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OBJECTIVES

FST 362

PRINCIPLES OF FOOD SCIENCE AND NUTRITION



SSJP's COLLEGE OF AGRICULTURE, KHANDALA

TQ: VAIJAPUR, DIST: A.BAD

**-DEPARTMENT-
FOOD SCIENCE**

1. **Food** is the nourishes the body.
2. Carbohydrates containing 3-10 mono-saccharides linked together by glycosidic bond are called **Oligosaccharides**.
3. Which is sweetest of all sugars **Fructose**.
4. Each gram of carbohydrate, as starch or sugar, provides **4Kcal/g**.
5. Each gram of fat provides **9Kcal/g**.
6. The best temperature range for flavor evaluation is **20-30°C**
7. Carbohydrates act also as reserve fuel supply in the form of **Glycogen**.
8. The average nitrogen content of proteins is about **16%**.
9. Proteins which on complete hydrolysis yield only amino acids as an end product are **Simple Proteins**.
10. Proteins which are attached to non- protein substances or prosthetic group are **Conjugated Proteins**.
11. Which of the following is not fat soluble vitamin **B**.
12. Which of the following is not an active form of vitamin A in the body **β-carotene**.
13. Deficiency of Niacin causes **Pellagra**.
14. Fatty acids which contain no double bonds between carbon atoms are **Saturated**
15. Which of the following is not a derived lipid **Wax**
16. Extra-nutritional constituents that typically occur in small quantities in foods **bioactive Compounds**.
17. Which of the following is non- perishable food **Sugar**
18. Which micro-organism is known as Brewer's yeast ***Saccharomyces cerevisiae***.
19. Sugar concentration of **65%** and above is required to inhibit mould growth.
20. Non-acidic foods are spoiled mainly by **Bacteria**.
21. Which of the following method doesn't prevent or delay microbial decomposition **Antioxidants**
22. Which of the following method of preservation does not involve lowering aw **Canning**.
23. Which preservation method is known as "cold sterilization" **Radiation**.
24. Sensory testing designed to determine whether detectable differences exist between samples is **Discrimination testing**.
25. Sensory testing designed to determine the acceptability between products is **Preference testing**.
26. Sensory testing which provides information on selected characteristics of food samples and determining the sensory profile of the products is **Descriptive testing**.
27. The cellular imbalance between the supply of nutrients and energy and the body's demand for them to ensure growth, maintainance and specific functions is called **Malnutrition**.
28. Range of pathological conditions arising from coincident lack of dietary protein and/or energy in varying proportions. **PEM**
29. Any diet altered to include certain components such as calories, fat, vitamins and minerals **Modified diet**.
30. Full form of FSSAI is **Food Safety and Standards Authority of India**.
31. Full form of ICDS is **Integrated Child Development Services**
32. Full form of PEM is **Protein Energy Malnutrition**.
33. Nutritional anemia is caused mainly due to deficiency of **Iron**.
34. Oedema is observed in **Kwashiorkor**.
35. Saliva contains **Amylase** enzyme.
36. High Protein diet is not recommended for **Kidney disorders**.
37. In balanced diet the ratio of energy distribution from Carbohydrates, proteins and Fats should be **7:1:2**.

