

# Lovely Little Lyra's Nutrition Quiz

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- 1. You want to give your new pony a carrot but are worried about getting your fingers bitten (your neighbor's Aunt Cindy's son knew some kid who lost three fingers giving a treat to a pony). Which is the best way to give a treat safely?**
  - a. Push it between the bars of his cage with a long pole.
  - b. Throw it at him, then quickly run the other way.
  - c. Offer it on the flat palm of your hand.
  - d. Arrange for the veterinarian to pull out his teeth so you don't have to worry.
  
- 2. Which of the following is not a good way to feed hay?**
  - a. On the ground
  - b. In a hay rack or manger
  - c. In a hay net or bag tied high enough that the horse can't get his foot in it even when it's empty.
  - d. In a hay net hanging at the level of the horse's knees so that he does not have to strain to reach it.
  
- 3. Uncle Yuri and his friend Jack Charmenian are watching you feed your horse. Jack Charmenian asks how much water the average horse drinks in a day. You consider telling him to look it up, but since he's cleaning his teeth with a switchblade, you decide to be agreeable and tell him it's about 8-12:**
  - a. cups.
  - b. pints.
  - c. quarts.
  - d. gallons.
  
- 4. Switchblades are:**
  - a. Good for emergencies when you need to cut a lead rope loose in a hurry.
  - b. Fun.
  - c. Illegal in most places.
  - d. Good for emergencies like being mugged.

- 5. What kind of water does a horse like to drink?**
- Water with mud in it.
  - Fresh, clean water.
  - Water with mosquito larvae in it.
  - Water with scummy green algae in it.
- 6. Because horses are grazing animals with small stomachs, it is best to feed them:**
- Frequent small meals
  - One really big meal
  - Lawn clippings
  - Every other day
- 7. Which of the following is not a good rule for feeding horses?**
- Feed little and often
  - Provide plenty of roughage
  - Make changes in the horse's diet gradually
  - Always provide fresh, clean water
  - Provide a source of salt
  - Feed at different times each day to keep the pony's life interesting
- 8. Horses need a lot of roughage to maintain a healthy digestive tract. Do you know what roughage is?**
- High-fiber foods like sawdust, newspaper clippings and old leaves.
  - High-fiber foods like hay and beet pulp.
  - High-energy foods like oats and corn.
  - A young man with tattoos and a drug problem you picked up outside a bar on the waterfront last Friday night.
- 9. You are making a feeding chart to take to a competition. If you weren't a devil-may-care rebel and wanted to do everything by the book, you would list your horse's grain in:**
- pounds per meal
  - coffee cans per meal
  - scoops per meal
  - quarts per meal
- 10. A good way to package grain for individual meals during a competition is:**
- In old whiskey bottles.
  - In plastic bags.
  - In paper bags with the horse's name, type of grain and amount written on it.
  - In the pockets of the clothes you plan to wear each day.

**11. What's the best way to store grain at home and on the road?**

- a. In a waterproof container that horses can't open and mice can't get into.
- b. Under a tarp.
- c. Just empty the bag in the stall or pasture so the horse can eat as much as he wants when he wants.
- d. In old whiskey bottles.

**12. Uncle Yuri knows where you can get a deal on some hay. His friends Boris and Sasha show you a lot of hay under tarps in a warehouse. They say they got several cuttings from different fields this year. You look at some sample bales and select the hay that is:**

- a. Yellow and stemmy because it will provide lots of roughage.
- b. Crisp, green, leafy and sweet-smelling because it's high quality.
- c. Still a little damp in the middle of the bales because you're worried about your horse getting dehydrated this summer and want to maximize his water intake.
- d. Brown and a little dusty because it's cheap—you can shake off the mold before you feed it.

**13. Why should you bring a feeding schedule for your horse to competitions?**

- a. Because it's the rule at Pony Club events and you don't want to lose stable management points.
- b. In case you forget what to feed him under the strain of competition.
- c. So that someone else will know what to feed your horse if you meet with an accident such as alien abduction or accidental evisceration.
- d. To help you remember all the changes—at home you just feed grass hay, but this weekend at competition you're feeding alfalfa, oats, electrolytes, a mineral supplement, a joint supplement and a bran mash every night.

