

**HOLSTEIN FOUNDATION  
AYRSHIRE QUIZ BOWL  
2017 PRACTICE QUESTIONS**

1. What is often the first warning sign of a cow becoming sick?  
Fever (Dairy Herd Management)
2. Adding water to barley 24 hours prior to rolling can boost milk production by 5%. What is this process called?  
Tempering (Hoard's Dairyman)
3. What percentage of all milk sold in the U.S. is pasteurized?  
99% (Hoard's Dairyman)
4. Which bedding will harbor more flies in calf housing: sawdust or wet straw?  
Wet Straw (Hoard's Dairyman)
5. What is the number one nutrient needed to make milk; the cow's requirement increases significantly when it gets hot?  
Water (Dairy Herd Management)
6. Based on research when is the best time to apply manure to an alfalfa field?  
Prior to seeding (Hoard's Dairyman)
7. A rolling herd average is based on how many months?  
12 months (Hoard's Dairyman)
8. What is the name of the official publication of the Ayrshire Breeders' Association?  
*Ayrshire Digest* (Ayrshire)
9. DNA testing is a means of verifying parentage. What type of sample is needed for the lab to best identify DNA markers?  
Hair sample from switch (Ayrshire)
10. The cost of feed traditionally makes up what percent of the cost of production?  
55 to 60% (Dairy Herd Management)
11. As a calf grows what happens to the percent of the body that is water?  
Decreases (Hoard's Dairyman)
12. What season is the ideal time to collect soil samples?  
Fall (Hoard's Dairyman)

13. A hundred weight (cwt) weighs how many pounds?  
100 pounds (VA QB Study Materials)
14. What is the normal incidence of retained placentas in most dairy herds?  
5 to 15% (Dairy Herd Management)
15. How many pairs of ribs do cows have?  
13 pairs (Hoard's Dairyman)
16. What restaurant chain is the most visited in the United States according to data from retail tracker?  
McDonald's (Hoard's Dairyman)
17. Spoiled milk is often referred to as what?  
Sour (Hoard's Dairyman)
18. Dairy producers invest what amount per hundred pounds of milk sold in dairy checkoff programs?  
15 cents per hundredweight (DMI)
19. Where is the vulva located?  
Beneath tail or immediately below the anus (Other)
20. What month is National Grilled Cheese Month?  
April (DM)
21. To reduce stillbirths, calving pens should be checked at least how often?  
Every two hours (Hoard's Dairyman)
22. What percent of all energy consumed by a dairy cow is eventually converted to methane and is released through the nostrils or mouth?  
6 to 10% (Hoard's Dairyman)
23. Looking forward into a cross section of the cows body cavity, the abomasum lies on which side near the floor of the abdomen?  
Right Side (Dairy Herd Management)
24. What legendary coach was quoted as saying "when you grow up on a dairy farm, cows don't take a day off. So you work every day and my dad always said, No one can outwork you?"  
Pat Summit (Hoard's Dairyman)
25. One serving of milk is equal to how many ounces?  
8 ounces (DMI)

26. Dairy cows are generally in labor for how long?  
2 to 6 hours (Dairy Herd Management)
27. What is the most common complaint from school children on how milk is served?  
Too warm (Hoard's Dairyman)
28. A microwave oven can be useful in doing what to colostrum?  
Thawing (Hoard's Dairyman)
29. True or False: Cows are ruminants, which are cud chewing mammals.  
True (Hoard's Dairyman)
30. Total mixed rations typically contain what percent concentrates?  
40 to 60 percent (Hoard's Dairyman)
31. The developing calf places its greatest nutritional demand on the cow during which trimester of pregnancy?  
Last trimester (Dairy Herd Management)
32. Gestations vary how many days among breeds on average?  
8 days (Hoard's Dairyman)
33. More cows die in what two months?  
July and August (Hoard's Dairyman)
34. In what city was the first ice cream parlor located?  
New York City (Other)
35. Name the Ayrshire Breeders' Association vice-president.  
Tom Fenton (Ayrshire)
36. In regards to calf care, which aspect of calf raising has the greatest impact on the concentration of airborne bacteria in the calf pen?  
Pen size (Hoard's Dairyman)
37. Which state is the only one with plans to make labeling of GMO ingredients mandatory?  
Vermont (Hoard's Dairyman)
38. Name the U.S. Secretary of Agriculture.  
Tom Vilsack (Hoard's Dairyman)

39. A cow's peak milk production occurs at 4 to 6 weeks after calving, but many reach their maximum feed intake at how many weeks?

