## Food Science Career Development Event 2021 General Knowledge Exam

b. slower, larger

| 1. | Humai   | ns "burn" food for energy. Which of the following can humans obtain energy from |  |  |  |
|----|---|---|--|--|--|
|    |   | Proteins  |  |  |  |
|    |   | Carbohydrates   |  |  |  |
|    |   | Lipids  |  |  |  |
|    |   | All of the above  |  |  |  |
|    | -   |   |  |  |  |
| 2. | According to the United States Food and Drug Administration (FDA), which of the     |   |  |  |  |
|    | follow  | ing is true regarding COVID-19 and the safety of our food supply?               |  |  |  |
|    | a.  | COVID-19 is now recognized as a foodborne illness                               |  |  |  |
|    | b.  | There is currently no evidence that food or food packaging have been associated |  |  |  |
|    |   | with COVID-19 transmission  |  |  |  |
|    | c.  | Foodborne exposure to SARS-CoV-2 (the virus that causes COVID-19) is a route of |  |  |  |
|    |   | transmission for the COVID-19 respiratory illness                               |  |  |  |
|    | d.  | The FDA has not released any information regarding COVID-19                     |  |  |  |
| 3. | Product quality and shelf life can be the result of an effective sanitation program |   |  |  |  |
|    | because   |   |  |  |  |
|    |   | a reduction in the microbial population can occur.                              |  |  |  |
|    |   | antimicrobials are directly added to the food product.                          |  |  |  |
|    |   | probiotics are used to sanitize equipment.                                      |  |  |  |
|    |   | all surfaces are irradiated during the sanitation process.                      |  |  |  |
| 4. |   | is necessary for many enzymes to function and for proper immune                 |  |  |  |
| •  |   | n function, as well as wound healing.   |  |  |  |
|    | •   | lodine  |  |  |  |
|    | b.  | Fluoride  |  |  |  |
|    | c.  | Iron  |  |  |  |
|    | d.  | Zinc  |  |  |  |
| 5. | Acids (   | develop as fruits mature. These acids .   |  |  |  |
|    |   | increase sugar content only   |  |  |  |
|    | b.  | increase sugar content and improve juice quality only                           |  |  |  |
|    |   | increase sugar content, improve juice quality, and affect color development     |  |  |  |
|    | d.  | increase sugar content, improve juice quality, affect color development, and    |  |  |  |
|    |   | always increase the pH of fruit   |  |  |  |
| 6. | The _   | the freezing process is, the the ice crystals become                            |  |  |  |
|    | a.  | slower, smaller   |  |  |  |

| d. faster, larger  Meat and poultry provide nourishment to microorganisms that lead to   |         | idster, smaller  |
|--|---------|--|
| a. spoilage b. discoloration c. foodborne illness d. all of the above  When a food contains all the indispensable amino acids, it is called a/an a. complete food b. incomplete food c. complete protein d. incomplete protein d. incomplete protein  is the reactions, both chemical and physical, that take place within cells a. Digestion b. Absorption c. Osmosis d. Metabolism  O. The human tongue can sense sour, sweet, salty, and bitter because it is covered in hundreds of a. papillae b. flavor sensors c. pores d. microorganisms  1 is the international food standards-setting body that protects consumer health and fair food trade practices by establishing voluntary international food standards, codes of practice, and guidelines. a. Codex Alimentarius b. United States Department of Agriculture c. United States Department of Agriculture c. United States Pood and Drug Administration d. Hazard Analysis and Critical Control Points (HACCP)  2. Using modern molecular biology to alter genetic material by removing, adding, or rearranging genes is called a. whole genome sequencing b. genetic engineering c. nanotechnology d. none of these | d       | . faster, larger   |
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| c. nanotechnology<br>d. none of these  |         | ·  |
| d. none of these   |         |  |
|  |         | <del>-</del> ,   |
| 3. The in red wine are associated with a reduction in heart disease.   | d       | . none of these  |
|  | 13 The  | in red wine are associated with a reduction in heart disease           |

