

## **SUMMARY**

Sugar is a name used for carbohydrates, which is one of the four classes of organic compounds found in the biological systems in addition to proteins, lipids and nucleic acids. These are a set of naturally occurring compound containing carbon, hydrogen and oxygen with hydrogen and oxygen generally in the ratio of two to one atom as in water. Carbohydrates are the most abundant organic compounds in the plant world as well as among the other living organisms. They act as storehouses of chemical energy in form of glucose, starch and glycogen. These are also the components of supportive structures in plants (cellulose) and crustacean shells (chitin), connective tissues in animals (acidic polysaccharides) and are essential components of nucleic acids (D-ribose and 2-deoxy-D-ribose) as well. Carbohydrates make up about three fourths of the dry weight of plants. Animals, including humans get their carbohydrates by eating plants, but they do not store much of what they consume. Less than 1 percent of the body weight of animals is made up of carbohydrates. They originate as products of photosynthesis, an endothermic reductive condensation of carbon dioxide requiring light energy and the pigment chlorophyll.

$$nCO_2 + nH_2O + energy \xrightarrow{sunlight} C_nH_{2n}O_n + nO_2$$