

2015 NYS District Novice 4-H Dairy Quiz Bowl Contest

Novice Packet 1, Phase A

- 1) What is another name for diarrhea in calves?
 - Scours

- 2) What is the name of the storage structure in which feed is stored and fermented?
 - A silo

- 3) What is used to wipe teat dip off of teats before putting the milking machine on?
 - Cloth or paper towels

- 4) How many quarts are in a gallon of milk?
 - 4 quarts

Novice Packet 1, Phase B

- 1) Name the six major breeds of dairy cows.
 - Ayrshire
 - Brown Swiss
 - Guernsey
 - Holstein
 - Jersey
 - Milking Shorthorn

- 2) Name the four compartments of the mature dairy cows stomach.
 - Reticulum
 - Rumen
 - Abomasum
 - Omasum

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

- 4) Name 4 things that a judge looks for in a fitting and showmanship class.
 - Animal's condition
 - Cleanliness
 - Clipping
 - Grooming
 - Appearance of exhibitor
 - Leading of the animal
 - Posing of the animal
 - Showing the animal to best advantage
 - Poise, alertness, and attitude of the showman

Novice Packet 1, Phase C

- 1) How many pounds does a gallon of milk weigh?
 - 8.6 pounds
- 2) What organ of the cow carries the fetus, or calf, during pregnancy?
 - Uterus
- 3) What portion of the feed is left after all of the water has been removed?
 - Dry matter
- 4) What does the acronym SCC stand for in regards to milk quality?
 - Somatic cell count
- 5) What is the term describing a sterile heifer born twin to a bull?
 - A freemartin
- 6) What is the food called that a cow regurgitates and re-chews?
 - Cud
- 7) What is the name for a dairy animal's personal space?
 - Flight zone
- 8) What hormone is at peak levels at the onset of standing heat?
 - Estrogen
- 9) What does it mean if a calf is born polled?
 - Born without horns
- 10) What is considered the largest cost to the producer for milk production?
 - Feed
- 11) Where is the median suspensory ligament found on a dairy cow?
 - The udder

12) What fast food chain uses the most milk in the U.S.?

- McDonalds

13) What term describes a substance that can reduce changes in pH when an acid or base is added to a solution?

- A buffer

14) In regards to reproduction, what does the acronym A.I. stand for?

- Artificial Insemination

15) What is often administered to a dairy animal to prevent Hardware disease?

- A magnet

16) What is the name for the brush of hair at the end of a cow's tail?

- The switch

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Novice Packet 2, Phase A

- 1) What is the most expensive disease in dairy cattle?
 - Mastitis

- 2) Of the following choices, which feed is considered a forage: cottonseed, soybean meal, or corn silage?
 - Corn silage

- 3) When talking about a dairy cow, what does the term open mean?
 - She is not pregnant

- 4) Milk that comes directly from the cow and is not processed in any way is called what?
 - Raw milk

Novice Packet 2, Phase B

1) Name 3 methods commonly used to identify calves.

- Ear tag
- Tattoo
- Freeze branding
- Photo
- Sketch

2) Name 4 organ systems found in the cow's body.

- Circulatory
- Respiratory
- Nervous
- Digestive
- Reproductive
- Skeletal
- Muscular
- Endocrine
- Integumentary

3) Name 3 materials commonly used for bedding dairy cattle.

- Newspaper
- Recycled manure solids
- Sand
- Sawdust (green or kiln-dried)
- Shavings
- Straw
- Old hay

4) Name 3 important factors to consider when choosing a dairy calf as a project animal.

- Age
- Breed
- Health
- Pedigree
- Conformation
- Cost/price
- Housing

Novice Packet 2, Phase C

1) What is the name for a blend of all feedstuffs, including forages and concentrates together, that is commonly fed to a dairy cow?

- Total Mixed Ration (TMR)

2) Which month of the year is known as “National Dairy Month”?

- June

3) What usually happens to a cow’s milk production as somatic cell count increases?

- Production decreases

4) Animals that have hooves and chew their cud are called what?

- Ruminants

5) What is the name used for the period of time when a cow is milking?

- Lactation

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

- Annuals

7) Why would a veterinarian use electric burners on a calf?

- Dehorning

8) What color clothes should a dairy showman wear in the show ring?

- White

9) The orange triangle sign found on the back of a hay wagon or silage wagon means what?

- Slow moving vehicle

10) What is dystocia?

- Difficulty calving

11) The walls of the small intestine are lined with small projections called what?

- Villi

12) What country did the Brown Swiss cow originate from?

- Switzerland

13) What stomach compartment is the largest on a mature dairy cow?

- Rumen

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

- Mucous

15) What part of the alfalfa plant has the highest percent protein?

- The leaves

16) What does NYSCHAP stands for?

- New York State Cattle Health Assurance Program

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Novice Packet 3, Phase A

1) During what season does pinkeye occur most often?