|     | b.     | polyphenols   |
|-----|--------|---|
|     | c.     | carotenes   |
|     | d.     | allyl sulfides  |
| 14. |        | is an acronym for   |
|     |        | Generally Recognized As Safe  |
|     | b.     | Generally Recognized Antimicrobial Substance                                  |
|     |        | Genetic Removal of Antimicrobial Substance                                    |
|     | d.     | Genetic Removal of Amylopectin Starch   |
| 15. |        | I intoxication is a foodborne illness that is caused by                       |
|     |        | ethanol in a food product   |
|     |        | toxins from a sanitizing agent used during sanitation                         |
|     |        | a toxin released from microbes  |
|     | d.     | none of these   |
| 16. | Accord | ding to the USDA, a product labeled as "Organic" means the product contains   |
|     | <br>а. | 100% organic ingredients  |
|     | b.     | a minimum of 95% organic ingredients  |
|     | c.     | at least 70% organic ingredients  |
|     | d.     | specific organic ingredients  |
| 17. | When   | making pastries, the role of fat is to  |
|     | a.     | add elasticity to the dough   |
|     | b.     | provide shape to the final product  |
|     | c.     | hold water in the dough   |
|     | d.     | provide texture to the final product  |
| 18. | GMPs   | is an acronym for   |
|     | a.     | Good Manufacturing Procedures   |
|     | b.     | Good Manufacturing Practices  |
|     | c.     | Great Manufacturing Procedures  |
|     | d.     | Great Manufacturing Practices   |
| 19. | On the | e new Nutrition Facts label, which of the following are included under "Added |
|     | Sugars | s"?   |
|     | a.     | Naturally-occurring sugars  |
|     |        | Sugars added during processing  |
|     | c.     | Naturally-occurring sugars and sugars added during processing                 |
|     | d.     | None of these   |
| 20. | The    | is the material that is being dissolved in a homogenous mixture               |
|     |        |   |

a. indoles

|     | a.     | solute   |
|-----|--------|--|
|     | b.     | solvent  |
|     | c.     | solution   |
|     | d.     | substance  |
| 21. | During | refrigeration, the of the air can be changed to stop respiration                 |
|     | and ex | tend the shelf life of a food.   |
|     | a.     | circulation  |
|     | b.     | filtration   |
|     | c.     | gas content  |
|     | d.     | pressure   |
| 22. | Which  | of the following is the definition for food defense?                             |
|     | a.     | Access to nutritious, safe food  |
|     | b.     | Protecting food products from unintentional adulteration by chemical, biological |
|     |        | radioactive, or physical contaminants  |
|     | C.     | Protecting food products from intentional adulteration by chemical, biological,  |
|     |        | radioactive, or physical contaminants  |
|     | d.     | All of the above   |
| 23. |        | is the fastest dehydration method.   |
|     |        | Spray drying   |
|     |        | Vacuum drying  |
|     |        | Freeze-drying  |
|     | d.     | Sun drying   |
| 24. | The co | mmon name for saccharide is  |
|     |        | protein  |
|     |        | fat  |
|     | c.     | sodium   |
|     | d.     | sugar  |
| 25. |        | ng temperature is important when brewing coffee or tea. What happens when the    |
|     |        | ng temperature is too high?  |
|     |        | Too few of flavor compounds are released.  |
|     |        | Bitter polyphenols are released.   |
|     |        | A sweet off flavor occurs because volatile fatty acids are released.             |
|     | d.     | None of these  |
| 26. |        | rentional food that has certain food components and/or essential nutrients added |
|     |        | pecific physiological purpose is referred to as a                                |
|     |        | medicinal food   |
|     |        | supplement   |
|     | c.     | genetically modified food  |

|     | a.      | functional food  |
|-----|---------|--|
| 27. |         | is the only reliable method for determining when a food has  |
|     | reache  | ed an internal temperature that is adequate for killing foodborne pathogens.   |
|     | a.      | Product color  |
|     | b.      | Product texture  |
|     | c.      | A food thermometer   |
|     | d.      | Oven temperature   |
| 28. | What '  | type of claim is "Calcium builds strong bones" when used on a food label?  |
|     | a.      | Nutrient content claim   |
|     | _       | Health claim   |
|     |         | Qualified health claim   |
|     | d.      | Structure/function claim   |
| 29. | A finis | hed food is a food product.  |
|     | _       | raw  |
|     |         | manufactured   |
|     |         | ready to eat   |
|     | d.      | discontinued   |
| 30. |         | ecule that has a polar end and a nonpolar end, and is used as a stabilizing factor to ain dispersion of one immiscible liquid in another, is called a/an |
|     |         | emulsifier   |
|     | b.      | pH control agent   |
|     | C.      | anticaking agent   |
|     | d.      | desiccant  |
| 31. | Which   | of the following is used to convert milk into cheese?  |
|     | a.      | Enzymes  |
|     | b.      | Acids  |
|     | c.      | Salts  |
|     | d.      | Sugars   |
| 32. | Which   | of the following is true regarding acrylamides?  |
|     | a.      | By-product of cooking, frying, and baking  |
|     | b.      | Formed by combination of sugars and proteins that undergo chemical changes at  |
|     |         | high temperatures  |
|     | c.      | Toasted or browned foods contain the highest levels  |
|     | d.      | All of the above   |
| 33. | Flavor  | is an effect caused by the combination of  |
|     | a.      | Taste and texture  |