9 to 10 weeks (Hoard's Dairyman)

40. Dry matter is the amount of feed left after what is removed?

Water (Hoard's Dairyman)

41. How often should silage dry matter be tested?

Once or twice a week (Hoard's Dairyman)

42. Multiple Choice: How many servings of dairy does the average American consume per day: 1.6, 2.2 or 3.1?

1.6 servings (DMI)

43. The loss of what mineral in the feces of a calf with diarrhea is the main cause of dehydration?

Sodium (Hoard's Dairyman)

44. Name the hereditary units that are passed on to offspring via sperm and egg which influence the expression of specific traits, like hair or eye color.

Genes (Hoard's Dairyman)

45. What does productive life tell producers?

How long daughters of bulls typically stay in the herd (Dairy Herd Mgt)

46. What is a cow's natural buffer?

Saliva (Hoard's Dairyman)

47. In the right composting environment, decomposition of a mature dairy cow carcass will take approximately how many months?

6 to 8 months (Dairy Herd Management)

48. How many inches of lunging space does a large cow require to rise with reasonable comfort?

30 to 40 inches (Hoard's Dairyman)

49. Not all cows that look healthy are healthy. In many cases, fevers develop how many hours before other clinical signs of common fresh-cow problems?

24 to 36 (Dairy Herd Management)

50. What does it cost to become a National Ayrshire Junior Member?

\$10.00 (Ayrshire)

51. What type of mastitis, clinical or subclinical, is the most common and the most costly because it reduces milk production and quality over long periods?

Subclinical Mastitis (Dairy Herd Management)

52. A "bypass" protein is a protein source that avoids breakdown in which stomach compartment?

Rumen (Hoard's Dairyman)

53. Foot wart research cites three major risk factors: bacteria, management and what else?

Environment (Dairy Herd Management)

54. What percent of lameness occurs in the rear feet?

90% (Dairy Herd Management)

55. Who is the *Ayrshire Digest* published by?

Purebred Publishing (Ayrshire)

56. According to research, even after a normal and complete milkout, what percent of milk will remain in the udder?

10 to 15% (Hoard's Dairyman)

57. Dental research has found that what dairy product can actually prevent cavities and restore depleted enamel?

Cheese (Dairy Herd Management)

57. In regards to machinery, what do the initials SMV stand for?

Slow-moving vehicle (Hoard's Dairyman)

58. How long should one ton of fresh silage be packed for?

One to three minutes (Hoard's Dairyman)

59. Typically, milk that comes from a healthy, infection-free udder will contain less than how many colony-forming units per milliliter?

1,000 (Dairy Herd Management)

60. Learning to pay attention to how a cow walks and stands can help you catch hoof health problems. The booklet, *Locomotion* developed by Zinpro Corporation places special emphasis on a cows' what to provide clues into hoof health?

Back postures (Dairy Herd Management)

61. Clinical ketosis affects what percent of dairy cows?

2 to 15% (Dairy Herd Management)

62. If you are sampling forage from a bunker that is ten feet high, how close can you safely stand next to it?

6 feet (Hoard's Dairyman)

63. Under multiple component pricing systems, milk prices are based on what?

Pounds of milk components (Hoard's Dairyman)

64. Who is the president of the Ayrshire Breeders' Association?

Jim Tentinger (Ayrshire)

65. Four factors affect pregnancy rates: heat detection rates, herd fertility levels, semen fertility, and what else?

Inseminator proficiency (Hoard's Dairyman)

66. In regards to nutrition, what do the initials NSC stand for?

Non-Structural Carbohydrates (Dairy Herd Management)

67. What are the two biggest enemies to a silage pile, that by covering piles quickly, can be avoided?

Oxygen and water (Hoard's Dairyman)