- Summer

2) An herbivore is an animal that eats only this.

- Plants

3) Where in the body is calcium stored?

- Bones and teeth

4) What is the largest dairy cooperative in the US?

- Dairy Farmers of America (DFA)

Novice Packet 3, Phase B

1) Name 3 of the 4 aspects of the PDCA Dairy Cow Unified Scorecard.

- Frame
- Dairy Strength
- Rear feet & legs
- Udder

2) Name 4 signs of sickness in calves.

- Poor appetite
- Cough
- Watery manure
- Nasal discharge
- Drooping ears
- Dull eyes
- Lack of energy
- Elevated temperature

3) Name 3 parts of a dairy cow's mammary system.

- Teats
- Rear udder
- Fore udder
- Rear udder attachment
- Fore udder attachment
- Milk veins
- Milk wells
- Median suspensory ligament

4) Name 2 metabolic diseases that may affect the dairy cow.

- Displaced abomasum (DA)
- Ketosis
- Laminitis
- Milk fever
- Retained placenta (RP)

Novice Packet 3, Phase C

- 1) Which breed of dairy cow produces milk that is known for its golden color?
 - Guernsey
- 2) What does the acronym ADG represent?
 - Average Daily Gain
- 3) How many upper front teeth does a dairy cow have?
 - None
- 4) What is the most desirable acid produced in ensiled feeds?
 - Lactic acid
- 5) What is the name of the first milk produced by the cow after she gives birth?
 - Colostrum
- 6) What is the name for a doctor of animals?
 - Veterinarian
- 7) When looking at a dairy animal's pedigree, what is the term used for an animal's father?
 - Sire
- 8) Homogenization breaks up what in milk?
 - Fat globules
- 9) On average, cows have a flight zone of how many feet?
 - 5 feet
- 10) When a calf is born, what is the normal delivery position?
 - Front feet first and then head
- 11) What is a group of cows called?
 - A herd
- 12) Why would you groove floors in a free stall?
 - To prevent slipping

- 13) What direction do you move when leading an animal in the show ring?
- Clockwise
- 14) What does mastication mean?
- Chewing
- 15) What are the units called when breaking a large grazing area into smaller sections?
- Paddocks
- 16) What month is national ice cream month?
- July

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Novice Packet 4, Phase A

- 1) What do we call the bugs in the cow's stomach that help digest forages?
 - Rumen bugs
- 2) What is the technical term for calving?
 - Parturition
- 3) Why do you put iodine on a calf's navel soon after birth?
 - To seal the entrance from disease-causing organisms
- 4) What substance is frozen semen stored in?
 - Liquid nitrogen

Novice Packet 4, Phase B

1) Fawn is an acceptable color for which 2 major dairy breeds?

- Guernsey
- Jersey

2) Name two options for storage of excess colostrum.

- Freezing
- Refrigerate
- Ferment
- Add preservative acid

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

- Head
- Hands
- Heart
- Health

4) Name 3 reasons why a dairy cow may get culled, or removed from the herd.

- Low milk production
- Mastitis
- Reproduction
- Udder
- Feet and legs
- Disease
- Injury
- Disposition
- Age
- Unhealthy

Novice Packet 4, Phase C

- 1) Dairy products are categorized into how many different classes?
 - 4 classes
- 2) If “3X” is noted in a dairy animal’s production records, what does this mean?
 - The cow is milked 3 times per day
- 3) What is the name for the period of heat in dairy cattle?
 - Estrus
- 4) What is known as a record of ancestry?
 - Pedigree
- 5) Which stomach compartment of the cow absorbs water and minerals and is sometimes called manypiles?
 - Omasum
- 6) What do you call the small individual calf buildings that are popular for housing young calves outside?
 - Calf hutches
- 7) What dairy breed, on average, has the highest milk production?
 - Holstein
- 8) An excess of calcium fed during the dry period can result in what metabolic disorder at freshening?
 - Milk fever
- 9) Corn meal is made from what part of the corn plant?
 - Corn kernels
- 10) Romano, Parmesan, and Mozzarella are all types of what?
 - Cheese
- 11) What is the percentage of water found in milk?
 - 87%

12) What is the normal length of the cow's estrous cycle?

- 21 days (+/- 3 days)

13) What condition occurs when a cow's rumen is distended with gases of fermentation?

- Bloat

14) What tool is used to administer an animal a pill?

- Balling gun

15) Where would you find dewclaws on a dairy cow's body?

- Foot

16) In months, what is the ideal age for a heifer to have her first calf?

- 22 to 24 months

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Novice Packet 5, Phase A

1) What is meant by the term “grade” dairy cow?

- An animal not registered with any breed association

2) Why is it important to feed newborn calves colostrum?