b. Taste and aroma

|     | c.      | Texture and aroma  |
|-----|---------|--|
|     | d.      | Taste and appearance   |
| 34. | The     | is primarily responsible for maintaining integrity of a food product   |
|     |         | he time when it leaves the factory to when it is consumed by a consumer.   |
|     |         | pH   |
|     | b.      | grocery store  |
|     | c.      | food package   |
|     | d.      | truck driver   |
| 35. | Effecti | ve January 1, 2023, what food will be added as the 9 <sup>th</sup> allergen?   |
|     | a.      | Soybeans   |
|     | b.      | Sesame   |
|     | c.      | Shellfish  |
|     | d.      | Sugar  |
| 36. |         | ple with, foods that contain gluten trigger an immune response an damage the small intestine lining.   |
|     | a.      | Celiac disease   |
|     |         | stomach cancer   |
|     | c.      | foodborne illness  |
|     | d.      | All of these   |
| 37. | Food h  | nandlers can spread bacteria and cause illness through their   |
|     | a.      | hands  |
|     | b.      | breath   |
|     | c.      | hair   |
|     | d.      | all of these   |
| 38. | Which   | of the following is indigestible by humans?  |
|     | a.      | Sucrose  |
|     | b.      | Fructose   |
|     | C.      |  |
|     | d.      | Cellulose  |
| 39. | Why d   | oes chocolate "melt in your mouth"?  |
|     | a.      | processing in the contract of the processing in the contract of the contract o |
|     |         | The lipids in chocolate have a melting point that is close to body temperature.  |
|     |         | The sugars in chocolate caramelize at body temperature.  |
|     | d.      | None of these.   |
| 40. |         | holds oxygen in muscle tissue and gives meat its color.  |
|     |         | Myoglobin  |
|     | b.      | Glycogen   |

| c.          | Lipids   |                                    |
|-------------|--|------------------------------------|
| d.          | Collagen   |                                    |
| <b>4</b> 1  | is a nonnutritive sweetener tha                    | at is made when chlorine atoms are |
|             | to sugar.  |                                    |
| a.          | Aspartame  |                                    |
| b.          | Acesulfame Potassium                               |                                    |
| C.          | Neotame  |                                    |
| d.          | Sucralose  |                                    |
| 42. When    | making semidry and dry sausages,                   | are added to ferment the           |
| meat.       |  |                                    |
| a.          | spices   |                                    |
| b.          | salts  |                                    |
| c.          | lactic acid bacteria                               |                                    |
| d.          | enzymes  |                                    |
| 43. In orde | er to multiply <i>, Clostridium botulinum</i> requ | uires an environment with          |
| a.          | a pH of 4.6 or greater that is free of oxyg        | gen                                |
|             | a pH below 4.6 that is free of oxygen              |                                    |
|             | a pH of 4.6 or greater that contains oxyg          | gen                                |
|             | a pH below 4.6 that contains oxygen                |                                    |
| 44. When    | developing a new food product, it is impo          | ortant for food scientists to know |
| a           | target consumer group                              |                                    |
|             | the need or problem                                |                                    |
|             | current trends                                     |                                    |
|             | all of these                                       |                                    |
| 45. What i  | is the first principle of HACCP?                   |                                    |
| a.          | Conduct a hazard analysis                          |                                    |
| b.          | Identify critical control points (CCPs)            |                                    |
| C.          | Establish critical limits for CCPs                 |                                    |
| d.          | Establish effective record-keeping proce           | dures                              |
|             | the calorie density of a food calculated?          |                                    |
|             | Total calories of a food divided by total v        | _                                  |
| b.          | Total calories of a food divided by total v        | _                                  |
| c.          | Total weight of a food divided by the tot          |                                    |
| d.          | Total weight of a food divided by total w          | veight of a meal                   |
| 47          | is responsible for the red color t                 | hat is typical of tomatoes.        |
|             |  |                                    |

