

Name: \_\_\_\_\_ Class: \_\_\_\_\_

### Unit 3 Study Guide

1. How many calories are in every gram of carbohydrate? \_\_\_\_\_
2. What types of food sources do we get most of our carbohydrates from, (plant or animal)? \_\_\_\_\_
3. What FOOD GROUP do we get most of our carbohydrates from? \_\_\_\_\_
4. What is the main function of carbohydrates? \_\_\_\_\_
5. If you eat more carbohydrates than your body needs for energy, how will your body store them?  
\_\_\_\_\_
6. What are the three types of carbohydrates?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
7. Which is a better energy source over a prolonged period of time, (complex starches or simple sugars)?  
\_\_\_\_\_
8. Will complex starches eventually break down into simple sugars? \_\_\_\_\_
9. How many grams of fiber should the average American consume each day? \_\_\_\_\_
10. Fiber can only come from what kind of food source, (plant or animal)? \_\_\_\_\_
11. What are the other two names for fiber? \_\_\_\_\_
12. What substance must fiber have in order to "do its job" effectively? \_\_\_\_\_
13. List two negative health consequences of not getting enough fiber:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
14. What part of fruits/vegetables have the most fiber? \_\_\_\_\_
15. What types of leavening agents do QUICK BREADS use? \_\_\_\_\_
16. What type of leavening agent does YEAST BREAD use? \_\_\_\_\_
17. What gas is produced when leavening agents react to raise quick or yeast breads? \_\_\_\_\_
18. What ingredient does yeast feed on? \_\_\_\_\_
19. What ingredient controls the growth of yeast? \_\_\_\_\_
20. What is the best way to develop gluten in YEAST breads? \_\_\_\_\_
21. What is the best way to develop gluten in QUICK breads? \_\_\_\_\_
22. Describe two characteristics of an under-mixed muffin:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
23. Describe two characteristics of a perfectly mixed muffin:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
24. Describe two characteristics of an over-mixed muffin:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
25. Describe two characteristics of a perfect biscuit:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_

26. What are the two most important steps in biscuit making?
- \_\_\_\_\_
  - \_\_\_\_\_
27. Which type of rice has the most fiber and is the “whole grain” form of rice? \_\_\_\_\_
28. Which type of rice is pre-cooked and then dehydrated? \_\_\_\_\_
29. When cooking rice, the lid should be \_\_\_\_\_.
30. When cooking pasta, the lid should be \_\_\_\_\_.
31. What is the RICE YIELD ratio (Dry:Cooked)? \_\_\_\_\_
32. What is the PASTA YIELD ratio (Dry:Cooked)? \_\_\_\_\_
33. If a product claims that it is “Whole Wheat”, what parts of the wheat kernel must it use?  
\_\_\_\_\_

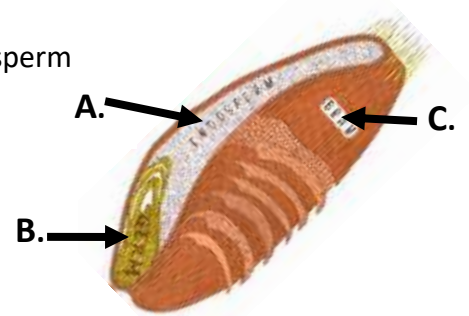
Match the part of the wheat kernel with the nutrients it provides:

**Nutrients:**

- \_\_\_\_\_ Fiber, Vitamins, Minerals
- \_\_\_\_\_ Starch, Protein
- \_\_\_\_\_ Unsaturated Fatty Acids, “B” Vitamins, Iron, Zinc

**Parts:**

- Endosperm
- Germ
- Bran



Match the basic ingredients to the purpose in a quick bread.

**Purpose:**

- \_\_\_\_\_ Body/Structure
- \_\_\_\_\_ Produces CO<sub>2</sub> to make light, airy and porous
- \_\_\_\_\_ Flavor
- \_\_\_\_\_ Tenderness, some flavor and richness
- \_\_\_\_\_ To dissolve leavening agent and provide moisture
- \_\_\_\_\_ Flavor and Browning
- \_\_\_\_\_ Color, texture and nutrients (especially protein)

**Ingredients:**

- Salt
- Flour
- Fat
- Leavening Agent
- Sugar
- Eggs
- Liquid

Match the type of sugar with its other common name.

- |           |          |                  |
|-----------|----------|------------------|
| 44. _____ | Sucrose  | A. “Fruit Sugar” |
| 45. _____ | Fructose | B. “Malt Sugar”  |
| 46. _____ | Maltose  | C. “Blood Sugar” |
| 47. _____ | Lactose  | D. “Table Sugar” |
| 48. _____ | Glucose  | E. “Milk Sugar”  |