

# CHEESE

e-dairy



Source -Dairy processing handbook

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- 1) What is the definition of "uncured" or "unripened" cheese?
  - a) Cheese that is aged for a long time
  - b) Cheese that is ready for consumption shortly after manufacture
  - c) Cheese that has undergone fermentation
  - d) Cheese made from cream
- 2) What is the main purpose of "thermisation" of cheese milk?
  - a) To reduce the bacterial count before storage
  - b) To enhance the flavour of cheese
  - c) To pasteurize the milk
  - d) To increase the acidity of the milk
- 3) In the cheese-making process, rennet is used to:
  - a) Increase the pH of milk
  - b) Coagulate the milk
  - c) Lower the acidity of the milk
  - d) Add flavour to the cheese
- 4) Which of the following is a common example of a soft cheese?
  - a) Parmesan
  - b) Gouda
  - c) Brie
  - d) Cheddar

5) How much moisture percentage does a hard cheese typically have?

- a) 45-55%
- b) 35-40%
- c) 30-40%
- d) 60-70%

6) What is the name of the Italian cheese that is commonly used on pizzas due to its stretchability?

- a) Gouda
- b) Brie
- c) Mozzarella
- d) Feta

7) Which of the following types of milk is most commonly used in the production of cheese?

- a) Goat's milk
- b) Cow's milk
- c) Sheep's milk
- d) Buffalo's milk

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- 8) What is the primary function of salt in cheese making?
  - a) To enhance the colour of the cheese
  - b) To help the cheese ripen
  - c) To improve the flavour and preserve the cheese
  - d) To reduce moisture content
- 9) Which of the following cheeses is known for being aged with a mold coating?
  - a) Brie
  - b) Roquefort
  - c) Cottage cheese
  - d) Ricotta
- 10) What is the effect of high moisture content on cheese texture?
  - a) It makes the cheese firmer
  - b) It makes the cheese soft and creamy
  - c) It makes the cheese harder
  - d) It reduces the flavour
- 11) What type of bacteria is primarily used in the fermentation process for cheese?
  - a) Lactobacillus
  - b) Escherichia coli
  - c) Streptococcus
  - d) Bacillus subtilis

12) Which of the following types of cheese is known for its blue veins and strong flavour?

- a) Gouda
- b) Camembert
- c) Roquefort
- d) Havarti

13) The process of "washing the curd" is used in the production of which type of cheese?

- a) Cream cheese
- b) Hard cheese
- c) Semi-soft cheese
- d) Blue cheese

14) What is the effect of high-fat content on cheese texture?

- a) It makes the cheese crumbly
- b) It makes the cheese smoother and creamier
- c) It makes the cheese drier
- d) It makes the cheese more acidic

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15) Which of the following is a characteristic of processed cheese?

- a) It is made using raw milk
- b) It is a blend of natural cheeses and emulsifiers
- c) It is always aged for over a year
- d) It is never packaged in slices

16) What is "cheddarization" in cheese making?

- a) The process of fermenting cheese at high temperatures
- b) The process of stirring the curd to increase moisture content
- c) The process of pressing curds to form a dense texture
- d) The process of aging cheddar cheese
- 17) Which of the following cheeses is known for its nutty flavour and holes?
  - a) Brie
  - b) Swiss
  - c) Gouda
  - d) Roquefort

18) Which of the following cheeses is often used in cooking due to its melting properties?

- a) Brie
- b) Mozzarella
- c) Roquefort
- d) Feta

19) What is the effect of adding calcium chloride to milk in cheesemaking?

- a) It improves curd formation
- b) It reduces the cheese's fat content
- c) It increases the acidity of the milk
- d) It makes the cheese saltier
- 20) What is a common method of storing hard cheese?
  - a) Freezing
  - b) Vacuum-sealing
  - c) Storing in a wet solution
  - d) Keeping at room temperature

21) Which of the following cheeses is produced using sheep's milk?

