

**HOLSTEIN FOUNDATION  
AYRSHIRE QUIZ BOWL  
2018 PRACTICE QUESTIONS**

1. What dairy product comes in blocks, slices, shreds, cubes and curds?

**Cheese** (Hoard's Dairyman 2017)

2. What activity of the bovine's digestive process stimulates saliva flow?

**Cud chewing or rumination** (Hoard's Dairyman 2017)

3. Semen for artificial insemination should be thawed in clean water and heated to what Fahrenheit temperature?

**95 degrees F** (Hoard's Dairyman 2017)

4. What is the most common post-mortem diagnosis in calves between one to five months of age?

**Pneumonia** (Hoard's Dairyman 2014)

5. What is the biggest drawback to milking three times a day?

**Labor** (Hoard's Dairyman 2015)

6. Name the statement that is used as a guideline for grocery retailers that ensures that people are being sold a fresh dairy product.

**Sell by date** (Hoard's Dairyman 2015)

7. Under heat stress conditions will cows consume more fresh feed in the evening or during the day?

**Evening** (Hoard's Dairyman 2015)

8. True or False: Purebred Ayrshires only produce red and white offspring.

True (Ayrshire April 2017)

9. What is the most popular American-type cheese?

Cheddar (Hoard's Dairyman 2017)

10. What is the biggest danger to overmilking?

Damage to teat end (Hoard's Dairyman 2014)

11. True or False: Meat from clones of cattle is safe to eat.

True (Dairy Herd Management 2015)

12. What is the procedure called where streams of milk are taken from each quarter prior to milking which stimulates the production of oxytocin?

Forestripping (Hoard's Dairyman 2016)

13. What percent of corn that is processed for human food ends up as a by-product feed?

48 to 52% (Hoard's Dairyman 2017)

14. Name the tube that leads from the mouth to the stomach.

Esophagus (HF Workbooks 2014)

15. What is the name of the value-added Ayrshire program that bundles registrations, pedigrees and classification?

REWARDS Program (Ayrshire July 2017)

16. What two dairy products, that greatly affect the milk price to farmers, are largely determined by domestic demand?

Butter and cheese (Hoard's Dairyman 2017)

17. Where does hardware settle when ingested by a cow?

Reticulum (Other January 2015)

18. Milk should be cooled to what Fahrenheit temperature within thirty minutes after the completion of milking?

38 degrees F (Hoard's Dairyman 2010)

19. Define productive life.

A measure of how many months a cow produces milk up until she dies (Hoard's Dairyman 2015)

20. Name the condition where the shoulder separates, and juts out sharply, at the elbow of a dairy cow.

Wing shoulder (Other 2014)

21. What is the name of the condition caused by a mite, and is characterized by small crusty scabs on the tail head, escutcheon, udder and thighs?

Mange (Hoard's Dairyman 2010)

22. What vitamin has been found to play an important role before calving and after calving and minimizes the incidence and prevalence of mastitis in dairy animals, especially heifers?

Vitamin E (Hoard's Dairyman 2010)

23. What does the California Mastitis Test measure?

Somatic cell count (Hoard's Dairyman 2010)

24. Diet-conscious Americans eat what calcium-rich dairy product as it helps burn more body fat?

Yogurt (Dairy Herd Management 2010)

25. What name is given to the contents of the large intestine that eventually leave the body through the rectum?

Feces (HF Workbooks March 2014)

26. At what age does Ayrshire Junior membership expire?

21 years old (Ayrshire 2012)

27. When does peak milk production occur?

6 to 8 weeks after calving (HF Workbooks March 2014)

28. What hormone in the first week following ovulation actually inhibits the development of the corpus luteum?

Oxytocin (Hoard's Dairyman 2010)

29. A cow's body is made up of what percent water?

56 to 81% (Hoard's Dairyman 2016)

30. Which cow will be more likely to conceive when inseminated for the first time, a two year old cow or a six year old cow?

2 year old (8% more likely) (Hoard's Dairyman 2014)

31. A maximum of how many leased animals may be shown by a Junior exhibitor at a National Ayrshire show?

4 leased animals (Ayrshire 2017)

32. Multiple Choice: Does a short-day or long-day photoperiod, during the dry period, improve herd health after calving?

Short-day (Hoard's Dairyman 2015)

33. When in a lactation are uterine infections most likely to affect a dairy cow?

Immediately following calving (Hoard's Dairyman 2015)

34. Is the percentage of true protein higher or lower than total protein?

Lower (6% less) (Hoard's Dairyman 2015)

35. Where specifically does the Western National Ayrshire show take place?

Puyallup, WA (Ayrshire March 2016)

36. What organization has oversight over all checkoff programs?

United States Department of Agriculture (Hoard's Dairyman 2017)

37. Cattle have how many pairs of ribs?

13 pairs (Other January 2017)

38. What is the primary gas produced by treating manure with an anaerobic digester?

Methane (Hoard's Dairyman 2016)

39. When a cow drinks freely she inclines her head around 60 degrees and inserts her muzzle how many inches into a water pool?

