

2012 N.Y State 4-H Novice Dairy Quiz Bowl Invitational

Novice Packet 1, Phase A

- 1) What dairy breed makes up about 90 % of the U.S dairy cow population?

Holstein

- 2) What do we call a cow's natural buffer?

Saliva

- 3) What do the letters TMR stand for?

Total Mixed Ration

- 4) The process of turning cream into butter is called what?

Churning

Novice Packet 1, Phase B

- 1) What are the two parts of a cow's anatomy that may be twisted to one side and called Wry?

Face and tail

- 2) Name two options for storage of excess colostrum.

Freezing

Refrigerate

Ferment

Add preservative acid

- 3) Name 3 signs that you would see or hear if a cow was in heat.

Restless

Bellowing

Following and smelling other cows

Mounting other cows

Standing to be mounted

Discharge of clear mucous from vulva

Vulva red and swollen

- 4) What are the 3 critical factors in colostrum management?

Quantity

Quality

Timing

Cleanliness

Novice Packet 1, Phase C

- 1) What do we call the act of taking a young calf off of milk as their main source of nutrition?

Weaning

- 2) What is another more common name for the subcutaneous abdominal veins in the dairy cow?

Milk vein

- 3) Which compartment of the cow's stomach is also noted as the true stomach?

Abomasum

- 4) The small projections that line the wall of the small intestine are called what?

Villi

- 5) The period of time when a cow is in milk is called what?

Lactation

- 6) An infection in the udder is called what?

Mastitis

- 7) What is the name of the tool used to administer a pill orally to a dairy animal?

Balling gun

- 8) What is the name of the most desirable acid produced during ensiling?

Lactic acid

9) What is generally considered the best material for covering a bunker silo?

Plastic

10) What do we call plants that are seeded each year and whose growth is complete in one crop year?

Annual

11) The acronym SCC stands for what?

Somatic Cell count

12) Milk let-down is caused by what hormone?

Oxytocin

13) What do you call the cyclic opening and closing of a teat cup liner?

Pulsation

14) A sterile heifer born twin to a bull is called what?

Freemartin

15) What is a bulk tank used for?

Holding milk

16) In what class of milk is fluid milk sold as?

Class 1

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Novice Packet 2, Phase A

1) What type of milk contains 0 grams of fat?

Fat free (skim) milk

2) When a calf is born, what is the normal delivery position?

Front feet first and then head

3) For a dairy cow, how long is the average estrus cycle?

21 days (17-21 days)

4) What does A.I. stand for?

Artificial insemination

Novice Packet 2, Phase B

- 1) Name 3 pieces of information you would find on your animals registration paper.

Name
Sire
Dam
Date of birth
Owner
Breeder
Grandsire
Grand dam
Sex
Registration number

- 2) In the Northeast, what season is hardest on a cow's milk production and why?

Season is summer
Why is because of the heat

- 3) What are the 6 major breeds of dairy cows?

Holstein
Jersey
Brown Swiss
Milking shorthorn
Ayrshire
Guernsey

- 4) Name 4 external parts of a dairy cow's head.

Poll, Eyes, Muzzle, Ears, Jaw, Forehead, Nostril

Novice Packet 2, Phase C

1) What vitamin do calves obtain by being exposed to sunlight?

Vitamin D

2) In a newborn calf, what stomach compartment is the largest in total volume?

Abomasum

3) What is the name for an animal doctor?

Veterinarian

4) Which breed of dairy cattle originated in Switzerland?

Brown Swiss

5) What hygiene practice is the single most important measure for preventing the spread of a disease from animals to humans?

Hand washing

6) What substance is frozen semen stored in?

Liquid nitrogen

7) What color should a dairy showman wear in the showring?

White

8) When looking at a dairy animal's pedigree, what is the term used for an animal's father?

Sire

9) Where is a cow's blind spot located?

Directly behind her

10) What month is Dairy Month?

June

11) What part of the alfalfa plant contains the highest percent of protein?

Leaves

12) What is a newborn calf's navel often dipped with?

7% tincture iodine

13) What is the name given to the food that has been regurgitated and re-chewed by a dairy cow?

Cud

14) What is the name of the gas that is produced by manure digesters and can be converted in electricity?

Methane

15) What is the name for a bull calf that has been castrated?

Steer

16) Which of the major dairy cattle breeds is the smallest?

Jersey

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Novice Packet 3, Phase A

1) Lice are the most troublesome during what season of the year?

Winter

2) Homogenization breaks up what in milk?

Fat globules

3) On what part of the cow would you find the dewclaws?

Foot

4) What connects the fetus to the navel and carries nutrients between the mother's body and the fetus?

Umbilical cord

Novice Packet 3, Phase B

1) What do the 4-H's stand for in the 4-H pledge?

Head, heart, hands, and health

2) Name the 4 compartments of the cow's stomach.

Rumen

Reticulum

Omasum

Abomasum

3) Name 5 different dairy products.

Milk, ice cream, yogurt, cheese, butter, cottage cheese, sour cream, cream cheese, frozen yogurt, nonfat dry milk

4) Name 2 types of storage facilities for silage.

Bunker silo

Trench silo

Upright or tower silo

Ag bag

Oxygen limiting silo (harvester)

Novice Packet 3, Phase C

1) What do we call the process of turning cream into butter?

Churning

2) What is considered the largest cost to the producer for milk production?

Feed

3) Which of the cow's four stomachs is often referred to as the honeycomb?

