**Team Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Team Number\_\_\_\_\_\_\_\_\_\_**

**Food Science – Holt Invitational Science Olympiad Tournament – Division B**

**You must select the best answer from the choices provided and write the letter in the blank.**

\_\_b\_ 1. What is the protein that is most common to cow’s milk?

1. Lactose
2. Casein
3. Amino acids
4. Serum
5. Curds

\_\_d\_\_ 2. What is the major carbohydrate in milk?

1. Lactase
2. Monosaccharide
3. Sucrose
4. Lactose
5. Casein

\_\_a\_\_ 3. For individuals aged 9-13 years old, what is the Recommended Dietary Allowance (RDA) for Calcium?

1. 1300mg
2. 200mg
3. 1000mg
4. 700mg
5. There is no RDA value for Calcium

\_\_b\_\_4. The process of heating liquids to destroy disease-producing bacteria as well as yeaats, molds, viruses, and less harmful bacteria is

1. Homogenization
2. Pasteurization
3. Chemical synthesis
4. Chemical hydrolysis
5. Separation

\_\_a\_\_5. What process is used to decrease the size of the fat globules in milk so that there is no separation of the fat from the milk serum?

1. Homogenization
2. Pasteurization
3. Chemical synthesis
4. Chemical hydrolysis
5. Separation

\_\_d\_\_6. The main milk lipids

1. Are called triglycerides.
2. Have a glycerol backbone.
3. Have up to three fatty acids
4. All of the above are true
5. None of the above are true

\_\_e\_\_7. Which type of milk contains about 4% milk fat and about 8% milk solids?

1. Dry Milk
2. 1% milk
3. 2% milk
4. Skim milk
5. Whole milk

\_\_a\_\_8. Which process which clusters and clumps fat globules leads to the development of a continuous internal fat network or matrix structure in the formation of butter, whipping cream, and ice cream?

1. Fat destabilization
2. Pasteurization
3. Homogenization
4. Dehydration
5. Synthesis

\_\_c\_\_ 9. Which of the following has the highest fat content?

1. skim milk
2. Half-and-Half
3. Heavy Cream
4. Whole Milk
5. None of the above. They all have the same fat content.

\_\_c\_\_ 10. In addition to the bacteria present in the milk, other sources of bacterial contamination include equipment, wash water, air contamination, personnel, and

1. Pasteurization.
2. Cows.
3. Packing materials.
4. All of the above
5. None of the above

\_\_b\_\_ 11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ effectively controls bacterial growth in butter.

1. Homogenization
2. Salting
3. Synthesizing
4. Dehydrating
5. Warming

\_\_a\_\_ 12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is made by curdling milk with an enzyme, and then draining off the whey.

1. Fresh cheese
2. Butter
3. Ice cream
4. Yogurt
5. None of the above

\_\_c\_\_ 13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a mixture of milk, air, and sugar.

1. Fresh cheese
2. Butter
3. Ice cream
4. Yogurt
5. None of the above

\_\_b\_\_ 14. Which of the following fat-soluble vitamins is not found in milk fat?

1. Vitamin A
2. Vitamin B
3. Vitamin D
4. Vitamin E
5. Vitamin K

\_\_\_d\_ 15. Soy milk is

1. Lower in sugar than cow’s milk.
2. Lower in calories than cow’s milk.
3. A non-animal product.
4. All of the above
5. None of the above.

\_\_c\_\_ 16. On a nutrition fact panel on a product label, what is the reference value intended to facilitate comparisons of the nutritional value of different foods?

1. Calories
2. Ingredients
3. Daily Value
4. Serving size
5. Warning label

\_\_a\_\_ 17. When a product provides 20% or more of the daily requirement of a vitamin or mineral, it is considered

1. An excellent source of that vitamin or mineral
2. A good source of that vitamin or mineral.
3. A poor source of that vitamin or mineral
4. All of the above
5. None of the above

\_\_b\_\_ 18. When a product provides between 10% and 19% of the daily requirement of a vitamin or mineral, it is considered

1. An excellent source of that vitamin or mineral
2. A good source of that vitamin or mineral.
3. A poor source of that vitamin or mineral
4. All of the above
5. None of the above

\_\_a\_\_ 19. Lactose intolerance

1. Can be caused by a lactase deficiency.
2. Can be caused by lactose absorption.
3. Can be treated by taking lactose.
4. Is when people have digestive symptoms after eating yogurt only.
5. None of the above are true

\_\_a\_\_20. Powdered milk

1. Is made by evaporating milk to dryness.
2. is made by using solely microfiltration.
3. is only pasteurized milk.
4. All of the above
5. None of the above