| ı        | Lycopene  |
|----------|---|
| (        | Lutein  |
| (        | Alpha-carotene  |
| 48. Prek | otics are non-digestible components of food that                        |
| ä        | can interfere with proper digestion                                     |
| ı        | support the growth of foodborne pathogens and lead to foodborne illness |
| (        | often lead to diarrhea and symptoms of indigestion                      |
| (        | encourage beneficial microorganism growth in the intestine              |
| 49. Gela | in is a/an that is often used to thicken ice cream and other desserts   |
| ä        | starch  |
| I        | lipid   |
| (        | emulsifier  |
| (        | protein   |
| 50. Refr | gerated leftovers should be used within                                 |
| ä        | 1-2 days  |
| ı        | 3-4 days  |
| (        | 5-7 days  |
| (        | 7-10 days   |

a. Beta-carotene

## Food Science Career Development Event 2021 General Knowledge Exam

b. slower, larger

| 1. | Humans "burn" food for energy. Which of the following can humans obtain energy from consuming?  a. Proteins b. Carbohydrates c. Lipids d. All of the above   |
|----|--|
| 2. | <ul> <li>According to the United States Food and Drug Administration (FDA), which of the following is true regarding COVID-19 and the safety of our food supply?</li> <li>a. COVID-19 is now recognized as a foodborne illness</li> <li>b. There is currently no evidence that food or food packaging have been associated with COVID-19 transmission</li> <li>c. Foodborne exposure to SARS-CoV-2 (the virus that causes COVID-19) is a route or transmission for the COVID-19 respiratory illness</li> <li>d. The FDA has not released any information regarding COVID-19</li> </ul> |
| 3. | Product quality and shelf life can be the result of an effective sanitation program because  a. a reduction in the microbial population can occur.  b. antimicrobials are directly added to the food product.  c. probiotics are used to sanitize equipment.  d. all surfaces are irradiated during the sanitation process.  |
| 4. | is necessary for many enzymes to function and for proper immune system function, as well as wound healing.  a. lodine b. Fluoride c. Iron d. Zinc  |
| 5. | Acids develop as fruits mature. These acids  a. increase sugar content only  b. increase sugar content and improve juice quality only  c. increase sugar content, improve juice quality, and affect color development  d. increase sugar content, improve juice quality, affect color development, and always increase the pH of fruit   |
| 6. | The the freezing process is, the the ice crystals become a. slower, smaller  |

|     | c.              | faster, smaller   |
|-----|-----------------|---|
|     | d.              | faster, larger  |
|     |                 |   |
| 7.  | Meat a          | and poultry provide nourishment to microorganisms that lead to                      |
|     | a.              | spoilage  |
|     | b.              | discoloration   |
|     | c.              | foodborne illness   |
|     | <mark>d.</mark> | all of the above  |
| 0   | Mhan            | a food contains all the indianonsable amine saids it is called a /an                |
| ο.  |                 | a food contains all the indispensable amino acids, it is called a/an complete food  |
|     |                 | incomplete food   |
|     |                 | ·   |
|     |                 | complete protein  |
|     | a.              | incomplete protein  |
| 9.  |                 | is the reactions, both chemical and physical, that take place within cells.         |
|     | a.              | Digestion   |
|     | b.              | Absorption  |
|     | c.              | Osmosis   |
|     | <mark>d.</mark> | Metabolism  |
|     |                 |   |
| 10. | The hu          | ıman tongue can sense sour, sweet, salty, and bitter because it is covered in       |
|     | hundre          | eds of  |
|     | <mark>a.</mark> | <mark>papillae</mark>   |
|     | b.              | flavor sensors  |
|     | c.              | pores   |
|     | d.              | microorganisms  |
| 11  |                 | is the international food standards-setting body that protects                      |
| 11. |                 | mer health and fair food trade practices by establishing voluntary international    |
|     |                 | tandards, codes of practice, and guidelines.  |
|     |                 | Codex Alimentarius  |
|     |                 | United States Department of Agriculture   |
|     |                 | United States Department of Agriculture  United States Food and Drug Administration |
|     |                 | Hazard Analysis and Critical Control Points (HACCP)                                 |
|     | u.              | nazaru Anarysis anu Criticai Control Points (nacce)                                 |
| 12. | Using           | modern molecular biology to alter genetic material by removing, adding, or          |
|     | rearra          | nging genes is called   |
|     |                 | whole genome sequencing   |
|     |                 | genetic engineering   |
|     |                 | nanotechnology  |
|     |                 | none of these   |
|     |                 |   |
| 13. | The             | in red wine are associated with a reduction in heart disease.                       |

