

**2004 Junior Dairy Quiz Bowl Questions**

**Round 03**

**Phase B      5 Questions      Correct answers are worth 10 points each.**

**Only the team being asked the questions is to be in the room. Each team will be asked these 5 questions. Answers are to be given by a team captain, but assistance may come from any team member. A question may be repeated only once. Answers must be started within 20 seconds. Partial credit may be given at the discretion of the judges. After one team has been questioned, the other team will enter the contest room and be asked the same 5 questions.**

**1. Which compartment of the cow's stomach is the largest and functions as a fermentation vat?**

ANS: Rumen

**2. What is the average gestation period (in days) for a cow?**

ANS: 280 days (accept 275 to 285 days)

**3. What do the initials PTA stand for in a sire summary?**

ANS: Predicted Transmitting Ability

**4. What do the initials ADF stand for in reference to a feed analysis report?**

ANS: Acid detergent fiber

**5. When you enter the show ring with your dairy animal, which direction should you walk?**

ANS: Clockwise

**Phase C      20 Questions      Correct answers are worth 15 points each.**

**Both teams are in the room for Phase C. The first contestant to signal will answer the question within 5 seconds after being acknowledged by the moderator. Failure to do so will cost that team 10 points. Any contestant answering a question without being acknowledged by the moderator will lose 10 points. If an answer is incorrect, members of the other team will have the opportunity to answer the question without having it reread except for true/false, either or and yes or no type questions. If an answer is given in these types of questions, the question will be replaced with a tie breaker question, and given to the other team. No points are deducted for giving an incorrect answer. Team members are not allowed to discuss the answers in this phase. No partial credit is available in Phase C, except for bonus questions. If neither team can offer an answer to the question within 10 seconds, the moderator will give the answer and the question will be dropped but neither team will forfeit points.**

**1. What is the maximum legal limit of somatic cells per milliliter that milk can contain?**

- |                     |                       |
|---------------------|-----------------------|
| a) 500,000 cells/ml | c) 1,000,000 cells/ml |
| b) 750,000 cells/ml | d) 2,000,000 cells/ml |

ANS: b) 750,000 cells/ml

**2. When a calf nurses milk, what stomach compartment receives the milk directly?**

ANS: Abomasum

**3. Normal milk is approximately what percent solids?**

- a) 20%      b) 25%      c) 10%      d) 13%

ANS: d) 13%

**4. What muscle keeps the teat end closed and helps prevent organisms from entering the udder?**

ANS: Sphincter muscle

**5. On a milking machine, what part functions to alternate vacuum and atmospheric pressure in the space between the teat cup shell and the liner?**

- a) milking claw      b) pulsator      c) compressor      d) bulk tank

ANS: b) pulsator

**6. What do the letters BVD stand for in reference to dairy cattle?**

ANS: Bovine Viral Diarrhea

**7. On the PDCA Dairy Cow Unified Score Card, how many points are allotted to udder?**

- a) 15          b) 40          c) 20          d) 10**

ANS: b) 40

**8. A low milk fat (butterfat) test is an indication of a deficiency of what in the cow's ration?**

- a) energy    b) protein    c) effective fiber**

ANS: c) effective fiber

**9. What is the main reason why you should keep newborn calves separate from each other?**

- a) to reduce fighting among the calves    b) to prevent transmission of disease    c) labor costs**

ANS: b) to prevent transmission of disease

**10. Cows are most susceptible to mastitis infection:**

- a) at freshening    b) during the early dry period    c) in late lactation**

ANS: a) at freshening

**11. What causes the disease "Rickets" in calves?**

- a) a deficiency of Vitamin C          b) a deficiency of Vitamin D  
c) too much Vitamin A in the diet**

ANS: b) a deficiency of Vitamin D

**12. The condition in which a cow is receptive to be bred is called:**

- a) lactation    b) estrus or heat    c) dry period    d) gestation**

ANS: b) estrus or heat

**13. It is a good management practice to give your dairy heifer a special magnet that stays in her reticulum throughout her life. What "disease" does this magnet help prevent?**

ANS: "Hardware disease"

**14. The deficiency of what trace mineral has been associated with retained placenta in cows and white muscle disease in calves?**

- a) selenium    b) copper    c) iron**

ANS: a.) selenium

**15. In dairy cattle judging, what part are you referring to when you describe the cow as being sickle-hocked?**

ANS: rear legs

**16. When you measure the heart girth of a dairy animal with a special tape, what are you trying to estimate?**

ANS: Body weight

**17. Bypass protein refers to the part of feed protein that, in the cow's rumen, is:**

**a) degraded b) undegraded c) fermented to volatile fatty acids**

ANS: b) undegraded

**18. What is another name for a calf's father?**

**a) progeny b) sire c) offspring d) dam**

ANS: b) sire

**19. Well grown Holstein heifers normally should have their first calf at what age (in months)?**

**a) 22 to 24 months b) 13 to 15 months c) 10 to 12 months**

ANS: a) 22 to 24 months

**20. As forage crops grow and mature, their fiber content:**

**a) increases b) decreases c) does not change**

ANS: a) increases

**Bonus Questions Each bonus question is worth 20 points.**

**Bonus questions may be earned in the toss-up round. To receive a bonus question, 3 different team members must correctly answer the toss-up questions. Bonus questions are**

not passed to the other team, nor are points deducted for an incomplete or incorrect answer to the question. Bonus question will be asked whenever 3 team members have answered toss-up questions correctly with the count kept individually for both teams within a match. Eligibility for bonus questions does not carry over to another match. The answers must come from the team captain but assistance can come from the other team members. Only the number of answers required by the bonus question will be accepted. Example: If the bonus has a four-part answer - the first four answers given by the team will be accepted. Answers to a bonus question must start within 20 seconds and be completed within 60 seconds.

**1. What do the letters DHIR stand for?**

ANS: Dairy Herd Improvement Registry

**2. What is the name of the waxy substance that is found in the teat duct (streak canal)?**

ANS: Keratin

**3. What is the name of the most desirable acid produced during silage fermentation that functions to preserve the silage when corn silage is stored in a silo?**

**a) lactic acid    b) butyric acid    c) hydrochloric acid**

ANS: a) lactic acid