- a) Feta
- b) Gouda
- c) Mozzarella
- d) Parmesan

22) What type of cheese is used for making cheese sauces due to its smooth texture when melted?

- a) Parmesan
- b) Gruyère
- c) Feta
- d) Ricotta

23) What type of cheese is made from goat's milk?

- a) Cheddar
- b) Camembert
- c) Chèvre
- d) Ricotta

24) What is the main purpose of bactofugation in milk processing?

- a) To separate fat from milk
- b) To reduce the number of bacteria and spores in milk
- c) To improve milk flavor
- d) To increase milk fat content

25) Which of the following temperatures is typically used for bactofugation?

- a)  $40 45^{\circ}C$
- b)  $50 55^{\circ}C$
- c)  $55 65^{\circ}C$
- d)  $70 75^{\circ}C$

26) In which of the following configurations is bactofugate sterilized after discharge?

- a) One-phase Bactofuge with continuous discharge
- b) Two-phase Bactofuge with continuous discharge
- c) One-phase Bactofuge with intermittent discharge
- d) Double bactofugation

27) Which colouring agent is commonly used to correct seasonal variations in cheese colour?

- a) Chlorophyll
- b) Carotene
- c) Beta-carotene
- d) Orleana

28) What is the primary enzyme in rennet responsible for coagulating milk?

- a) Protease
- b) Chymosin
- c) Amylase
- d) Lactase

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29) What is the primary challenge with plant-based coagulants used in cheese-making?

- a) They are difficult to store
- b) They are not cost-effective
- c) They have no coagulating ability
- d) They often produce a bitter taste

30) What is the desired size range for curd grains in cheese production?

- a) 1 5 mm
- b) 3-15 mm
- c) 10 20 mm
- d) 20 30 mm
- 31) What is the effect of homogenising milk before cheese-making?
  - a) It increases curd texture
  - b) It decreases water-binding ability
  - c) It increases the difficulty of making hard cheeses
  - d) It enhances milk flavour
- 32) Which bacterium survives scalding temperatures in cheese production, contributing to the characteristic flavour of Emmenthal?
  - a) Lactobacillus
  - b) Propionibacterium freudenreichii ssp. Shermanii
  - c) Streptococcus thermophilus
  - d) Bacillus subtilis

33) How much liquid rennet is typically added per 100 kg of milk in cheesemaking?

- a) 10 ml
- b) 20 ml
- c) 30 ml
- d) 50 ml

34) What is the desired final acidity range of the curd in cheesemaking?

- a) pH 6.5 7.0
- b) pH 5.0 5.5
- c) pH 4.0 4.7
- d) pH 3.5 4.0

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35) Which of the following is a typical heating temperature range for scalding during cheesemaking?

- a)  $45 50^{\circ}C$
- b)  $50 56^{\circ}C$
- c)  $60 65^{\circ}C$
- d)  $40 45^{\circ}C$

36) At what acidity level is the whey drained off during Cheddar cheese production?

- a) 0.5 0.6%
- b) 0.7 0.8%
- c) 0.2 0.22%
- d) 0.75 0.85%

37) What type of machine is used for mechanized cheddaring?

- a) Alfomatic
- b) CheddarMaster
- c) WheyScoop
- d) BlockFormer

38) What does the Alfomatic cheddaring machine use to move curd during the process?

- a) Vacuum suction
- b) Air pressure
- c) Conveyor belts with adjustable speeds
- d) Manual labor

39) What is a key feature of the Alfomatic machine in large-scale production?

- a) It only uses one conveyor
- b) It is made of plastic materials
- c) It has four conveyors for uniform curd distribution
- d) It only works for small batches
- 40) What is the function of the first conveyor in the Alfomatic cheddaring system?
  - a) To cool the curd
  - b) To stir the curd and drain whey
  - c) To add salt
  - d) To pack the cheese
- 41) What is the main characteristic of Pasta Filata cheese?
  - a) It is made using fermented curd
  - b) It has a stringy, elastic texture
  - c) It has a firm texture and no holes
  - d) It is typically cooked at low temperatures

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42) What is the ideal temperature range for cooking and stretching Pasta Filata cheese?