|     | b.              | polyphenols   |
|-----|-----------------|---|
|     | c.              | carotenes   |
|     | d.              | allyl sulfides  |
| 14. | GRAS            | is an acronym for   |
|     | a.              | Generally Recognized As Safe  |
|     | b.              | Generally Recognized Antimicrobial Substance                                  |
|     | c.              | Genetic Removal of Antimicrobial Substance                                    |
|     | d.              | Genetic Removal of Amylopectin Starch   |
| 15. | A food          | I intoxication is a foodborne illness that is caused by                       |
|     | a.              | ethanol in a food product   |
|     | b.              | toxins from a sanitizing agent used during sanitation                         |
|     | <mark>C.</mark> | a toxin released from microbes  |
|     | d.              | none of these   |
| 16. | Accord          | ding to the USDA, a product labeled as "Organic" means the product contains   |
|     | a.              | 100% organic ingredients  |
|     | b.              | a minimum of 95% organic ingredients  |
|     | c.              | at least 70% organic ingredients  |
|     | d.              | specific organic ingredients  |
| 17. | When            | making pastries, the role of fat is to  |
|     |                 | add elasticity to the dough   |
|     | b.              | provide shape to the final product  |
|     | c.              | hold water in the dough   |
|     |                 | provide texture to the final product  |
| 18. | GMPs            | is an acronym for   |
|     | a.              | Good Manufacturing Procedures   |
|     | <mark>b.</mark> | Good Manufacturing Practices  |
|     | c.              | Great Manufacturing Procedures  |
|     | d.              | Great Manufacturing Practices   |
| 19. | On the          | e new Nutrition Facts label, which of the following are included under "Added |
|     | Sugars          | ·"?   |
|     | a.              | Naturally-occurring sugars  |
|     | <mark>b.</mark> | Sugars added during processing  |
|     | C.              | Naturally-occurring sugars and sugars added during processing                 |
|     | d.              | None of these   |
| 20. | The             | is the material that is being dissolved in a homogenous mixture.              |

a. indoles

|     | <mark>a.</mark> | solute   |
|-----|-----------------|--|
|     | b.              | solvent  |
|     | c.              | solution   |
|     | d.              | substance  |
| 21. | During          | refrigeration, the of the air can be changed to stop respiration                 |
|     |                 | tend the shelf life of a food.   |
|     | a.              | circulation  |
|     |                 | filtration   |
|     |                 | gas content  |
|     |                 | pressure   |
| 22. | Which           | of the following is the definition for food defense?                             |
|     |                 | Access to nutritious, safe food  |
|     | b.              | Protecting food products from unintentional adulteration by chemical, biological |
|     |                 | radioactive, or physical contaminants  |
|     | <mark>c.</mark> | Protecting food products from intentional adulteration by chemical, biological,  |
|     |                 | radioactive, or physical contaminants  |
|     | d.              | All of the above   |
| 23. |                 | is the fastest dehydration method.   |
|     | <mark>a.</mark> | Spray drying   |
|     | b.              | Vacuum drying  |
|     | c.              | Freeze-drying  |
|     | d.              | Sun drying   |
| 24. | The co          | ommon name for saccharide is   |
|     | a.              | protein  |
|     | b.              | fat  |
|     | c.              | sodium   |
|     | <mark>d.</mark> | <mark>sugar</mark>   |
| 25. | Brewir          | ng temperature is important when brewing coffee or tea. What happens when the    |
|     | brewir          | ng temperature is too high?  |
|     |                 | Too few of flavor compounds are released.  |
|     |                 | Bitter polyphenols are released.   |
|     |                 | A sweet off flavor occurs because volatile fatty acids are released.             |
|     | d.              | None of these  |
| 26. |                 | rentional food that has certain food components and/or essential nutrients added |
|     |                 | pecific physiological purpose is referred to as a                                |
|     |                 | medicinal food   |
|     |                 | supplement   |
|     | C               | genetically modified food  |

