

QUIZBOWL



# SENIOR QUIZBOWL

## Nutrition

- Fats contain \_\_\_\_ times \_\_\_\_ than the energy of carbohydrates.  
**A. 2.25, More**                      B. 1.5, less  
 C. 3, less                              D. 1.5, more
- An example of a major calcium supplement in swine diets is:  
 A. Limestone  
 B. Cat Food  
 C. Fish Meal  
**D. None of the above**
- What key factor of the diet must be increased prior to parturition in the sow?  
 A. Calcium                              B. Energy  
**C. Fiber**                                  D. protein
- Swine diets measure protein levels in rations by:  
**A. Amino acid concentration**  
 B. Grams  
 C. Pounds  
 D. Percentages
- True or **False**. Whole raw soybeans are a viable source of protein in swine diets.
- Which is not an amino acid?  
 A. Lysine                                  B. Leucine  
 C. Methionine                          D. Isolleucine  
**E. All are Amino acids**
- Which one of the following is not a vitamin?  
 A. Vitamin K  
 B. Thiamine  
 C. Ascorbic acid  
**D. All of these are vitamins**
- On average, how many pounds of feed does a pig eat to gain 1 pound?  
 A. ½ lbs.    B. 1 lb.    **C. 3 lbs.**    D. 5 lbs.
- When balancing swine rations we usually consider protein requirements, but what should we actually use?  
**A. Amino Acids**                      B. Carbohydrates  
 C. Fatty Acids                          D. Vitamin/Mineral
- True** or False. Fishmeal is used as an energy source in show pig diets.
- When does the mature sow have the lowest nutrient requirement?  
**A. Gestation**  
 B. Lactation  
 C. Estrus  
 D. Requirements don't change
- What is lysine?  
 A. Fatty acid                              **B. Amino acid**  
 C. Vitamin                                  D. Mineral
- True** or False. Pigs possess more taste buds than humans.
- True** or False. Synthetic amino acids can be used in swine diets to replace part of the protein supplement.
- True** or False. Canola Meal is a byproduct of vegetable oil production.
- Which is the most practical source of protein for a commercial pig weighing 150 lbs.?  
 A. Fish meal                              **C. Soybean meal**  
 B. Corn                                      D. Blood meal

(continued)



QUIZBOWL



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(page 2)

18. Electrolytes are used at a hog show to?  
**A. hydrate the pigs muscle fibers**  
 B. Increase the pigs appetite  
 C. Calm the pig down  
 D. Make the pig sounder (walk better in the show ring)  
 E. Cool the pig down
19. Name the major categories of essential nutrients in pigs?  
**Water, Protein, Carbohydrates, Vitamins, Minerals.**
20. True or **False**. Pig are ruminants.
21. What nutrient gives the hog energy and should make up the majority of the diet?  
**Carbohydrates**
22. **True** or False. Gastric ulcers occur most commonly when pigs are eating finely ground, pelleted feed.
23. All of the following are examples of energy feeds, except \_\_\_\_\_?  
 A. Oats                                      **C. Fish meal**  
 B. Corn                                        D. Grain Sorghum
24. About how much feed does a sow consume each day during peak lactation?  
**Accept any answer 8 - 20 pounds.**
25. Name the product that can be added to swine diets to reduce the amount of phosphorus contained in hog manure.  
**Phytase**
26. Name the first limiting amino acid in swine diets.  
 A. Arginine                                      **C. Lysine**  
 B. Tryptophan                                      D. None of the above
27. Name the swine feed additive that increases muscling and decreases fat.  
**Paylean® or Ractopamine**
28. What cost will have the largest influence on profitability of a hog farm?  
 A. Labor  
**B. Feed cost (specifically corn cost)**  
 C. Propane  
 D. Water
29. About how much water will a lactating sow drink each day?  
 A. 2      **B. 5**      C. 18      D. 22
30. Name two trace elements that must be added to swine diets.  
**Iron, Zinc, Manganese, Selenium, Iodine, Copper**
31. Overfeeding protein to finishing pigs results in a need for (more or less) acreage for manure disposal in a nitrogen-based nutrient management plan.  
**More**
32. Pigs fed too much protein will excrete too much of what nutrient?  
**Nitrogen**
33. Name one energy feedstuff besides corn that can be used in swine feeds.  
**Barley, Wheat, Oats, Milo**