Reticulum

4) What is the term used to describe animals that give birth to live young and they can suckle their offspring after birth?

Mammal

5) What is the name for the feed by-product that is recovered when cheese is made?

Whey

6) When doing embryo transfer in dairy animals, what is the name given to the animal that has an embryo transferred into her from another cow?

Recipient

7) The term gestation is the term used to describe the length of what?

Pregnancy

8) How many teeth does a mature cow have?

32 teeth

9) Which stomach compartment is largest on a mature dairy cow?

Rumen

10) What class of nutrients is the major source of energy in a cow's diet?

Carbohydrates

11) What is the term used on an animal's pedigree for that animal's mother?

Dam

12) Milk is approximately what percent water?

87%

13) What is the number of recommended daily servings of dairy products per day for people?

3 servings

14) Limestone contains high amounts of what mineral?

Calcium

15) What do we call the condition in the cow when the abomasum twists out of the normal position?

DA or displaced abomasum

16) How many upper front teeth does a dairy cow have?

None

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Novice Packet 4, Phase A

- 1) What is the name of the hormone that causes a heifer or cow to come in heat?

Estrogen

- 2) What does the "Real Seal" mean?

It means the product it appears on is a genuine dairy product.

- 3) How often should the bulk tank be washed and sanitized?

Every time it is emptied. (VA sect 12 p 39)

- 4) What is a group of cattle called?

A Herd

Novice Packet 4, Phase B

- 1) Name two things that the milk-hauler does before pumping our milk on the truck?

Check the temperature of the milk,
Measures the amount in the tank (lbs.),
Checks milk for "off" odors,
Removes a sample of the milk for future testing.

- 2) Name 2 adjectives that best describes the ideal udder rear udder attachment?

High and wide

- 3) Name 3 parts of the milking machine.

Shell
Inflation
Air tubes
Claw
Milk tubes
Pulsator

- 4) Give the common name for the 3 different stages of a female dairy animal from birth through milk production.

Calf
Heifer
Cow

Novice Packet 4, Phase C

1) What is the name for the storage structure that allows feed to ferment?

A silo

2) Which of the 4 stomach compartments of a cow is nicknamed the paunch?

Rumen

3) Name the organ of the cow that carries the fetus or calf during pregnancy.

Uterus

4) The solid portion of cheese is called what?

Curds

5) What is the name of the milk that is secreted by the cow during the first two to three days after calving?

Colostrum

6) What are the building blocks of true proteins?

Amino Acids

7) What is the most reliable way of knowing the nutrient content of forages?

Forage testing

8) The portion of a feed that remains after water has been removed by drying in an oven is called what?

Dry matter

9) Which fast food chain uses the most milk in the U.S?

McDonalds

10) What is the name for an infection of the uterus in a cow?

Metritis

11) What is the normal temperature for a calf?

102 (101.5 to 102.5)

12) What is the general term used to describe a situation where a piece of metal has been swallowed by a cow or heifer and collects in the reticulum?

Hardware disease

13) What is the disease we are describing with a dairy heifer that is characterized by a round or circular crusty spot and the hair falls off?

Ringworm

14) What disease in calves is characterized by diarrhea, dehydration, and unthriftiness?

Scours

15) On a dairy operation, what is a lagoon used for?

Manure storage

16) What is the material that must be cleaned out of a newborn calf's nose and mouth called?

Mucous

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Novice Packet 5, Phase A

1) What season does pinkeye occurs most often?

Summer

2) What is a cow's natural buffer?

Saliva

3) What part of the corn plant is corn meal made from?

Corn kernels

4) Why would you groove floors in a free stall?

To prevent slipping

Novice Packet 5, Phase B

1) Name 3 symptoms of a cow with clinical mastitis.

- Flakes
- Clots
- Hot quarter
- Stringy milk
- Watery milk
- Swollen quarter
- Presence of blood

2) Name 3 ways a dairy cow excretes or loses water.

- Breathing
- Sweating
- Feces
- Milk
- Urine

3) What are the two primary gases produced in the rumen?

- Methane
- Carbon dioxide

4) Name 3 different kinds of bedding that can be used on a dairy farm.

- Straw
- Sand
- Old hay
- Sawdust
- Mattresses
- Old corn stalks
- Paper

Novice Packet 5, Phase C

1) Which dairy breed discriminates against white hair?

Brown Swiss

2) Fiber digesting microbes live in what part of the digestive system?

The rumen

3) Where do heel flies lay their eggs on the dairy cow?

On the lower leg

4) Who invented the pasteurization process?

Louis Pasteur

5) Why shouldn't you use the same shovel for handling feed and manure?

To prevent contaminating the feed

6) What is the name for a dairy animal's personal space?

Flight zone

7) A cow's udder has how many quarters?

4

8) How many pounds does a gallon of milk weigh?

8.6 pounds

9) In what part of the body does the major storage of calcium occur?

Bones

10) Which portion of plants do grains usually come from?

Seed

11) Milk that is not pasteurized or processed is called what?

Raw milk

12) Cows exposed to sunlight will readily make which vitamin on their own?

Vitamin D

13) What does the orange triangle sign on the back of a wagon mean?

Slow moving vehicle

14) What country did the jersey cow originate from?

Isle of Jersey

15) The median suspensory ligament can be found where on a dairy cow?

Udder

16) What is the name of the condition called when the rumen is distended with the gases of fermentation?

Bloat