38. Full form of RDA **Recommended Dietary Allowances**.
39. Golden Rice variety of rice is genetically engineered to biosynthesize **β -carotene**.
40. Which of the following nutrient is not used for fortification **Protein**
41. Yellow revolution includes **Oilseed Production**.
42. Brown revolution includes **Coffee Production**.
43. Full Form of NFSM is **National Food Security Mission**.
44. Headquarters of WHO is in **Geneva**.
45. Headquarters of FAO is in **Rome**.
46. Vernier caliper is used for measuring **Size**.
47. No microbes can multiply below water activity of **0.6**.
48. Penetrometer is used to measure **Firmness**.
49. Process of keeping out micro-organisms is called as **Asepsis**.
50. Father of Canning is **Nicholas Appert**.
51. Foods rich in **Fats** are called body building foods.
52. **Vitamin D** is known as Sunshine vitamin.
53. Which vitamin is required for blood clotting **Vitamin K**.
54. The addition of one or more essential nutrients to a food, whether or not it is normally contained in the food, for the purpose of preventing or correcting a demonstrated nutrient deficiency in the population or specific population groups is **Fortification**.
55. Iodized salt is example of **Fortification**.
56. Addition of nutrients to replace the ones that were lost during processing is **Enrichment**.
57. Foods aimed at specific subgroups of the population are fortified, thereby increasing the intake of that particular group rather than that of the population as a whole **Targeted Fortification**.
58. Addition of one or more micro-nutrients to foods commonly consumed by the general public is **Mass Fortification**.
59. Process of breeding crops to increase their nutritional value is **Biofortification**.
60. **Which of the following is true for fortification:**
 - I. There should be a demonstrated need for increasing the intake of the nutrient
 - II. Nutrient added should be sufficient to correct or prevent deficiency
 - III. The food selected for fortification should be consumed by the population at risk.
61. Golden rice is example of **Biofortification**.
62. High pressure processing is also known as cold pasteurization: **True**.
63. Full form of HPP is **High pressure Processing**.
64. Which of the following is thermal processing method **Ohmic Processing**.
65. Cavitation bubbles are formed in which processing method **Ultrasound processing**.
66. Technique by which the sensitive ingredients are packed within a coating or protective wall material to preserve organoleptic and physico-chemical properties of the original products is **Encapsulation technology**.
67. **Cold Plasma** is a quasi-neutral ionized gas comprising of positive ions, negative ions, free radicals, electrons, excited or non-excited molecules and photons at or near room temperature.
68. **PEF** technology involves the application of microsecond pulses of high voltage to liquid or semi-solid foods placed between two electrodes.
69. The Mid-day Meal Scheme first started in **Tamil Nadu**.
70. Balwadi nutrition program is for children of age **3-5 Year**.
71. Integrated Child Development Services **Children >6 years, Pregnant ladies, Lactating mothers**.

72. **Neutral Tube Defects (NTDs)** are the most common congenital malformation with an incidence that varies between 0.1-8/1000 births.
73. The deficiency of micronutrients or macronutrients malnutrition, also known as “**hidden hunger**” is a serious health risk.
74. Father of nano technology **Richard Feynman**.
75. GM: **Genetically Modified Food** also called GE: **Genetically engineered Food**.
76. **Fluorosis** is a condition resulting due to ingestion of large amounts of fluorine when the drinking water contains fluorides in excess of 3-5 ppm.
77. Endemic goiter is a type of goitre that is associated with dietary **iodine deficiency**.
78. **Xerophthalmia** is a medical condition in which the eye fails to produce tears.
79. Marasmus is a form of severe malnutrition characterized by **energy deficiency**.
80. World Food Day **16 October**.
81. **Dietetics**: is the science of how food and nutrition affects human health.
82. **Digestion**: it is a mechanical and chemical breakdown of food into smaller components.
83. **Absorption**: it is a process where the nutrients from foods are absorb by the body into the bloodstreams.
84. **Metabolism**: is a chemical process of transforming foods into other substance to sustain life.
85. **Nutritional Status**: is the condition of the body resulting from the utilization of essential nutrients.
86. **Nutrient**: is a chemical component needed by the body to provide energy, to build and repair tissues and to regulate life process.
87. **Health**: As officially defined by the World Health Organization, a state of complete physical, mental, and social well being, not merely the absence of disease or infirmity.
88. **Growth**: The gradual increase (e.g. in size or number) of an animal or vegetable body over time.
89. **Diet**: In nutrition, diet is the sum of food consumed by a person or other organism.
90. **Radappertization** is a term used to define "radiation sterilization" which would imply high dose treatments, with the resulting product being shelf-stable.
91. **Radurization** refers to radiation pasteurization low-dose treatments, where the intent is to extend a product's shelf life.
92. **Radication** also is a low-dose "radiation pasteurization treatment, but with the specific intent being the elimination of a particular pathogen.
93. **Picowaved** is a term used to label foods treated with low-level ionizing radiation.
94. **Homo-lactic fermentation** is the production of lactic acid from pyruvate.
95. **Hetero-lactic fermentation** is the production of lactic acid as well as other acids and alcohols.
96. **Alcoholic fermentation** is the conversion of pyruvate into ethanol and carbon dioxide.
97. **Mucor** species are used in the Orient in food fermentations.
98. **Rhizopus stolonifer** is the common bread mold.
99. **Pectinolytic enzymes** are secreted by Rhizopus species.
100. **Thamnidium**: Thamnidium elegans is found on meat in chilling storage, causing "whiskers" on the meat.
101. **Claviceps**: The species Claviceps purpurea is of interest to food microbiologists because it produces toxic alkaloids on cereals.
102. **Aspergillus organisms** along with penicillia, are known as storage fungi of grain.
103. **G. candidum** is called machinery mold because it will grow on equipment on which are attached food particles or juices.
104. **Penicillium**: This is one of the storage fungi of grain.