1 to 2 inches (Hoard's Dairyman 2016)

40. Products with at least ninety-six percent organic ingredients will have what USDA label?

Organic (Hoard's Dairyman 2015)

41. What is the name of the artery that carries blood to and from the fetus to the mother?

Umbilical cord (Hoard's Dairyman 2016)

42. What name is given to the bones in the rump of dairy cattle?

Hook and pin bones (Other January 2017)

43. Where is most of the potassium located in an alfalfa plant?

**Stems** (Hoard's Dairyman 2015)

44. What is the most common method for destroying pathogenic organisms in milk?

**Pasteurization** (Hoard's Dairyman 2017)

45. The National Mastitis Council defines the somatic cell count for a normal, healthy mammary gland as how many cells per milliliter?

**150,000 to 200,000** (Dairy Herd Management 2015)

46. Cattle that are maintained on a high concentrate diet will most likely be deficient in what?

**Calcium** (Other January 2015)

47. What is the minimum percentage purebred Ayrshires need in order to qualify for U.S. sanctioned shows and recognition programs?

**87.5%** (Ayrshire 2017)

48. What is the average saliva production, per day, by a dairy cow?

**13 to 24 gallons** (HF Workbooks March 2014)

49. What state was home to the most organic dairy farms in 2015?

**Wisconsin** (Hoard's Dairyman 2017)

50. What is the most likely source of Johne's disease?

**Manure** (Hoard's Dairyman 2015)

51. What is the name of the ABA publication that highlights some of the most prominent and influential Ayrshire females?

**Ayrshire Year Book** (Ayrshire July 2016)

52. What term is a disorder of structure or function in a human, animal, or plant, especially one that produces specific signs or symptoms or that affects a specific location and is not simply a direct result of physical injury?

**Disease** (Other 2017)

53. Newborn calves need to receive at least what percent of their body weight in colostrum after delivery?

**8 to 10%** (Dairy Herd Management 2015)

54. What term describes an inflamed or infected uterus?

**Metritis** (Hoard's Dairyman 2016)

55. Who is the U.S. Ayrshire Breeders' Association Executive Secretary?

**Becky Payne** (Ayrshire 2017)

56. For most cows, the automatic take-offs should come off when milk flow drops below how many pounds?

**1.5 to 2.2 pounds** (Hoard's Dairyman 2014)

57. What material is tile drainage typically constructed of today?

**PVC tubing** (HD January 17)

58. What is soil in harvested forages known as?

**Ash** (Hoard's Dairyman 2010)

59 The milk/wash valve in a pipeline system is a vital component of the equipment. Should valves be in the open or closed position for milking?

Open (Hoard's Dairyman 2010)

60. President Trump pulled the U.S out of what country trade deal during his first week in office?

Trans-Pacific Partnership (HD February 2017)

61. What is hyperkeratosis?

Rough teat ends (Hoard's Dairyman 2010)

62. What term describes the study of the functions of the living body and its organs?

Physiology (Other January 2015)

63. In what year was the first Ayrshire show sponsored by the Highland Agricultural Society?

1786 (Ayrshire April 2012)

64. Which cow, a cow bred at 60 days in milk or a cow bred at 160 days in milk is more likely to conceive when bred?

Cow bred at 160 days (10% more likely) (Hoard's Dairyman 2010)

65. Multiple Choice: A silent heat is when a cow does not show any of the normal signs of being in heat such as standing to be mounted, restlessness, and bellowing. Do silent heats increase or decrease during the hot, humid summer months?

Increase (Hoard's Dairyman 2010)



66. SARA has been suggested to be the most important nutritional disease of dairy cattle. What does SARA stand for?

Subacute rumen acidosis (Hoard's Dairyman 2010)

67. What award is given to the person who exemplifies the same principles as the Klussendorf recipient on character, sportsmanship, ability and endeavor. Above all else, the person helps make the showstring successful and attractive.

Klussendorf-MacKenzie Award (Holstein World 2014)

68. In one of the first actions as Secretary of Agriculture, Perdue announced that the U.S. Department of Agriculture will implement regulations to allow school districts to again offer what as part of the National School Lunch and School Breakfast program?