|     | <mark>d.</mark>                        | functional food   |  |
|-----|--|---|--|
| 27. |  | is the only reliable method for determining when a food has                           |  |
|     | reache                                 | ed an internal temperature that is adequate for killing foodborne pathogens.          |  |
|     |  | Product color   |  |
|     | b.                                     | Product texture   |  |
|     | c.                                     | A food thermometer  |  |
|     | d.                                     | Oven temperature  |  |
| 28. | What :                                 | type of claim is "Calcium builds strong bones" when used on a food label?             |  |
|     | a.                                     | Nutrient content claim  |  |
|     | b.                                     | Health claim  |  |
|     | c.                                     | Qualified health claim  |  |
|     | d.                                     | Structure/function claim  |  |
| 29. | 29. A finished food is a food product. |   |  |
|     | a.                                     | raw   |  |
|     | b.                                     | manufactured  |  |
|     | C.                                     | ready to eat  |  |
|     | d.                                     | discontinued  |  |
|     |  | ecule that has a polar end and a nonpolar end, and is used as a stabilizing factor to |  |
|     |  | ain dispersion of one immiscible liquid in another, is called a/an  emulsifier        |  |
|     | b.                                     | pH control agent  |  |
|     |  | anticaking agent  |  |
|     |  | desiccant   |  |
| 31. | Which                                  | of the following is used to convert milk into cheese?                                 |  |
|     | <mark>a.</mark>                        | <u>Enzymes</u>  |  |
|     | b.                                     | Acids   |  |
|     | C.                                     | Salts   |  |
|     | d.                                     | Sugars  |  |
| 32. | Which                                  | of the following is true regarding acrylamides?                                       |  |
|     | a.                                     | By-product of cooking, frying, and baking   |  |
|     | b.                                     | Formed by combination of sugars and proteins that undergo chemical changes at         |  |
|     |  | high temperatures   |  |
|     | C.                                     | Toasted or browned foods contain the highest levels                                   |  |
|     | <mark>d.</mark>                        | All of the above  |  |
| 33. | Flavor                                 | is an effect caused by the combination of   |  |
|     | a.                                     | Taste and texture   |  |

b. Taste and aroma

|   | c.              | Texture and aroma   |
|---|-----------------|---|
|   | d.              | Taste and appearance  |
|   |                 |   |
| 34. The is primarily responsible for maintaining integrity of a foo |                 |   |
|   | from t          | he time when it leaves the factory to when it is consumed by a consumer.        |
|   | a.              | рН  |
|   | b.              | grocery store   |
|   | <mark>c.</mark> | food package  |
|   | d.              | truck driver  |
| 25  | Ltto or:        | we leave to 1 2022 what food will be added as the 0th allowers?                 |
| 35.   |                 | ve January 1, 2023, what food will be added as the 9 <sup>th</sup> allergen?    |
|   |                 | Soybeans  |
|   |                 | Sesame Challfigh  |
|   |                 | Shellfish   |
|   | a.              | Sugar   |
| 36.   | In peo          | ple with, foods that contain gluten trigger an immune response                  |
|   | -               | an damage the small intestine lining.   |
|   | <mark>a.</mark> | Celiac disease  |
|   | b.              | stomach cancer  |
|   | c.              | foodborne illness   |
|   | d.              | All of these  |
|   |                 |   |
| 37.   | Food h          | nandlers can spread bacteria and cause illness through their                    |
|   | a.              | hands   |
|   | b.              | breath  |
|   | c.              | hair  |
|   | <mark>d.</mark> | all of these  |
| 20  | \A/bicb         | of the following is indignetials by humans?                                     |
|   |                 | of the following is indigestible by humans? Sucrose                             |
|   |                 | Fructose  |
|   |                 | Glucose   |
|   | C.              |   |
|   | a.              | <u>Cellulose</u>  |
| 39.   | Why d           | oes chocolate "melt in your mouth"?   |
|   | a.              | The proteins in the chocolate denature at body temperature.                     |
|   | b.              | The lipids in chocolate have a melting point that is close to body temperature. |
|   | c.              | The sugars in chocolate caramelize at body temperature.                         |
|   | d.              | None of these.  |
|   |                 |   |
| 40.   |                 | holds oxygen in muscle tissue and gives meat its color.                         |
|   | <mark>a.</mark> | Myoglobin Myoglobin Myoglobin   |
|   | b.              | Glycogen  |

