

2009 DAIRY FOODS PRODUCTION EXAM

1. What field vegetable can be a cheap replacement for soybean meal and corn grain?
 - a) Sugar beets
 - b) Sweet corn
 - c) Field peas
 - d) Almonds

2. The decision of a milk hauler to accept or reject milk at the producing farm
 - a) depends on knowledge of milk quality and ability to smell off odors
 - b) must always be confirmed by tests for acidity
 - c) must be made the day before pickup is scheduled
 - d) both a & b
 - e) both a & c

3. Molds growing on corn and other feed grains may produce
 - a) fungicides
 - b) aflatoxins
 - c) myxotoxins
 - d) bactericides

4. For every pound of dry matter, cows should consume how much water?
 - a) 1 to 2 pounds
 - b) 4 to 5 pounds
 - c) 10 to 15 pounds
 - d) 25 to 30 pounds

5. The breakdown of milk fat that releases fatty acids in milk and causes the rancid or lipolyzed off flavor develops fastest when
 - a) Bacterial counts are high
 - b) Cows are consuming fresh pasture grasses
 - c) Fat is partially churned so lipase can attack the fat
 - d) Cows are in their highest phase of milk production

6. Which of the following fatty acids found in milk have been associated with health benefits in humans?
- a) Oleic acid
 - b) Conjugated Linoleum Acid
 - c) Butyric Acid
 - d) Lactic Acid
7. How many years does it take for a dairy farm to fully transition to certify organic?
- a) 1
 - b) 3
 - c) 5
 - d) 7
8. What technology destroys 90 percent of BST found in milk?
- a) Pasteurization
 - b) homogenization
 - c) hormonization
 - d) reverse osmosis
9. Stainless steel equipment is used to produce and process milk because
- a) Surfaces can be polished to a smooth finish
 - b) Surfaces do not corrode easily
 - c) There is little chance for copper to get into milk
 - d) All of the above
10. Rancidity or lipolyzed flavor in milk results from
- a) Growth of acid producing bacteria
 - b) Release of amino acids from casein
 - c) Contamination of milk with antibiotics
 - d) Action of a natural enzyme of milk that splits fatty acids from milk fat
11. What method of manure application is best to fully utilize nutrients, reduce risk of runoff, and lower odor complaints?
- a) injecting
 - b) broadcasting
 - c) surface application
 - d) flood application

12. At refrigerated temperatures, butter will begin to lose some of its natural flavor after how long?
- a) Within 2 months
 - b) Within 6 months
 - c) Within 1 year
 - d) Butter will not lose its natural flavor when stored properly
13. Why do protein and amino acids go hand in hand?
- a) Amino acids and proteins need to be found in a 2:1 ratio in all diets
 - b) Proteins are the building blocks of amino acids
 - c) Amino acids are the building blocks of protein
 - d) Proteins link to amino acids in bone formation
14. When performing a CMT test, watch for color changes and gel formation. Milk from a normal quarter does which of the following?
- a) Forms a gelatinous mass clinging together in a strong reaction
 - b) Flows freely without change in viscosity
 - c) Forms small clumps in a moderate reaction
 - d) Turns a deep purple color
15. Antibiotics that may be found in milk are there most likely because
- a) milk was not withheld from the bulk tank long enough after treatment of a cow
 - b) they were used to preserve the milk
 - c) cows ate feed containing it
 - d) the veterinarian prescribed the medication
16. New food pyramid guidelines recommended how many servings of dairy products per day?
- a) 5
 - b) 2
 - c) 4
 - d) 3
17. The greatest damage to the cow caused by mechanical milking is due to
- a) Milking too fast
 - b) Leaving the machine on too long
 - c) Using too low vacuum
 - d) Milking too slowly

18. Which of the following are required for milk from a dairy farm to be certified organic?
- a) Cows may not have been treated with antibiotics
 - b) Insecticides may not have been used
 - c) The farm must have been audited by a third party
 - d) All of the above
19. Antibiotics are not permitted in milk because
- a) they artificially lower bacteria counts
 - b) off flavors are produced
 - c) fat becomes rancid
 - d) some persons are hypersensitive to certain antibiotics
20. What disease is caused by a worm that is taken up as larvae by cattle eating grass, penetrates the gut, and eventually matures to adult form in the respiratory tract?
- a) tuberculosis
 - b) heartworm
 - c) trichinosis
 - d) lungworm
21. Which of these is a good nutritional strategy to maintain milk production in hot weather?
- a) Feed more grain
 - b) Increase protein concentration
 - c) Add more fat
 - d) Milk slower
22. The **fat-soluble** vitamins found in milkfat are
- a) A, D, E and K
 - b) A, D, B2 and B12
 - c) niacin and riboflavin
 - d) B2, B3, B6 and B12

23. The components of milk responsible for richness and sweetness, in this order, are

- a) minerals and milk sugar
- b) casein and lactic acid
- c) milk fat and lactose
- d) curds and whey

24. Failure to sanitize milking equipment after cleaning may result in

- a) unexpected spoilage of the milk
- b) high somatic cell counts
- c) malfunction of the milking machine
- d) dirty sediment pads

25. Lactose is the principal _____ in milk.

- a) fat
- b) protein
- c) carbohydrate
- d) mineral