

National FFA Organization
2018 Meats Evaluation & Technology CDE
Written Test

Instructions: Carefully read each item and possible answers. Mark the correct answer on the correct CDE form. Completely fill the chosen ovals to indicate your answers.

1. According to FSIS, which of the following applies to meat labeled as “Natural”?
 - A. No added color
 - B. No artificial ingredients
 - C. Minimally processed
 - D. All of the above apply to meat labeled as “Natural”

(CEV Meat Science & Food Safety slide #84)

2. Growth-Promoting Implants are NOT approved for use in which species?
 - A. Hormonal implants are approved for use in all species.
 - B. Cattle
 - C. Sheep
 - D. Swine

(CEV Meat Science & Food Safety slide #30)

3. After a power outage, meat in the refrigerator is safe for 6 to 8 hours, unless meat temperature rises above ___ for more than 2 hours.
 - A. 10°F
 - B. 20°F
 - C. 30°F
 - D. 40°F

(CEV Meat Science & Food Safety slide #111)

4. Which of the following is a primal cut of lamb?
 - A. Breast
 - B. Brisket
 - C. Ham
 - D. Round

(CEV Meat Science & Food Safety slide #64)

5. Meat should be defrosted in all of the following ways EXCEPT
 - A. In a microwave oven
 - B. In a refrigerator
 - C. In cold water
 - D. On a countertop at room temperature

(CEV Meat Science & Food Safety slide #117)

6. Which of the following statements is true of Water-Added Ham?
 - A. It must be the entire hind leg of a hog.
 - B. It shall not contain more than 30% of the fresh ham in added moisture.
 - C. It can be made from the Boston or picnic shoulder.
 - D. It uses water as an essential part of the curing process.

(CEV Meat Science & Food Safety slide #68)

7. In meat products, what is the major reason for net weight loss from packaging to counter?
- A. Fat evaporation
 - B. Loss of vitamins and minerals
 - C. Moisture loss
 - D. Protein breakdown

(CEV Meat Science & Food Safety slide #75)

8. Generally, three ounces of lean lamb contains 74 percent of the recommended daily allowance (RDA) for ____.
- A. Carbohydrates
 - B. Protein
 - C. Vitamin B12
 - D. Zinc

(CEV Meat Science & Food Safety slide #57)

9. What compounds are used to absorb oxygen, reducing or preventing the oxidation of food?
- A. Anaerobicoxidants
 - B. Antioxidants
 - C. Curing Corroders
 - D. Oxygen Inhibitors

(CEV Meat Science & Food Safety slide #160)

10. Maturity classes divide meat into categories based on age. Which of the following utilize maturity classes?
- A. Cattle & Pork
 - B. Cattle & Sheep
 - C. Goats & Pork
 - D. Pork & Sheep

(CEV Meat Science & Food Safety slide #85)

11. All of the following are plant enzymes used to tenderize meat EXCEPT
- A. Bromelain
 - B. Ficin
 - C. Neotame
 - D. Papain

(CEV Meat Science & Food Safety slide #168)

12. Riboflavin is an example of these water soluble vitamins.
- A. A Vitamins
 - B. B Vitamins
 - C. C Vitamins
 - D. D Vitamins

(CEV Meat Science & Food Safety slide #53)

13. What is another term for Cold Cuts?
- A. Cured meats
 - B. Luncheon meats
 - C. Meat by-products
 - D. Variety meats

(CEV Meat Science & Food Safety slide #154)

14. Which of the following is the thin myofilament in the muscle sarcomere?

- A. Actin
- B. Actosin
- C. Bundle
- D. Myosin

(CEV Meat Science & Food Safety slide #59)

15. What should be done to pre-cooked sausages (such as frankfurters) when using a microwave oven?

- A. Cut off the ends to allow expansion
- B. Keep the casings whole to preserve moisture
- C. Pierce the casings to vent steam
- D. Split the sausage in quarters to assure even cooking

(CEV Meat Science & Food Safety slide #145)

16. This important piece of legislation was enacted the same day as the Meat Inspection Act. It prohibited the sale, manufacture and transportation of adulterated food products.