- Its antibodies help to protect against disease (passive immunity)

3) True or false: Dry cows should be fed a ration that is identical to that fed to the high producing milking cow.

- False

4) What do you call the condition in a cow that has a body temperature of 103 degrees Fahrenheit or more?

- Fever

Novice Packet 5, Phase B

1) What are the 3 critical factors in colostrum management?

- Quality
- Quantity
- Timing
- Cleanliness

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

- Season: Summer
- Reason: The heat

3) Name 4 parts of the cow's digestive system.

- Mouth
- Esophagus
- Rumen
- Reticulum
- Omasum
- Abomasum
- Small Intestine
- Large Intestine
- Colon
- Rectum

4) Name 2 different forages.

- Corn silage
- Haylage
- Balelage
- Shredlage

Novice Packet 5, Phase C

- 1) What is it called when an egg is released from the cow's ovary?
 - Ovulation

- 2) Limestone contains high amounts of what mineral?
 - Calcium

- 3) What is a newborn calf's navel often dipped with?
 - 7% tincture iodine

- 4) In gallons, how much water does a cow drink in one day?
 - 30 to 50 gallons

- 5) How often should the bulk tank on a dairy farm be washed and sanitized?
 - Every time it is emptied

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

- 7) What term describes mating two purebred animals of different breeds?
 - Crossbreeding

- 8) Lice are most troublesome during what season of the year?
 - Winter

- 9) What infection causes milk somatic cell counts to increase?
 - Mastitis

- 10) What does the acronym DIM represent in regards to milk production?
 - Days in milk

- 11) What is the most reliable sign of estrus, or that a cow is in heat?
 - Standing to be mounted

- 12) Which dairy product is made by fermenting milk and cream with bacteria cultures?
 - Yogurt

- 13) What is the normal body temperature of an adult dairy cow?
- 101.5 degrees F (accept 101 – 102.5)
- 14) What is the name of the fungus infection that attacks the hair follicles and outer layer of skin, appearing in the shape of a circle?
- Ringworm
- 15) The spot located directly behind a cow is called what?
- Blind spot
- 16) When breeding a heifer, what is the most important factor used in deciding when to breed her?
- Size

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Novice Packet 6, Phase A

1) If a farmer said he was feeding an 18% dairy feed, what does the 18% refer to?

- The protein content of the feed

2) What is the name of the medication that is put in all four of a cow's teats when she is dried off to help prevent mastitis?

- Dry cow treatment

3) True or False: Warts are not contagious to other animals.

- False

4) What is the term for taking a young animal off of milk as its main source of nutrition?

- Weaning

Novice Packet 6, 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 2 methods used to dehorn calves.

- Paste (caustic potash)
- Cut or gouge (Barnes type dehorner)
- Electric

3) Name 3 types of storage facilities for silage.

- Bunker silo
- Trench silo
- Upright or tower silo
- Ag bag
- Oxygen limiting silo (harvester)

4) Name 2 different types of milking parlors commonly used on dairies.

- Herringbone
- Perabone
- Parallel
- Rotary
- Side opening
- Flat barn

Novice Packet 6, Phase C

- 1) The Milking Shorthorn is from what country?
 - England
- 2) Who invented the pasteurization process?
 - Louis Pasteur
- 3) In days, what is the standard length of a dairy cow's lactation?
 - 305 days
- 4) What is the name for an infection of the uterus in a cow?
 - Metritis
- 5) What is the most frequent cause of high bacteria counts in milk?
 - Dirty milking equipment
- 6) What is the most common reason that a cow does not come into heat?
 - Pregnancy
- 7) In regards to giving birth, what does the acronym CE stand for?
 - Calving Ease
- 8) What is the normal body temperature of a calf?
 - 102.5 degrees F (accept 102 – 103.5 degrees F)
- 9) When looking at a cow, what body part is located between the cow's hip and pin bones?
 - Thurls
- 10) What is the name of a type of barn and stall in which the animal is free to come and go?
 - Freestall
- 11) What is "nature's most nearly perfect food?"
 - Milk
- 12) Why might a dairy farmer use crayon or paint on the tail head of a cow?
 - Heat detection

13) Why should a teat dip be used on a dairy cow after milking?

- To reduce or prevent udder infection

14) What is another name for the subcutaneous abdominal veins in the dairy cow?

- Milk veins

15) What do we call an animal that another organism lives on as a parasite?

- Host

16) What are supernumerary teats?

- Extra teats

**2015 NYS District Novice 4-H
Dairy Quiz Bowl Contest**

Novice Packet 7, Phase A

1) What is the official state snack of New York?

- Yogurt

2) What is the name of the time for a dairy cow when she is not producing milk? This time period is usually around 60 days long.

- Dry period

3) What happens to the nutrient value of high moisture corn with the growth of mold in it?

- Nutritive value decreases (less palatable)

4) Which breed is smallest of the 6 major dairy breeds?