105. **Sporotrichum:** Among the saprophytic species is *S. carnis*, found growing on chilled meats, where it causes "white spot."
106. **Neurospora (Monilla)** sitophila, the most important species in foods, sometimes is termed the "red bread mold" because its pink, loose-textured growth often occurs on bread.
107. **Disaccharide** contains of two mono-saccharides linked together by glycosidic bond.
108. **Sucrose** or the table sugar is the most common disaccharide.
109. **Lactose** known as milk sugar, contains one glucose and one galactose molecules.
110. **Maltose** contains two glucose units linked by α -1-4 glycosidic bond.
111. **Oligosaccharides** contains 3-10 monosaccharide units linked together by glycosidic bonds.
112. **Raffinose** is a trisaccharide composed of three monosaccharide units.
113. **Stachyose** is a tetrasaccharide, composed of one molecule each of glucose and fructose and two molecules of galactose.
114. **Polysaccharide** contains more than 10 monosaccharide units linked together by glycosidic bond.
115. **Starch** It is the important energy giving polysaccharide present in food.
116. **Pectin** is a structural polysaccharide present in the primary cell walls of terrestrial plants.
117. **Browning** is the process of food turning brown due to the chemical reactions that take place within.
118. **Roundness**, as defined by Mohsenin (1970), "It is a measure of the sharpness of the corners of the solid.
119. **Carbohydrates** can be defined chemically as neutral compounds of carbon, hydrogen and oxygen.
120. **Gelation** in food is defined as the process in which the liquid is converted to the gel.
121. The mode of obtaining food for growth, energy, repair, and maintenance is called **Nutrition**.
122. All of the following are the components of foods except **Fiber**.
123. Which of the following are called macronutrients **Carbohydrates, Proteins, and Fats**.
124. Which of the following are the micronutrients **Vitamins and Minerals**.
125. Which components of food are called body builder **Proteins**.
126. Which of the following nutrients is the energy producer **Carbohydrates and Fats**.
127. Which of the following is called Metabolic regulators **Vitamins and Minerals**
128. Which of the following are the primary products of photosynthesis **Carbohydrates**
129. The elements present in the carbohydrates are **Carbon, Hydrogen, and Oxygen**.
130. How much energy will you get from one gram of glucose **4.2 kilocalories**
131. **Glucose** is the simple sugar found in carbohydrates.
132. How much percentage of calories are contributed by carbohydrates in the most of our diets: **45**
What is the formula for glucose: **$C_6H_{12}O_6$**
133. Which of the following carbohydrates give the instant source of energy: **Glucose**
134. Which of the following is found more in the human milk in comparison to milk of cow, buffalo, and goat: **Lactose**
135. Which of the following are the examples of Monosaccharides: **Glucose, galactose, and fructose**.
Which of the following are the examples of Oligosaccharides/Disaccharides: **Maltose, sucrose, lactose**
136. Which of the following are the examples of Polysaccharides: **Cellulose, starch, glycogen, heprin**.
137. Which of the following are structural polysaccharides: **Cellulose and chitin**.
138. The human body uses carbohydrates in the form of **Glucose**.
139. In which form body stores glucose: **Glycogen**
140. Which organ of human body stores glucose in the form of glycogen: **Liver and muscles**
141. The brain and RBC needs energy source in the form of **Glucose**