- A. Food and Drug Act
- B. Packers and Stockyards Act
- C. Pure Food and Drug Act
- D. Wholesome Meat Act

(CEV Meat Science & Food Safety slide #12)

17. The Meat Inspection Act of 1906 was prompted by which book by Upton Sinclair?

- A. *Charlotte's Web*
- B. *FSIS Standards*
- C. *The Jungle*
- D. *The Meat We Eat*

(CEV Meat Science & Food Safety slide #10)

18. What does the acronym HACCP stand for?

- A. Hazmat Critical Control Point
- B. Hazard Analysis Critical Control Point
- C. Hazard Awareness Critical Collection Program
- D. Harmful Analysis Crucial Control Program

(CEV Meat Science & Food Safety slide #20)

19. Handling leftovers should have the ultimate goal of ___ to slow bacterial growth.

- A. fast cooling
- B. fast heating
- C. slow cooling
- D. slow heating

(CEV Meat Science & Food Safety slide #121)

20. Due to regulations concerning BSE, downer cattle cannot be harvested for human or animal consumption. What is BSE?

- A. Bovine Spondilosis Endoscopy
- B. Bovine Spongiform Encephalopathy
- C. Breed Sporozoite Encephalopathy
- D. Breed Sustained Embryotomy

(CEV Meat Science & Food Safety slide #39)

21. When is it better to use a dry cooking method?
- A. For cuts with large amounts of connective tissue
 - B. For ground products
 - C. For less tender cuts
 - D. For lower quality cuts

(CEV Meat Science & Food Safety slide #131)

22. All of the following are true about water in the meat industry EXCEPT
- A. Water aids in evisceration
 - B. Water is essential to all life processes
 - C. Water makes hide removal more difficult
 - D. Water must be provided to livestock through the life cycle until the point of harvest

(CEV Meat Science & Food Safety slide #36)

23. When smoking meats, two thermometers are recommended. One thermometer is used to measure the internal temperature of the meat. What should the other thermometer measure?
- A. The air temperature of the smoker
 - B. The surface temperature of the meat
 - C. The internal temperature of the meat taken at a second location
 - D. The temperature outside of the smoker

(CEV Meat Science & Food Safety slide #142)

24. What is a synthetic chemical that shifts nutrients away from fat production to the promotion of lean muscle growth?
- A. Antibiotic
 - B. Beta-agonist
 - C. Growth-Promoting Implant
 - D. Zeranol

(CEV Meat Science & Food Safety slide #31)

25. Which piece of legislation passed in 1921 resulted in the monitoring of scales and brands?
- A. Meat Inspection Act
 - B. Packers and Stockyards Act
 - C. Pure Food and Drug Act
 - D. Uniform Wholesale Act

(CEV Meat Science & Food Safety slide #13 & #9)

26. When did labeling begin as a result of the Nutritional Labeling & Education Act?
- A. January 1973
 - B. December 1979
 - C. January 1990
 - D. January 2012

(CEV Meat Science & Food Safety slide #23)

27. What is used to retard mold growth on the outside of dried sausages?
- A. Di-Glycerides
 - B. Isolated Soy Proteins
 - C. Lecithin
 - D. Potassium Sorbate

(CEV Meat Science & Food Safety slide #169)

28. Which of the following specifies that meat be held for ten days to six weeks at 34°F to 38°F in a humidity controlled cooler?
- A. Brine aging
 - B. Dry aging
 - C. Smoking
 - D. Wet aging

(CEV Meat Science & Food Safety slide #80)

29. Which of the following are the proper storage temperatures?
- A. Below 32°F for cold products and above 140°F for hot products
 - B. Below 32°F for cold products and above 165°F for hot products
 - C. Below 40°F for cold products and above 140°F for hot products
 - D. Below 40°F for cold products and above 165°F for hot products

(CEV Meat Science & Food Safety slide #180)

30. Which nutrient is essential for the absorption of vitamins A, D, E, and K?
- A. Carbohydrates
 - B. Fat
 - C. Minerals
 - D. Protein

(CEV Meat Science & Food Safety slide #49)

31. Which of the following is the most common cause of foodborne illness?
- A. Mishandling food
 - B. Misidentifying meats
 - C. Misreading labels
 - D. Mistreating animals

(CEV Meat Science & Food Safety slide #182)