68. Hairy heel warts can cause severe what in cows?

Lameness (Hoard's Dairyman)

69. When feeding calves, what protein source is best: vegetable or milk?

Milk (Hoard's Dairyman)

70. What percent of your total mixed ration should have particle sizes of at least one inch?

5% (+/-2%) (Dairy Herd Management)

71. To join FFA, you must be enrolled in what at your school?

An agriculture course (Hoard's Dairyman)

72. In regards to the environment, what do the initials DEP stand for?

Department of Environmental Protection (Hoard's Dairyman)

73. Corn silage should not be fed until it has had a chance to ferment. How many weeks are usually required for corn silage to ferment?

8 to 10 weeks (Hoard's Dairyman)

74. In reference to farm employees, what do the letters NIOSH stand for?

National Institute for Occupational Safety and Health (Hoard's Dairyman)

75. Where did BSE originate?  
Great Britain (Hoard's Dairyman)
76. What is another name for rumination?  
Cud chewing (Hoard's Dairyman)
77. How much uninterrupted growth does an alfalfa plant need prior to frost to prepare itself for winter?  
6 weeks (Hoard's Dairyman)
78. Cows can produce how many gallons of moisture per day by respiration alone?  
4 to 6 gallons (Hoard's Dairyman)
79. At what age does Ayrshire Junior membership expire?  
21 (Ayrshire)
80. Do sole ulcers occur on the inner or outer side of the hind claw?  
Inner (Dairy Herd Management)
81. A Presynch program of how many shots of prostaglandin before a timed A.I. program has proven to improve conception rates?  
Two shots (Hoard's Dairyman)
82. Name the person who introduced artificial insemination to American dairymen.  
Enos J. Perry (Progress of the Breed)
83. What do the letters VFA stand for?  
Volatile fatty acids (Hoard's Dairyman)
84. What does PETA stand for?  
People for Ethical Treatment of Animals (Hoard's Dairyman)
85. Fahrenheit temperatures below what degree slow growth of most bacteria?  
40 degrees F (Hoard's Dairyman)
86. Adding dissolved carbon dioxide to fresh milk can extend shelf-life by how many months?  
3 months (Hoard's Dairyman)

87. Name the cheese that is fresh, creamy and sweet and of Italian origin. Its smooth texture and rich taste make it perfectly suited for desserts. It is also excellent in dips sauces and soups.

Mascarpone (Hoard's Dairyman)

88. What is not a disease in itself, but rather a symptom of an infection? It is produced by the fermentation of bacteria, viruses, or protozoas and occurs in the large intestine.

Diarrhea (Dairy Herd Management)

89. One serving of yogurt is how many ounces?

6 (DMI)

90. Increased dairy rations for its soldiers are yet another sign of what country's government commitment to increase per capita dairy consumption?

China (Dairy Herd Management)

91. What color is nitric oxide?

Colorless (Hoard's Dairyman)

92. What do the initials AFGC stand for?

American Forage and Grassland Council (Hoard's Dairyman)

93. In what year did the Food and Drug Administration approve the first commercial bST product?

1993 (Dairy Herd Management)

94. What are the two most common types of flies on a dairy?

House flies and stable flies (Hoard's Dairyman)

95. In regards to equipment, what do the initials ROPS stand for?

Roll Over Protective Structures (Dairy Herd Management)

96. In regards to feed, what do the initials TLC stand for?

Theoretical Length of Cut (Hoard's Dairyman)

97. Anionic salts are fed to prevent milk fever. When is the best time to feed them?

Two weeks before calving (Hoard's Dairyman)



98. When grazing sudangrass, sorghum-sudangrass hybrids and grain/forage sorgham how many days after a frost is it safe to graze again?

3 to 5 days (Hoard's Dairyman)

99. In regards to global warming, what do the initials GGE stand for?

Greenhouse Gas Emissions (Hoard's Dairyman)

100. What is the name of the nationally syndicated radio program dedicated to coverage of the dairy industry? A five-day-a-week, 4-1/2-minute version of the show covers dairy industry outlook and market analysis.

Dairyline (Hoard's Dairyman)