

Common neutral sugars							
Pentoses				Hexoses			
Aldoses				Deoxy Sugars			
$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HOCH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HOCH} \\ \\ \text{CH}_3 \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{CH}_3 \end{array} $
D-Ribose	D-Arabvinose	D-Xylose	D-Glucose	D-Mannose	D-Galactose	L-Rhamnose	L-Fucose

Figure 8.9 Structures of common neutral aldoses and other types of simple sugar. Five- (pentose) as well as six- (hexose) carbon sugars are common, as are deoxy sugars, where the oxygen is lost from the last carbon. Other sugars involve further modifications in the location and number of oxygen atoms within the sugar.

Other types of sugar					
Ketose	Uronic acid	Aldonic acid	Aldaric acid	Lactone	Amino sugar
$ \begin{array}{c} \text{CH}_2\text{OH} \\ \\ \text{C=O} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{COOH} \end{array} $	$ \begin{array}{c} \text{COOH} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $	$ \begin{array}{c} \text{COOH} \\ \\ \text{HCOH} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{COOH} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HC} \text{---} \text{O} \\ \\ \text{HOCH} \\ \\ \text{HCOH} \text{O} \\ \\ \text{HCOH} \\ \\ \text{HC} \text{---} \text{O} \end{array} $	$ \begin{array}{c} \text{CHO} \\ \\ \text{HC-NH}_2 \\ \\ \text{HOCH} \\ \\ \text{HCOH} \\ \\ \text{HCOH} \\ \\ \text{CH}_2\text{OH} \end{array} $