- a)  $40 45^{\circ}C$
- b)  $55 60^{\circ}C$
- c)  $65 70^{\circ}C$
- d)  $82 85^{\circ}C$

43) Which material should be used for heat exchangers in brine systems due to its non-corrosive properties?

- a) Stainless steel
- b) Titanium
- c) Aluminium
- d) Copper

44) Which of the following chemicals is commonly used to control microbiological activity in brine?

- a) Sodium chloride
- b) Sodium hypochlorite
- c) Potassium nitrate
- d) Calcium carbonate

45) Which bacteria are important in the fermentation of lactose in cheeses like Emmenthal?

- a) Butyric acid bacteria
- b) Lactic acid bacteria
- c) Propionic acid bacteria
- d) E. coli

46) What happens during the ripening of smear-treated cheeses like Tilsiter?

- a) Ammonia is produced from protein decomposition
- b) Fat content increases
- c) Lactic acid is neutralized
- d) Lactose fermentation halts
- 47) What does the term "green cheese room" refer to in cheese storage?
  - a) A room where cheese is pasteurized
  - b) A room where cheese is initially stored at low temperatures
  - c) A room where cheese is sealed in plastic
  - d) A room used for final packaging

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48) Which type of cheese requires low temperatures (4-8°C) and RH lower than 80% during ripening?

- a) Limburger
- b) Cheddar
- c) Feta
- d) Emmenthal

49) What type of mold is used in blue cheese production?

- a) Penicillium camemberti
- b) Penicillium roqueforti
- c) Penicillium candidum
- d) Aspergillus niger

50) Which type of cheese is typically characterized as semi-soft?

- a) Gouda
- b) Tilsiter
- c) Brie
- d) Cottage

51) Which equipment is used for fragment turning in blue cheese?

- a) Piercing machine
- b) Pivoted rods
- c) Washing machine
- d) Conveyor press
- 52) Which cheese is not stored in brine?
  - a) Gouda
  - b) Tilsiter
  - c) Camembert
  - d) Mozzarella
- 53) What is the primary characteristic of Quarg?
  - a) It is a ripened cheese
  - b) It is consumed unripened
  - c) It is always made with fruit
  - d) It has a dry matter of 30%

54) What bacteria are typically used in Quarg production?

- a) Streptococcus thermophilus
- b) Lactobacillus bulgaricus
- c) Streptococcus lactis/cremoris
- d) Lactococcus lactis

- 55) Which product is included under processed cheese varieties?
  - a) Paneer
  - b) Smoked cheese
  - c) Feta cheese
  - d) Ricotta

Question	Answer	19.	a		38.	с
1.	b	20.	b		39.	с
2.	а	21.	а		40.	b
3.	b	22.	b		41.	b
4.	с	23.	с		42.	d
5.	с	24.	b		43.	b
6.	с	25.	с		44.	b
7.	b	26.	с		45.	с
8.	с	27.	b		46.	а
9.	b	28.	b		47.	b
10.	b	29.	d		48.	b
11.	а	30.	b		49.	b
12.	с	31.	с		50.	с
13.	с	32.	b		51.	b
14.	b	33.	с		52.	с
15.	b	34.	c		53.	b
16.	с	35.	b		54.	с
17.	b	36.	c	N'I	55.	b
18.	b	37.	a			

# **Answer Key**

# **Bonus Tips**

- 1. Thermisation is moderate heat treatment at 65°C for 15 s which is often given to cheese milk.
- 2. To prevent "blowing" certain chemicals like sodium nitrate (NaNO<sub>3</sub>) have been added in cheese milk, but at production of Emmenthal cheese, hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) is also used.
- 3. 5-20 grams of calcium chloride per 100 kg of milk is normally enough to achieve a constant coagulation time and result in sufficient firmness of the coagulum.