**14. Cellulose is a plant material. There's a lot of it in grass and in bark. You and I can't digest cellulose. Who can?**

- a. Jack Charmerian.
- b. Termites.
- c. Horses.
- d. Microbes.

**15. Uncle Yuri and Jack Charmerian are sitting on the fence watching you feed your horse. Jack Charmerian points his vodka bottle at you and says that since your horse obviously likes it so much, you should feed him a lot more grain. You explain that too much grain is bad for a horse. Which of the following is not a possible consequence of too much grain?**

- a. The horse could get laminitis, or founder.
- b. The horse could colic.

- c. The horse could get too fat.
- d. The horse could get tuberculosis.

**16. You need to come up with a feeding plan for your pony. What don't you need to take into account when designing a diet?**

- a. The type of work he will be doing—a weekly amble through the park? Dressage? Eventing? Racing across the frozen steppes of Mongolia?
- b. The condition he's in right now—fatty-fatty? Pleasantly plump? Lean, mean and fighting fit?
- c. His astrological sign—Leo? Scorpio? Libra? Virgo?
- d. His size, breed and metabolic rate—itty-bitty? Super-plus econo-size? Easy keeper? Can't keep weight on?

**17. What is a good source of protein for a horse?**

- a. fresh, raw meat
- b. baked tofu
- c. alfalfa hay
- d. granola bars

**18. Concentrates are a good source of energy for horses. What are concentrates?**

- a. grains such as oats, corn and barley
- b. just-add-water horse food in a can
- c. hay such as alfalfa, timothy or meadow grass
- d. high-energy foods such as fish meal and bone meal

**Questions 19-25 are about the seven basic nutrients that make up a horse's diet: protein, carbohydrates, fats, fiber, vitamins, minerals and water. Learn the seven nutrients. Learn them now. If you do not learn them, you will be an ignorant ignoramus and people will shun you.**

**19. Water is very critical—it's important in maintaining blood volume and cell hydration and is needed everywhere in the body. Horses can become dehydrated even when water is available if they stop drinking for some reason—if they are sick, it's very cold, or they are nervous in new surroundings. Which is not a sign that a horse is dehydrated?**

- a. Gums are sticky and tacky.
- b. Sunken eyes.
- c. Tongue hanging out and panting.
- d. If you pinch the skin on her neck, it stays tented for a few seconds instead of snapping back right away.

**20. Fats provide energy, heat and warmth. Of the following, what is the best way to supplement fats in your horse's diet?**

- a. A cup of Crisco
- b. Corn oil

- c. Lard
- d. A stick of butter

**21. Fiber is important for proper digestion. It is supplied as roughage (hay, beet pulp) and is broken down by microbes in the horse's digestive tract. I bet you don't know which part of the horse's digestive tract is a big fermentation vat to break down fiber. Is it:**

- a. The anus?
- b. The cecum?
- c. The esophagus?
- d. The gall bladder?

**22. Protein is used by the body for growth and repair. What are proteins made of?**

- a. daisy chains
- b. amino acid chains
- c. gold chains
- d. dandelion chains

**23. Carbohydrates provide heat and energy. How should you give carbohydrates to a pony?**

- a. Carbo-load her before an event with a big plate of pasta and a whole-wheat roll.
- b. Give grain according to condition and work done.
- c. Supplement with Power Bars or a similar product containing a balanced source of protein and carbohydrates.
- d. Cat food is cheap and high in carbohydrates.

**24. These nutrients are supplemented in some salt blocks. Calcium and phosphorous are an example—they are an important part of bones.**

**25. These nutrients are named after letters of the alphabet. D is made by the body when the horse is exposed to the sun and is also found in sun-cured hay. It is important for healthy bones. K is important for blood clotting.**

**BONUS QUESTION: Back in the day, horses that worked grinding wheat in flour mills were fed sweepings from the floor. They tended to develop Miller's Head Disease, a condition in which their heads became enlarged with deformed bones. What caused this?**

- a. An improper calcium to phosphorous ratio—these horses were getting way too much phosphorous in their diets.
- b. Being regularly beaten about the head by irate mill workers.
- c. An allergy to wheat, resulting in swollen sinuses.
- d. Ill-fitting halters.