32. For a maturity score “A” beef carcass to make quality grade Choice^o (Average Choice) the marbling score should be ____.
- A. Moderate⁰⁻¹⁰⁰
 - B. Modest⁰⁻¹⁰⁰
 - C. Slightly Abundant⁰⁻¹⁰⁰
 - D. Small⁰⁻¹⁰⁰

(CEV Meat Science & Food Safety slide #93)

33. Which type of meat cookery uses heated air circulated around the meat by a fan?
- A. Convection Oven
 - B. Grilling
 - C. Microwave Oven
 - D. Smoking

(CEV Meat Science & Food Safety slide #135)

34. Food is deemed “____” unless it has a nutritional label.
- A. Misappropriated
 - B. Misbranded
 - C. Misregulated
 - D. Mistaken

(CEV Meat Science & Food Safety slide #21)

35. Which meat cookery method is recommended for thinner sliced meats?
- A. Broiling
 - B. Pan Frying
 - C. Roasting
 - D. Stewing

(CEV Meat Science & Food Safety slide #139)

36. Which of the following is the correct recommended refrigerated storage time?
- A. Fresh, Uncooked Beef = 6-8 days
 - B. Frankfurters = 2-3 weeks
 - C. Fresh, Uncooked Ground meats = 4-6 days
 - D. Sausage = 1 week

(CEV Meat Science & Food Safety slides #103 & #104)

37. What is the primary function of phosphates as processed meat additives?
- A. They add to nutritional value.
 - B. They aid in drying the product.
 - C. They increase water holding capacity.
 - D. They keep ingredients and seasonings evenly distributed throughout the mix.

(CEV Meat Science & Food Safety slide #171)

38. Prime, Choice, Good, Utility, and Cull are all quality grades for which species?
- A. Beef
 - B. Exotics
 - C. Lamb
 - D. Pork

(CEV Meat Science & Food Safety slide #98)

39. Which nutrient's primary function is to aid in the repair and maintenance of body cells?
- A. Carbohydrate
 - B. Fat
 - C. Protein
 - D. Water

(CEV Meat Science & Food Safety slide #46)

40. In order to aid in evisceration and reduce microbial contamination, feed is withheld from animals ___ prior to slaughter.
- A. 6 hours
 - B. 12 hours
 - C. 1 day
 - D. 2 days

(CEV Meat Science & Food Safety slide #37)

41. Improperly cooked beef products have been commonly associated with Trichinosis.
- A. True
 - B. False

(CEV Meat Science & Food Safety slide #191)

42. If an antibiotic has been used to treat a disease, the animal will lose its organic status.
- A. True
 - B. False

(CEV Meat Science & Food Safety slide #82)

43. In the beef carcass, physiological age is an estimate of the actual chronological age.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #90)

44. Lysine is an essential amino acid found in meat.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #47)

45. Over 12,000 species of *Salmonella* cause illness when ingested.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #189)

46. Pan broiling is recommended for steaks and chops more than 2 inches thick.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #138)

47. Re-Freezing meat causes no deterioration of quality as long as it is done correctly.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #112)

48. “Shoulder” is a primal cut found in the beef carcass.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #62)

49. *Trichinella spiralis* is a nematode worm.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #191)

50. Uniform retail meat identity standards were implemented in 1973. This established a single, specific name for each basic retail cut.

- A. True
- B. False

(CEV Meat Science & Food Safety slide #17)

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|-------|-------|
| 1. D | 26. D |
| 2. D | 27. D |
| 3. D | 28. B |
| 4. A | 29. C |
| 5. D | 30. B |
| 6. D | 31. A |
| 7. C | 32. B |
| 8. C | 33. A |
| 9. B | 34. B |
| 10. B | 35. B |
| 11. C | 36. D |
| 12. B | 37. C |
| 13. B | 38. C |
| 14. A | 39. C |
| 15. C | 40. B |
| 16. C | 41. B |
| 17. C | 42. A |
| 18. B | 43. A |
| 19. A | 44. A |
| 20. B | 45. B |
| 21. B | 46. B |
| 22. C | 47. B |
| 23. A | 48. B |
| 24. B | 49. A |
| 25. B | 50. A |