142. If a person has not consumed food for a period of time then blood glucose levels start to get low then which organ of body release glucose into the bloodstream to maintain healthy levels: **Liver**
143. Condensation of glucose molecules ($C_6H_{12}O_6$) results in **glucagon**
144. Starch($C_6H_{10}O_5$)_n is broken down to form glucose($C_6H_{12}O_6$) units when hydrolysed by: **acidic base**
145. Lactose($C_{12}H_{22}O_{11}$) can be hydrolyzed in glucose($C_6H_{12}O_6$) and galactose($C_6H_{12}O_6$) in the presence of the enzyme: **lactase**
146. About half of your diet should be made up of **Grains And Vegetables**
147. According to the MyPyramid food guidance system, a person should obtain most of their fat from **Vegetables oils, nuts, and fish**
148. This food group is our body's best source of energy **Breads And Cereals**
149. Which of these is added to the food label because people sometimes don't eat ENOUGH of this: **Calcium.**
150. Which of the following contains lauric acid which is used treat certain infections and also in the manufacture of soaps: **Coconut Oil**
151. Which of the following has the highest calorific value **Fats**
152. Which of the following food components is required for the growth and maintenance of the human body **Proteins Vitamins**
153. Which of the following food products are the best sources of animal proteins: **Milk, Egg, Cheese**
154. Which of the following mineral functions by building strong bones and teeth: **Calcium**
155. Egg is a rich source of **Proteins, Vitamins, Minerals**
156. Which of the following food components does not provide any nutrients: **Water**
157. Which of the following food items is the best source of plant proteins: **Legumes**
158. Which of the following food components is rich in fat: **Butter, cheese and oil**
159. Which of the following statements is false about nutrients in milk: **Milk is a good source of vitamin C**
160. Guava, Lemon, Orange and Tomato are rich in: **Vitamin C.**
161. Potatoes, cereals, beans, pulses and oats are rich in **Carbohydrates.**
162. The most significant and essential mineral required for our body is **Iron, Sodium, Calcium.**
163. **International No Diet Day: 6 May**
164. Father of **Food Microbiology: Loiuze Pasteur**
165. Father of nutrition science in India: **Coluthur Gopalan.**
166. The Father of Nutrition: **Antoine Lavoisier.**
167. First American dietitian: **Sarah Tyson Rorer.**
168. Central social welfare board: Set up by Government of **India in 1953.**
169. Child survival and safe motherhood program: **(CSSM):** Started in **1992** with financial assistance of World Bank and UNICEF.
170. National nutrition monitoring bureau: **(NNMB):** Set up by ICMR in **1972** with Central Research Laboratory (CRL) of NIN, **Hyderabad.**
171. Central food technological research institute: **(CFTRI):** It is located at **Mysore** and started in **21st Oct 1950.**
172. **Food and nutrition board:** It is under the department of Women and Child Welfare having offices at **Delhi, Mumbai, Kolkata and Chennai.**
173. Nutrition foundation of india: **(NFI):** Founded by **Dr. C. Gopalan in 1980.**
174. National institute of nutrition **(NIN):** It is located at **Hyderabad** and is started in **1918.**
175. Co-operative for assistance and relief everywhere: **(CARE):** Started in **North America.**
176. United nations international children's educational fund **(UNICEF):** First started in **1946.**

177. A National Goitre Control Programme was initiated by the Government of India in **1962**.
178. **NATIONAL DIARRHOEAL DISEASES CONTROL PROGRAMME** The programme was launched in **1981** to reduce the mortality in children below five years due to diarrheal diseases through introduction of Oral Rehydration Therapy (**ORT**).
179. A centrally sponsored scheme called Wheat-based Supplementary Nutrition Programme (**WNP**) was introduced in **1986**.
180. **Special nutrition programme (SNP)** Started in 1970.

...GOOD LUCK...