**SUPER BONUS QUESTION: Uncle Yuri owes Boris and Sasha a lot of money. Sasha wants to break Uncle Yuri's kneecaps, but Boris is very interested in anatomy. He says that if you can trace a morsel of food through a horse's digestive system, he will give Uncle Yuri another week to come up with the money. Boris can remember the parts of the digestive system, but he can't put them in order. He does know that the small intestine goes like this: duodenum, jejunum, jejunum, jejunum (the jejunum is very long), ileum. Can you help Uncle Yuri by putting the rest in order?**

Colon, mouth, oral cavity, small intestine (duodenum, jejunum, jejunum, jejunum, ileum), stomach, rectum, esophagus, anus, cecum.

### **Answers**

1. C. If you offer a treat on the flat palm of your hand, your horse is unlikely to accidentally ingest your fingers. All others are incorrect: ponies are not kept in cages, throwing a treat at a pony is not a good way to reward him, and if you arrange to have all of your pony's teeth removed a. he will be unable to eat carrots and b. you are likely to be investigated by the Society for the Prevention of Cruelty to Animals. And you should be. I hope they lock you up.

2. D. If you feed hay in a hay net or bag, it is very important that the horse cannot get a foot tangled up. When you are hanging the net, be sure that it will not be too low even when it is empty. A, B and C are acceptable ways to feed hay. Some people like to feed hay on the ground, so that the horse's head and neck are in a natural grazing position. This also helps promote more even wear on the horse's teeth because his jaw drops forward as he lowers his head. Other people prefer to feed in a manger or from a hay net—they may be worried about the horse accidentally eating grit if the soil is sandy, or may be concerned about wasting hay. Some types of hay, such as alfalfa, are leafy enough that part of the meal will sift out of a hay net. A hay bag might be better for this kind of hay.

3. D. Horses drink about 8-12 gallons of water a day. If you are providing 8-12 cups, the ASPCA will come calling.

4. C. This is the best answer. Because switch blades are frowned upon, it is best to keep something else for cutting ropes in an emergency. This isn't actually a nutrition question.

5. B. Like you, horses prefer clean water to drink. Jack Charmerian prefers vodka. Uncle Yuri likes light beer.

6. A. Horses are designed to spend all day wandering around the plains looking for things to eat and watching for predators. They are healthiest and happiest when fed several small meals. Horses fed one large meal are prone to

boredom and may develop stable vices. They are also at risk for colic. Horses should never be fed grass clippings—they are highly fermentable and are likely to cause colic. A horse fed every other day needs the ASPCA on its side.

7. F. All are good rules except this one—horses like routine, and feeding the horse at different times every day will cause stress and anxiety.

8. B. High-fiber foods such as a hay and beet pulp are considered roughage. Sawdust, newspaper clippings and old leaves are high in fiber, but are not food. High-energy foods are concentrates. The young man on the waterfront is rough trade, not roughage. Jack Charmerian is rough trade.

9. A. Pounds. That's the best way. Different bags of grain, even the same type of grain, often have different densities, so a quart of oats from one bag doesn't weigh the same as a quart of oats from another bag. Since quarts are easier to measure, though, a good way around is to measure out the meal in quarts and weigh it—like on your bathroom scale—and then list it as both quarts and pounds. Scoops per meal works on the home farm, but no one else has any idea how much grain the horse is actually getting. Same things with coffee cans. If Uncle Yuri has to feed your horse, he won't know if he's using a small can of Folger's or the big old huge one with the guy and his donkey on front.

10. C. Paper bags breathe, so grain is less likely to get moldy and spoil like it might if it sat in airtight plastic bags over a long, hot weekend. Writing the horse's name, meal, and amount on the bag makes it easy for anyone to feed the horse: Lovely Little Lyra, Saturday morning, 1/16 lb rolled oats (Lovely Little Lyra is on a diet). Whiskey bottles are not a practical way to store grain—you would need a funnel to get it inside. Pockets aren't very practical either—the grain might spill out if you stood on your head.