- Jersey

Novice Packet 7, Phase B

1) Name 3 different heifer classes in a dairy show.

- Spring heifer calf
- Winter heifer calf
- Fall heifer calf
- Summer yearling heifer
- Spring yearling heifer
- Winter yearling heifer
- Fall yearling heifer

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

- Restlessness
- Bellowing
- Following and smelling other cows
- Mounting other cows
- Standing to be mounted
- Discharge of clear mucous from vulva
- Vulva red and swollen

3) Name 3 pieces of information you would find on your animal's registration paper.

- Name
- Sire
- Dam
- Date of birth
- Owner
- Breeder
- Grandsire
- Granddam
- Sex
- Registration number

4) Name the 3 main purposes for which cattle are used across the world.

- Milk
- Meat
- Labor

Novice Packet 7, Phase C

1) What hormone causes milk letdown?

- Oxytocin

2) Acidosis is a metabolic disorder that often occurs when a cow eats too much what?

- Grain

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

- Churning

4) Where do you deposit the material when an injection is given IM?

- Into the muscle

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

- 3 servings

6) What is the danger to a person when entering an upright silo too soon after filling?

- Toxic silo gases

7) What is the 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

8) What is the name of the substance in colostrum that provides protection against diseases through passive immunity?

- Antibodies or immunoglobulins

9) On the PDCA scorecard, which category is worth the most points?

- Udder

10) The storage unit used to hold milk on the farm is called what?

- Bulk tank

11) What food stuff consists of leaves and stems of plants that are relatively high in fiber content?

- Roughage

12) What does it mean if we say a heifer is over conditioned?

- She is too fat

13) An adult cow has how many incisor teeth?

- 8

14) Which compartment of the cow's stomach is also known as the true stomach?

- Abomasum

15) What is the only part of the milking machine that touches the cow?

- Teat cup liner (inflation)

16) What word describes the cutting or selling of unwanted or poor quality animals from the herd?

- Culling

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Novice Packet 8, Phase A

1) Where is the best place on a cow to give an intravenous injection?

- Jugular vein on the neck

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

- Recipient

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

- Forage testing

4) Any act, omission, or neglect done by a person or organization that causes or permits unnecessary pain, suffering, or death to an animal is called what?

- Animal abuse

Novice Packet 8, Phase B

1) Name 4 different pieces of information you would find on the nutrition label on a container of milk.

- Serving size
- Servings per container
- Ingredients
- Calories
- Fat content
- Cholesterol
- Sodium
- Carbs
- Protein
- Where processed
- Size of container

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

- Breathing
- Sweating
- Feces
- Milk
- Urine

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

- Carbon dioxide
- Methane

4) Name 3 things that can cause diseases in animals.

- Viruses
- Bacteria
- Parasites
- Poor nutrition
- Genetic defects
- Poor environment

Novice Packet 8, Phase C

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

- Saliva

2) The by-product called whey is produced from making what dairy product?

- Cheese

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

- Plastic

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

- Hand washing

5) What is the best way to store colostrum for extended periods of time?

- Freeze it

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

- Mammals

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

- Pregnancy

8) What is the name of the farmer magazine that has the dairy cattle judging contest on the cover?

- Hoard's Dairyman

9) What are the building blocks of true proteins?

- Amino Acids

10) What is the condition that describes when a cow's teats point outward too much?

- Strutting

11) What is the name of the paper that accompanies a purebred animal and certifies his or her parentage?

- Registration paper

12) What colors is the Ayrshire breed known for?

- Red and white (Reddish brown)

13) Your cow's back looks like it has marbles under the skin. What parasite does it have?

- Grubs

14) Which vitamin is routinely added to milk?

- Vitamin D

15) What is the most common complaint from school children on how milk is served?

- Too warm

16) What does the acronym PDCA stand for?

- Purebred Dairy Cattle Association

Extra Questions-2015 NYS 4-H Novice Dairy Quiz Bowl

- 1) What is the process called that destroys harmful bacteria in milk?
 - Pasteurization
- 2) What does the acronym ADA stand for?
 - American Dairy Association
- 3) What disease are you trying to prevent if you are using a separate towel to wash or clean the udder of each cow prior to milking?
 - Mastitis
- 4) How many teeth does a cow have?
 - 32
- 5) Which dairy breed discriminates against white hair?
 - Brown Swiss
- 6) Why shouldn't you use the same shovel for handling feed and manure?
 - Prevent contamination of the feed
- 7) What does the "Real Seal" indicate?
 - The product it appears on is a genuine dairy product
- 8) What is the condition in the cow when the abomasum twists out of the normal position?
 - Displaced Abomasum (DA)
- 9) What does the acronym USDA stand for?
 - United States Department of Agriculture
- 10) In what state is the World Dairy Expo held each year?
 - Wisconsin