(continued)



QUIZBOWL



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## Nutrition

(page 3)

34. **True** or False. A pig's digestive system is similar to that of a human.
35. What is another name for the "blind gut"?  
**The cecum**
36. What is the correct formula for Average Daily Gain?  
**Weight gained/days on feed**
37. What is a swine creep diet?  
**Diet provided to nursing pigs from about 3 days old until weaning**
38. Which of the following is not a protein feed?  
A. Fish meal                      B. Sunflower meal  
**C. Steam flaked corn**      D. Soybean meal
39. Which of the following is considered a by-product feed?  
A. Corn Gluten Feed  
B. Soybean Hull Pellets  
C. Distillers Dried Grains  
**D. All of these are by-product feeds**
40. Most creep feeds for pigs contain what percent of crude protein?  
**15-20% crude protein**
41. **True** or False. Gastric ulcers occur most commonly when pigs are eating finely ground, pelleted feed.
42. **True** or False. Closely matching the protein needs of the pig with the protein contained in the diet can reduce the amount of nitrogen contained in manure.
43. Name one fat soluble vitamin that is normally added to swine diets.  
**A, D, E, or K**
44. About how much feed does a sow consume each day during peak lactation?  
**Accept any answer 8 - 20 pounds.**
45. Name the product that can be added to swine diets to reduce the amount of phosphorus contained in hog manure.  
**Phytase**
46. Would you expect gestating sows to require more or less feed each day than a sow nursing a litter?  
**Less. Gestating sows eat 4-6 lbs per day. Lactating sows 10-20 lbs per day.**
47. Between barrows and gilts, which would you expect to consume more feed per day?  
**Barrows**
48. During the entire finishing period from 50 to 250 lbs. what would be an average daily feed intake for a market hog.  
**Accept answers from 4.5 to 6 lbs per day.**
49. True or **False**. It requires the same amount of feed for a pig to gain a pound of muscle as it does for a pound of fat.
50. Name the first limiting amino acid in swine diets.  
A. Arginine  
B. Tryptophan  
**C. Lysine**

(continued)



QUIZBOWL



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(page 4)

51. Between nursery pigs and finishing pigs, which would require a diet with a higher percent protein?

**Nursery Pigs**

52. Calculate its feed-to-gain ratio for a pig that gained 100 lbs and ate 300 lbs of feed.

**Three, or 3:1.**

53. Between barrows and gilts, which are generally more efficient converters of feed to lean meat?

**Gilts**

54. Would you expect pigs to be more efficient at converting feed to pork if they were eating mash feed or pelleted feed?

**Pelleted feed because the particle size is smaller and more highly digestible.**

55. True or False. We would expect nursery pigs to convert feed to pork less efficiently than finishing pigs.

**False, young pigs are more efficient than older pigs.**

56. During periods of cold weather, pigs use a (higher or lower) percentage of the feed energy they consume to maintain body temperature.

**Higher**

57. Calcium is a critical component in sow's milk. During lactation, sows may draw on their body reserves of calcium if there is not enough calcium in the feed they eat. Where is calcium stored in a sow's body?

A. Heart  
B. Liver

C. Ears  
**D. Bones**

58. True or **False**. In split-sex fed finishing pigs, barrows are normally fed a higher protein diet than gilts of the same body weight.

59. Gestating sows in an outside lot require more or less feed per day to maintain body condition.

**More**

60. **True** or False. Pigs will consume less feed when fed a diet containing corn contaminated with vomitoxin.

61. How does the feed additive Paylean® (a.k.a. Ractopamine) change hog carcasses?

**Make them leaner and heavier muscled (accept either answer or both)**