11. A. The ideal grain storage container keeps horses out—so they don't eat too much and get laminitis or colic—as well as mice. Not only do mice eat the good part of the grain and leave the hulls, but they also poop all over the grain bin. Nobody wants to sit down to a meal of mouse poop and grain hulls.

12. B. Hay that looks good to you is probably good for your horse. Hay that is very yellow and stemmy has poor nutritional value. Damp hay can become moldy. It can also spontaneously combust. This is interesting in theory, but would be bad if it burned down your barn. Dusty, musty or moldy hay isn't a bargain, no matter how cheap it is. It's low on nutrition, your horse may not eat it, and it could make respiratory problems worse.

13. C is the best answer. A is true, but shouldn't be your only motivation. If you answered B, you may wish to consider yoga, meditation or some time at the ashram learning to let go. Please don't say D—you should never make sudden

changes to a horse's diet, especially not when she's in a new or potentially stressful situation.

14. D. Only microbes can digest cellulose. Horses and termites can eat things like grass and bark because microbes in their guts do the digesting for them. Jack Charmerian can't digest cellulose, but once he ate three pork sandwiches at Big Daddy Sam's All-Nite Bar-B-Q stand.

15. D. A horse can get laminitis, and possibly founder (that's when the coffin bone rotates), from eating too much grain. He can also colic. A little too much grain on a long-term basis can make a horse fat. Too much grain doesn't cause tuberculosis. Tuberculosis is what you get from the rheumy old man sitting on the bus next to you coughing up blood into his dirty handkerchief. Tuberculosis is also what killed off a lot of the Romantics. It was quite the fashionable way to go, in arty circles. Keats died of TB. The Brontës got TB. So did Chopin.

16. C. Your pony's astrological sign isn't a major factor in designing a diet. The type of work she'll be doing, her current body condition, size, breed and basic metabolism, however, are important to keep in mind when working out a feeding plan.

17. C. Alfalfa hay is relatively high in protein. Tofu and raw meat are high in protein, but aren't considered horse food. Most horses like granola bars, but this is not a practical sort of diet.

18. A. Grains are considered concentrates. They are usually high-energy foods.

19. C. Horses don't pant—they can't, because they're obligate nose breathers. They can't breathe through their mouths, so they don't pant. A, B and D are all signs that your horse is very dehydrated. If you see any of these signs, you should call your veterinarian pronto—your horse needs fluids.

20. B. Corn oil is the best option—it would be difficult to get a horse to eat a stick of butter or a cup of Crisco. Nobody wants to eat lard. Possibly my dog. But nobody else.

21. B. The cecum is a big fermentation vat to break down fiber. It lives on the upper right side of your horse's belly. If you put your ear against her side, you can hear the cecum digesting away. The anus is the very, very end of the digestive system. The esophagus is in the horse's throat. Its job is to squeeze food into the stomach. D is a trick. Horses don't have gallbladders.

22. B. Proteins are made of amino acid chains. If you think proteins are made up of daisy chains, gold chains or dandelion chains, there isn't a lot of hope for you. I'm sure you're a very nice person, though.

23. B. Always feed according to work done. Horses, unlike long-distance runners, don't need pasta before an event. Power Bars are too sticky for horses to eat. Cat food is generally high in protein and low in carbohydrates—that's because cats are strict carnivores, designed to eat lots of little critters. Horses don't eat critters.

24. Calcium and phosphorus are examples of minerals. Magnesium, selenium and copper are also minerals. If you can find it on a periodic table, it's a mineral.

25. This question refers to vitamins. The fat soluble vitamins are A, D, E and K. Vitamin C and the B complex vitamins are water soluble. It's hard to overdose on water soluble vitamins, because the horse (or you) can just pee them out. It's possible to overdose on fat soluble vitamins, though, since they tend to stick around. In the fat.

BONUS: A.

SUPER BONUS: Mouth, oral cavity, esophagus, stomach, duodenum, jejunum, jejunum, jejunum, ileum, cecum, colon, rectum, anus.