

Biomolecules - Food

1. What is a disaccharide?
2. Name the nutrient medium that you used.
3. Name a monosaccharide and state a role for it in living organisms.
4. What is the ratio of hydrogen atoms to oxygen atoms in a carbohydrate?
5. Name the chemical elements present in carbohydrates.
6. When two monosaccharides unite they form a ...
7. Describe a test for a named polysaccharide.
8. Name the reagents used to test for a reducing sugar.
9. State one way in which carbohydrates differ from fats.
10. Name the reagents used to test for a protein.
11. Cellulose is a polysaccharide. What is it formed from?
12. Name an important group of biomolecules that plants make from nitrates.
13. Fats are composed of fatty acids and ...
14. What name is given to fats that are liquid at room temperature?
15. Name a chemical element found in proteins that is not found in carbohydrates.
16. Fats are composed of oxygen, hydrogen and ...
17. When an iodine solution is added to a food sample and remains red-brown in colour is absent.
18. State a use of each of the following in the biology laboratory. Biuret test (copper sulphate and sodium hydroxide solutions).
19. State a use of each of the following in the biology laboratory. Benedict's (or Fehling's) test.
20. Name the four elements that are always present in protein.
21. To what group of biomolecules do the main products of the dark stage belong?
22. Name a test or the solution(s) that is (are) used to detect protein in a food source.
23. A reducing sugar. E.g. ...
24. A polysaccharide. E.g. ...
25. A carbohydrate is composed of carbon, hydrogen and ...
26. A chemical that is used to show the presence of starch is ...
27. Fats are made from fatty acids and ...
28. Name the element, other than carbon, hydrogen and oxygen, which is always found in protein.

29. What reagent or chemicals did you use to test for protein?
30. What is saprophytic nutrition?
31. Biomolecules of the general formula $C_x(H_2O)_y$ are examples of ...
32. Name the test or give the chemicals used to detect the presence of protein in a food sample.
33. Name a structural polysaccharide.
34. Name a group of biomolecules in the blood which are too large to pass through the filtration system of the nephron.
35. State a role for cellulose in living organisms.
36. Name a polysaccharide that has a different role to cellulose. What is the role of the polysaccharide that you have named?
37. An example of a protein that has a structural role is
38. State two functions of fats in the human body
39. Give an example of a carbohydrate that has a structural role. Where would you expect to find this carbohydrate in a living organism?
40. State a role of carbohydrates other than a structural one.
41. Cellulose is an example of a structural ...
42. Name a carbohydrate found in the cell wall of plant cells.
43. Give an example of a protein that has a structural role.
44. Give two functions of water in a living organism.
45. How do fats differ from oils at room temperature?
46. Name a fat-soluble vitamin, a good source of it and a deficiency disease caused by it.
47. An example of a fat-soluble vitamin is ... A source is ... A lack causes ...
48. Vitamins are either water-soluble or-soluble
49. Vitamin ... is an example of a water-soluble vitamin.
50. Name a disorder associated with a deficiency of a named vitamin in the human diet.
51. A fat-soluble vitamin. E.g. ...
52. A trace element in the human diet. E.g. ...
53. An example of a water-soluble vitamin is ...
54. Name two minerals required by the human body and give their functions
55. In the human diet zinc, iron and copper are examples of ...
56. In carbohydrates, which two elements are in the ratio 2:1?
57. Cellulose is a polysaccharide. Explain the term *polysaccharide*.
58. Name a polysaccharide other than cellulose.
59. Where precisely in a plant cell would you expect to find cellulose?

60. Name a test or give the chemicals used to demonstrate the presence of a reducing sugar.
61. When using Fehling's or Benedict's solution which of the following is correct?
 1. No heat needed.
 2. Heat but do not boil.
 3. Boil
62. Name the chemical elements present in carbohydrates.
63. Which two of these elements always occur in a 2:1 ratio in carbohydrates?
64. Name a structural carbohydrate.
65. Give a function of carbohydrates other than a structural one.
66. Name a chemical element always present in proteins but not in carbohydrates.
67. Give **one** reason why the body needs water.
68. Give **one** way in which water is lost from the body.
69. Name the test **or** name the chemical used to test the sports drink for the presence of glucose (reducing sugar).
70. Name the test **or** give the chemicals used to test a sports drink for the presence of protein.
71. Name the small biomolecules that are joined together to make a protein.
72. Give **one** function of proteins in living organisms.
73. True or False. Glucose is a monosaccharide.
74. True or False. Nitrogen is a trace element.
75. True or False. Eggs are a good source of fat in the diet.
76. True or False. All vitamins are fat soluble.
77. True or False. Lipids are made of amino acids.
78. True or False. Iodine turns starch to a blue-black colour.
79. True or False. Cellulose is a protein.
80. True or False. Polysaccharide molecules contain many sugar units.
81. What is a plant growth regulator?
82. For which purpose did you use Biuret solution or alkaline copper sulphate in food testing?
83. What is a triglyceride?
84. Vitamins may be divided into two groups depending upon their solubility. Name these **two** groups.
85. State **one** way in which an oil differs from a fat.
86. Give an example of a trace element.
87. In relation to the human diet, what is meant by a trace element?
88. Carbohydrates always contain the elements carbon, hydrogen and

89. Lipids are made up of fatty acids and
90. Name a fat-soluble vitamin.
91. Name a structural carbohydrate found in plants.
92. For what purpose in an experiment did you use Biuret or Fehling's solution?
93. Which food type may be identified in the laboratory by the use of Sudan III or brown paper?
94. Give one role for a named mineral in plants.
95. What colour indicates a strong positive result of the Fehling's or Benedict's test for reducing sugar?
96. Give a role of lipids in cells.
97. Give a role of water in the human body other than as a component of cytoplasm and body fluids.
98. How many common amino acids are found in proteins?
99. State a use for the Biuret test in the biology laboratory
100. State two different uses of the iodine solution in biological investigations.
101. State two different uses of a water bath in biological investigations.