

DAIRY SCIENCE

Prepared by

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Dairy Science

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1. Cottage cheese is a soft, unripened cheese usually made from **Skim milk**
2. Operation flood was started in the year **1970**
3. Plastic cream contains **65-85 per cent milk fat**
4. According to PFA Rules the milk fat content of khoa should not be less than **20 per cent of finished product.**
5. The average specific gravity of skim milk ranges from **1.035 to 1.037**
6. According to the PFA Rules the mixed milk should contain minimum per cent of milk fat and milk SNF respectively **4.5, 8.5**
7. The chairman of NDDB, has become the first Indian to be elected to the board of the International Dairy Federation (IDF) **Dr. (Ms) Amrita Patel**
8. Daily per capita milk consumption recommended by the Medical Authorities is **280g**
9. According to the PFA Rules chhana should not contain more than **70 per cent moisture**
10. The acidity in mastitic milk is **Lower than normal milk**
11. The starter organisms for yoghurt are **Streptococcus thermophilus** and **Lactobacillus delbruekii subsp. bulgaricus**
12. Natural acidity of milk is due to **casein, acid phosphates and citrates**
13. Temperature and time of flash pasteurization **72⁰C for 15 second**
14. Pizza is prepared from **mozzarella** cheese
15. National Dairy Development Board, Anand, Gujarat was set-up in the year **1965**
16. Soft ice cream is usually drawn from the freezer at around - 8 to -7°C. The overrun may be in the range of **30 to 50** per cent.
17. Pasteurization refers to the process of heating every particle of milk to at least **63°C for 30 min** or heating to **72°C for 15 sec.**

18. The time-temperature combinations used for producing sterilized milk are **145°C and 3 sec.**
19. The low temperature storage of raw milk prior to processing is likely to increase **Psychrotrophic** counts.
20. The spores of **B. stearothermophilus** are known to withstand UHT treatment.
21. **Sterilizing effect** refers to the number of decimal reductions that the heat treatment is able to effect in milk.
22. For aseptic packaging of UHT milk, **Tetra pack, Tetra-Brick** etc are used as packaging materials
23. The common groups of post-pasteurization contaminants include **Coliforms and psychrotrophs**
24. The thermal destruction of bacteria in milk is based on the principle of **Protein denaturation**
25. **Pseudomonas putrefaciens** causes surface taints in butter.
26. The **gas producing organisms** may enter milk chiefly from soil and manure.
27. The blue discolouration in milk is caused by the associative action of **Ps. Syncyanea and S. lactis.**
28. Slime production in milk is mainly caused by **Leuconostoc** genus of lactic acid bacteria.
29. Ropiness in milk is mainly caused by **Alcaligenes viscolactis**
30. Coliforms cause **Early** blowing in cheese.
31. The two types of materials responsible for ropiness are **Gums, and Mucins**
32. The three types of rancidity in milk are **Hydrolytic, oxidative and ketonic**
33. The fruity aroma of milk produced by *Ps. fragi* is due to the production of **Esters;**
34. Malty flavour produced by *S. lactis* var. *maltigenes* in milk is due to the production of **Aldehydes** .
35. Unclean flavour in milk may be due to microbial production of **Dimethyl sulfide** by Gram-negative psychrotrophic bacteria.
36. Faecal coliforms in dairy products are detected by **Eijkman test** test.
37. The common indicator organisms used for determining faecal contamination in frozen and thermized foods are **Enterococci**

38. The tentative standards for bacterial count of environment in butter section are **300 cfu/m³**.
39. The aflatoxin **B1** in dairy animal feed is transformed into aflatoxin M₁ and is secreted into milk.
40. The efficiency of dairy sanitizers is determined by **Capacity and suspension** tests.
41. Food-borne intoxications through dairy products are mainly caused by **Staph.aureus**
42. **Widal** test is used for the detection of Salmonella in dairy products.
43. E.coli forms typical **Dark centered with green metallic sheen** colonies on Eosin Methylene Blue (EMB) agar.
44. Indian Standards Institution (ISI) has been renamed as **Bureau of Indian Standards**
45. ICMSF stands of **International Commission on Microbiological Specifications for Foods;**
46. Indole is produced from tryptophan by the action of **Tryptophanase** enzyme of micro-organisms during IMViC test.
47. Milk with titratable acidity more than **0.17 %** (LA) gives a positive COB test.
48. A special pipette called **Breed's pipette** is used for performing direct microscopic count (DMC).
49. For staining milk smear during direct microscopic count, a special stain, a special stain called **Newman's stain** is used.
50. The oxidation-reduction potential of resazurin is **0.34 V** whereas it is **0.1 V or less** for dihydroresorufin.

Note: above material are sample question useful for ICAR JRF, SRF, ARS/NET and related exams in veterinary, dairy, food science students

Suggested reading:

1. Outlines of Dairy Technology by Sukumar De
 2. A Compressive DAIRY MICROBIOLOGY by J.S.Yadav,Grover and Batish
 3. Technology of Indian Milk Products by R.P. Aneja
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