

**2009 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. What is the name of the first part of the small intestine that is connected to the abomasum?**

- a) colon      b) ileum      c) jejunum      d) duodenum**

ANS: d) duodenum

**2. What is the proper name for “milk fever”?**

- a) metritis      b) laminitis      c) parturient paresis      d) beta hydroxybutyrate**

ANS: c) parturient paresis

**3. What describes the process of flushing fertilized eggs from donor cows and implanting them in recipient cows?**

- a) artificial insemination      b) ultrasound imaging      c) gestation      d) embryo transfer**

ANS: d) embryo transfer

**4. What does “palatability” mean in reference to dairy feed?**

- a) the taste or likability of a feed      b) The color of a feedstuff  
c) the energy level of a feedstuff**

ANS: a) the taste or likability of a feed

**5. What are the two main gases produced in the rumen?**

- a) methane and oxygen      b) methane and carbon dioxide      c) oxygen and helium**

ANS: b) methane and carbon dioxide

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. If a feed contains 70% moisture, what percentage dry matter does it contain?

ANS: 30%

2. What enzyme breaks down fat (or lipids)?

a) lipase                      b) amylase                      c) lactase                      d) peptidase

ANS: a) lipase

3. What is the proper name for a "yellow body" in the cow's reproductive system?

a) ovary      b) follicle      c) corpus luteum      d) uterus

ANS: c) corpus luteum

4. What is the term for a dairy or beef animal that is born without horns?

ANS: polled

5. What does Klebsiella cause in lactating dairy cows?

ANS: mastitis

6. What hormone causes milk "let down"?

a) adrenaline                      b) prolactin                      c) estrogen                      d) oxytocin

ANS: d) oxytocin

**7. What does “ppm” stand for on a feed ration report?**

ANS: parts per million

**8. What is “morbidity rate” in dairy calf management?**

- a) the average daily gain of the calves      b) the number of calf death losses  
c) the number of sick calves in a certain period of time

ANS: c) the number of sick calves in a certain period of time

**9. What type of organism causes “Bovine Leukosis”?**

- a) virus                      b) bacteria                      c) protozoa                      d) lymphocytes

ANS: a) virus

**10. How many points are allotted to the “Feet and Legs” category on the PDCA Dairy Cow Unified Score Card?**

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

ANS: b) 15

**11. When is consumer demand for dairy products usually the lowest?**

- a) spring                      b) summer                      c) fall                      d) winter

ANS: b) summer

**12. What is the term for “clusters of milk secreting cells” in the udder of a dairy cow?**

ANS: alveoli

**13. Which one of the following ranges is closest to the total ration crude protein requirement for dry cows?**

- a) 30 to 32%                      b) 18 to 20%                      c) 11 to 13%                      d) 4 to 5%

ANS: c) 11 to 13%

**14. Dairy cattle are most comfortable within which of the following temperature ranges?**

- a) 70 to 75 degrees F                      b) 30 to 35 degrees F                      c) 50 to 55 degrees F

ANS: c) 50 to 55 degrees F

**15. A deficiency of this vitamin causes the disease “Rickets” in calves:**

ANS: Vitamin D

**16. What digestive disorder in cows can cause sore feet or laminitis?**

**a) acidosis                      b) fatty liver                      c) metritis                      d) retained placenta**

ANS: a) acidosis

**17. Which of the following is often used as a source of calcium in dairy cattle rations?**

**a) monensin                      b) lasalocid                      c) calcitic limestone                      d) sodium selenite**

ANS: c) calcitic limestone

**18. What is the main component of adipose tissue?**

**a) carbohydrate                      b) fat                      c) protein                      d) minerals**

ANS: b) fat

**19. What is the normal range in length of the estrous cycle in dairy cows?**

**a) 35 to 40 days                      b) 70 to 80 days                      c) 18 to 24 days**

ANS: c) 18 to 24 days

**20. What is the term for “undulant fever” when it occurs in dairy cows?**

ANS: Brucellosis (or Bang’s disease)

**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 or 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. In reference to digestion and metabolism, which one of the following best describes Beta hydroxybutyrate?**

- a) a mastitis pathogen                      b) an amino acid                      c) a ketone body**

ANS: c) a ketone body

**2. What is the main function of the sphincter muscle located in the teat end of a dairy cow?**

- a) supports the udder                      b) provides support for the median suspensory ligament  
c) it keeps the teat end closed and helps prevent organisms from entering the udder**

ANS: c) it keeps the teat end closed and helps prevent organisms from entering the udder

**3. What compartment of the ruminant stomach has a honeycomb lining?**

- a) rumen                      b) reticulum                      c) omasum                      d) abomasum**

ANS: b) reticulum