Dairy Science

(Fundamentals)

- Practical lesson 5, for Desert Land Reclamation and Cultivation, level 2, 2019-2020
- By:

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Cheese

- The manufacture of cheese is a mean of preserving the most important constituents of milk mainly fat and protein, and at the same time providing a palatable, easily-digestible, long-keeping food.

Production of kareish cheese (white soft cheese):

- It is of the most famous soft cheeses usually made in Egypt. It has important nutritive value and cheap in price.
- Milk used in the manufacture of kareish cheese is either obtained by mechanical separation or by gravity separation of cream.
- In villages “Rayeb-milk” which is a sour milk retained after creaming, is left in warm place to curdle by the influence of lactic acid produced.

- The curd is then placed in a mat which should be hung from both ends to allow the way to drain.
- After the of cheese is dry enough, it is cut into pieces by a knife , then sprinkle dry salt on the surface of the pieces and left for some time to absorb the salt.

- In factories kareish cheese is made from skim milk produced as a by-product from the mechanical separation or cream.
- The skim milk may be coagulated by adding a starter culture which produce lactic acid and the curd is placed into cheese cloth to drain the whey, then dry salt is added and after its body becomes firm enough it is cut into pieces.
- Skim milk may be coagulated with rennet and treated as in domiatti cheese making *i.e*. salting, coagulating, ladled in to moulds or linen cloth and drained.
- The skim milk may also be coagulated by a combination of lactic acid and rennet.
- The yield of kareish cheese is about 15-20%.

Domiatti cheese production

- Enriched milk containing 10-12% fat is prepared by mixing one part of thin cream to 10 parts of buffalo's milk.
- Two kilos of this mixture produces one piece of cheese (0.5 kg).
- The mixture is salted at the rate of 6-8% and strained in the coagulation vat.
- The temperature of the mixture is regulated to 40°C and renneted at the rate of 1 ml of rennet extract to every 1 kg of the mixture.
- After thoroughly stirring for 3-5 minutes, stir again on the surface to keep the cream from rising.

- Complete formation of the curd occurs after 3 hours.
- The moulds usually used are coulommier moulds. The mould is in two pieces, which then fitted together.
- The moulds are placed on straw mats with boards under.
- The curd is loaded carefully and gently to prevent loss of fat.
- After the moulds are filled they are left to drain for 12 hours until the curd sunk sufficiently for the top half of the mould to be removed.

- When the top part of the moulds has been removed, a mat and board are placed on the top of the other portion and the curd turned.
- After 12 hours the cheese should be again turned, and the operation repeated twice daily for 2-3 other days.
- After which the mould is taken off and the cheese is ready to be eaten or kept in the refrigerator.

With my best wishes