| d  | Lipids   |
|--|--|
| u.   | Collagen   |
| 41   | is a nonnutritive sweetener that is made when chlorine atoms are   |
| added  | to sugar.  |
| a.   | Aspartame  |
| b.   | Acesulfame Potassium   |
|  | Neotame  |
| <mark>d.</mark>  | <u>Sucralose</u>   |
| 42. When   | making semidry and dry sausages, are added to ferment the  |
| meat.  |  |
| a.   | spices   |
| b.   | salts  |
| C.   | lactic acid bacteria   |
| d.   | enzymes  |
| 43. In orde  | er to multiply, Clostridium botulinum requires an environment with   |
|  | <u> </u>   |
|  | a pH of 4.6 or greater that is free of oxygen  |
|  | a pH below 4.6 that is free of oxygen  |
|  | a pH of 4.6 or greater that contains oxygen  |
| a.   | a pH below 4.6 that contains oxygen  |
| 44. When   | developing a new food product, it is important for food scientists to know .   |
| a.   | target consumer group  |
| b.   | the need or problem  |
|  |  |
| C.   | current trends   |
|  | all of these   |
| d.   |  |
| d.<br>45. What i   | all of these   |
| d.<br>45. What i<br><mark>a.</mark>                          | all of these is the first principle of HACCP?  |
| d.<br>45. What i<br><mark>a.</mark><br>b.                    | all of these is the first principle of HACCP? Conduct a hazard analysis  |
| d.<br>45. What i<br><mark>a.</mark><br>b.<br>c.              | all of these is the first principle of HACCP? Conduct a hazard analysis Identify critical control points (CCPs)  |
| d.<br>45. What i<br><mark>a.</mark><br>b.<br>c.<br>d.        | all of these is the first principle of HACCP? Conduct a hazard analysis Identify critical control points (CCPs) Establish critical limits for CCPs   |
| d. 45. What is a. b. c. d.                                   | all of these is the first principle of HACCP? Conduct a hazard analysis Identify critical control points (CCPs) Establish critical limits for CCPs Establish effective record-keeping procedures s the calorie density of a food calculated?   |
| d.<br>45. What is<br>b.<br>c.<br>d.<br>46. How is<br>a.      | all of these is the first principle of HACCP?  Conduct a hazard analysis Identify critical control points (CCPs) Establish critical limits for CCPs Establish effective record-keeping procedures  |
| d.<br>45. What i<br>b.<br>c.<br>d.<br>46. How is<br>a.<br>b. | all of these is the first principle of HACCP? Conduct a hazard analysis Identify critical control points (CCPs) Establish critical limits for CCPs Establish effective record-keeping procedures s the calorie density of a food calculated? Total calories of a food divided by total weight of the food Total calories of a food divided by total weight of a meal |
| d. 45. What is a. 46. How is a. b. c.                        | all of these is the first principle of HACCP? Conduct a hazard analysis Identify critical control points (CCPs) Establish critical limits for CCPs Establish effective record-keeping procedures of the calorie density of a food calculated? Total calories of a food divided by total weight of the food   |

|   | a.    | Beta-carotene   |  |  |  |
|---|-------|---|--|--|--|
|   | b.    | <mark>Lycopene</mark>   |  |  |  |
|   | c.    | Lutein  |  |  |  |
|   | d.    | Alpha-carotene  |  |  |  |
| 48. Prebiotics are non-digestible components of food that . |       |   |  |  |  |
|   | a.    | can interfere with proper digestion                                     |  |  |  |
|   | b.    | support the growth of foodborne pathogens and lead to foodborne illness |  |  |  |
|   | c.    | often lead to diarrhea and symptoms of indigestion                      |  |  |  |
|   | d.    | encourage beneficial microorganism growth in the intestine              |  |  |  |
|   |       |   |  |  |  |
| 49. Gel   | latin | is a/an that is often used to thicken ice cream and other desserts.     |  |  |  |
|   | a.    | starch  |  |  |  |
|   | b.    | lipid   |  |  |  |
|   | c.    | emulsifier  |  |  |  |
|   | d.    | <mark>protein</mark>  |  |  |  |
| 50. Ref   | rige  | erated leftovers should be used within .                                |  |  |  |
|   | _     | 1-2 days  |  |  |  |
|   |       | 3-4 days  |  |  |  |
|   | c.    | 5-7 days  |  |  |  |
|   | d.    | 7-10 days   |  |  |  |