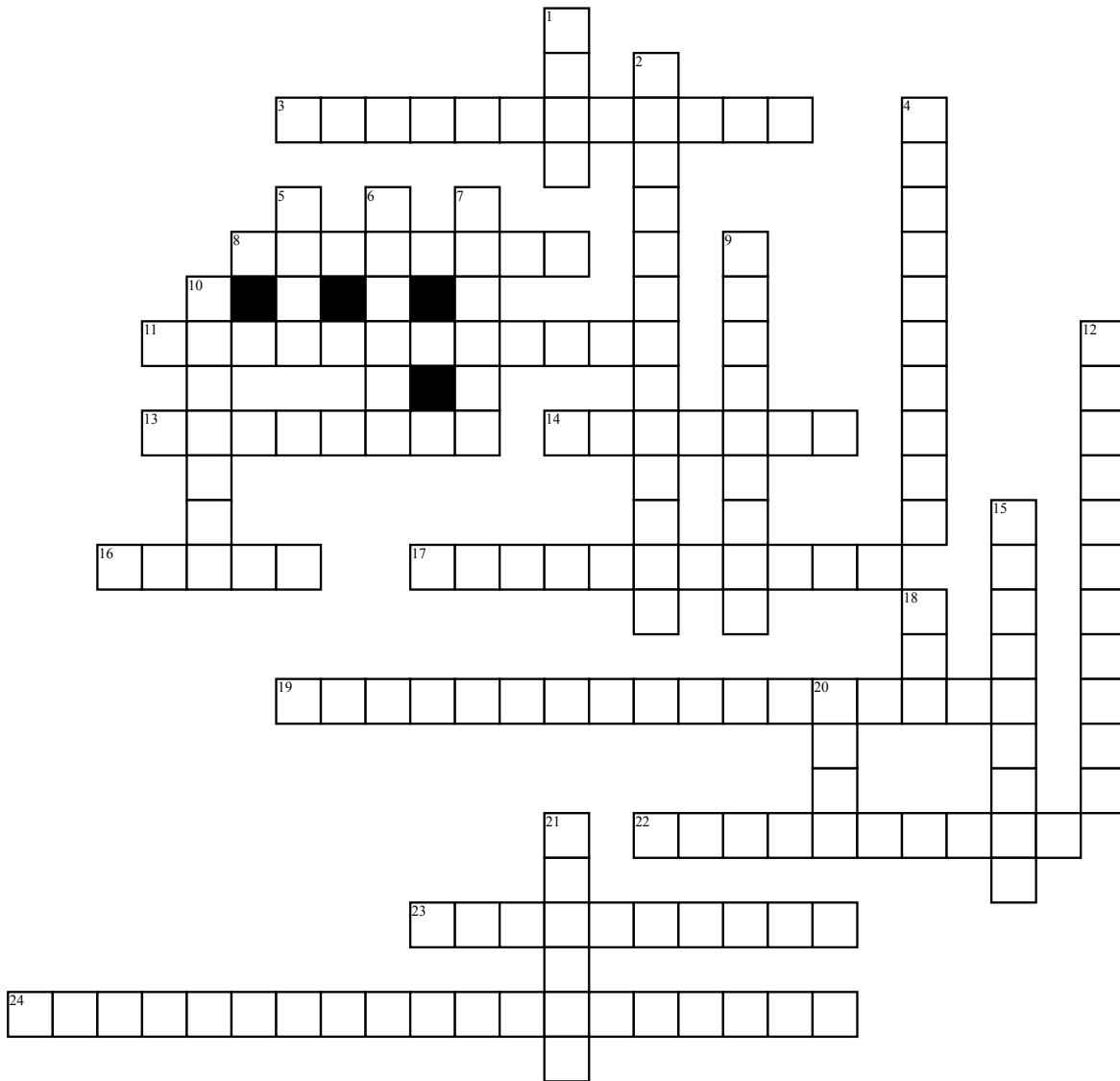


# Animal Nutrients



**Across**

- 3. materials that are high in energy and low in fiber
- 8. compounds that are formed by amino acids
- 11. quality having to do with taste
- 13. a sweet substance full of microbes, used as a binder to feed and improves palatability
- 14. a feed that can be used as a complete replacement of corn; have different variations
- 16. a feed thats high in energy and protein but is used more for a cash crop
- 17. total amount of heat released when a substance is completely oxidized in a bomb calorimeter
- 19. approximate amount of protein available for use

- 22. a feed variant containing 50% dry matter and includes ground stalks and grass as well as actual feed
  - 23. materials in feeds that are either processed out or are used for other things
  - 24. the portion of gross energy that is used for digestion and metabolism
- Down**
- 1. added mainly to raise the energy level, improve flavor, texture, etc. in a feed ration
  - 2. organic compounds known for being the best form of digestible nutrients; ex: sugars, cellulose
  - 4. building blocks of proteins
  - 5. non-protein compound contains 45% nitrogen
  - 6. dried grass and dry matter used for additional fiber in animals

- 7. simple, complex or derived compounds that have have over 2x the amount of energy content as carbs
- 9. materials that are high in fiber and low in energy
- 10. the amount of heat energy required to raise the temperature of one gram of water 1 degree C
- 12. one of the highest energy feeds available
- 15. energy used for growth, maintenance, production, work, and reproduction
- 18. a feed not normally used for animals but rather ground into bread for humans
- 20. a feed used that is known to increase bacterial/protozoa function in ruminants
- 21. a feed equal to the energy content of corn and can be used as a 50% replacement feed