxy texture. Gas holes are absent but a few openings and splits are acceptable. The cheese is manufactured with or without rind which may be coated. The cheddar ripening process depends upon the extent of maturity required. Alternative ripening conditions with enzymes may also be used. Cheddar intended for further processing need not exhibit the same extent of ripening when justified through technical or trade needs.



FAO Ghee, Butter & Cream

Processing

Cream is the fluid milk product comparatively rich in fat, in the form of an emulsion of fat-in-skimmed milk, obtained by physical separation from milk. Butter is a fatty product derived exclusively from milk and/or products obtained from milk, principally in the form of an emulsion of the type water-in-oil. Ghee is a product exclusively obtained from milk, cream or butter, by means of processes which results in almost total removal of water and non-fat solids, with an especially developed flavour and physical structure.



FAO Fermented Processing Milk

Fermented milks are milk products obtained by fermentation of milk, which milk may have been manufactured from products obtained from milk with or without compositional modification as limited by the action of suitable microorganisms and resulting in reduction of pH with or without coagulation. These starters shall be viable, active and abundant in the product to the date of minimum durability. If the product is heat treated after fermentation the requirement for viable microorganisms does not apply. Fermented milk products are the most popular dairy products consumed around world. The unique therapeutic value and benefits make this dairy product suitable for all age groups. Among fermented dairy products most popular ones are

Yogurt and Curd

Curd Starter Culture

Streptococcus thermophilus & any *Lactobacillus* species.



Cooled to 40-45* C

Room Temperature

Yoghurt Starter Culture

Symbiotic cultures of
Lactobacillus delbrueckii subsp. *bulgaricus*
&
Streptococcus thermophilus



Cooled to 40-45* C

Room Temperature

Innoculation

Add 2-3 % of culture to milk with slow stirring



Rapidly cooled



Cooling

Product is cooled and stored at 4°C

Incubation

Hold inoculation milk for 3-5 hrs
at temperature-38-45°C

Heat Treatment

Heating of milk to 72°C for 15 Seconds

Benefits

Kills Pathogenic Organisms
Reduce whey separation



Pasteurisation
Homogenisation



Raw Milk

The milk suitable for yogurt production
should be safe from

Microbs, Sediments & Adulteration

should be

Fresh & Clean