Low-fat (1%) flavored milk (HD April 2017)

69. What is the name of the small finger-like projections which cover the surface of the small intestine?

Villi (HF Workbooks March 2014)

70. How much does a one-year subscription of the Ayrshire Blue Book cost?

\$30.00 (Ayrshire March 2016)

71. To what part of the mammary system do the orifice, streak canal and cistern belong?

Teat (Other 2014)

72. Where in the body do secretions from the pancreas, liver and intestine enter?

Small intestine (HF Workbooks March 2014)

73. On average thawed sperm has an estimated lifespan of how long in the female reproductive tract?

24 to 30 hours (Hoard's Dairyman 2010)

74. Who served as the first president of the U.S. Dairy Export Council?

Tom Suber (HD January 2017)

75. What organization manages the dairy checkoff program?

Dairy Management, Inc. (Hoard's Dairyman 2010)

76. Frozen butter can be stored for how long without any off-flavor?

1 year (Hoard's Dairyman 2010)

77. What is the name of the hormone that induces the follicle to ovulate and releases the egg that it contains shortly after estrus?

Lutenizing hormone (LH) (Hoard's Dairyman 2010)

78. What do heifers have the most trouble releasing when they have bloat?

Gas or methane (Hoard's Dairyman 2010)

79. What is the name of the condition where there is a buildup of fat in the body organ that produces bile?

Fatty liver (Hoard's Dairyman 2010)

80. At what age does a dairy cow have a full set of incisors with the corners fully developed?

4.5 to 5 years old (Other 2014)

81. What is the name of the disease that causes a loss of oxygen and a blue tinge to the tongue and can be carried by cattle? Worldwide there are 24 strains of this disease and there is no cure.

Blue tongue (HD 2014)

82. When was the first Registered Ayrshire imported into the United States?

1822 (Ayrshire 2010)

83. Typically, alfalfa is cut at what percent bloom?

10% (Hoard's Dairyman 2010)

84. What metabolic disorder occurs when dry matter intake and body condition loss can't meet the energy demand for milk production and the cow will have low blood glucose, high ketone and free fatty acid levels?

Ketosis (Hoard's Dairyman 2010)

85. Name one major factor that affects rearing costs.

Milking herd cull rate or age at first calving (Hoard's Dairyman 2010)

86. During the Ayrshire development it was referred to as the Cunningham and what else?

Dunlop (Ayrshire April 2012)

87. Which has a higher progesterone content milk or blood?

Milk (Hoard's Dairyman 2010)

88. What feed ingredient may improve conception rates as it may contribute to larger ovarian follicles capable of producing more estrogen, a larger corpus luteum and less embryonic loss?

Fats (Hoard's Dairyman December 2009)

89. If your corn showed a v-shaped yellowing at harvest your corn probably ran out of what?

Nitrogen (Dairy Herd Management 2010)

90. How much does an on-line Ayrshire three-generation pedigree cost?

\$4.00 (Ayrshire March 2016)

91. Each tanker load of milk must be tested for and free of antibiotic residues before it is permitted to be unloaded at the processing plant. What is the most common reason that milk from dairy farms is contaminated with antibiotic residues?

Accidental human error (Hoard's Dairyman 2010)

92. Which acid is most prevalent in well-preserved silage storage?

Lactic acid (Hoard's Dairyman 2010)

93. The male animal has the "XY" chromosome and the female has the "XX" chromosome. Which chromosome, the "X" or the "Y", has more of the genetic material DNA?

X chromosome (4% more) (Hoard's Dairyman 2010)

94. What percent of the average U.S. dairy cow diet could be digested by a human?

20% (HD January 2017)

95. How many square feet per cow should you plan for with a bedding pack barn?

100 feet (Hoard's Dairyman 2010)

96. The International Dairy Foods Association is composed of how many constituent organizations?

3 organizations (HD May 2017)

97. Many foreign countries will not accept GMO agriculture products such as corn and soybeans. What do the initials GMO represent?

Genetically modified organism (Hoard's Dairyman 2010)

98. What nutrient should be increased in a transition diet to limit feed intake?

Fiber (Hoard's Dairyman 2010)

99. What is the name of the single cell that is formed after an oocyte or egg is fertilized by sperm?

Zygote (Hoard's Dairyman 2010)

100. Studies show that kids like milk best when it is served cold. What Fahrenheit temperature is best to serve milk?

33 to 40 degrees F (Hoard's Dairyman 2010)

101. In what part of the cow's body would you find the cecum and colon?

Large intestine (HF Workbooks March 2014)

102. Any calf birth that is considered difficult is known as what?

Dystocia (Hoard's Dairyman 2010)

103. If a cow has mastitis, the veterinarian will run culture and sensitivity tests on what type of sample?

Milk sample (Hoard's Dairyman 2010)