Glossary

Fruit: Fruit is a part of a flowering plant that derives from specific tissues of the flower, one or more ovaries, and in some cases accessory tissues.

Caryopsis: Caryopsis or grain, a one-seeded fruit in which the seed is firmly attached to the fruit at all possible points.

Phenolic compounds: Phenolic compounds occur in all fruits as a diverse group of secondary metabolites e.g., chlorogenic acid, catechin, epicatechin, leucoanthocyanidins, flavonols, cinnamic acid, etc.

Monosaccharides: Monosaccharides [Greek monos = single; sacchar = sugar] or simple sugars consist of one sugar unit that cannot be further broken down into simpler sugars.

Vitamin: Vitamin is an organic compound required by an organism as a vital nutrient in limited amounts.

Disaccharide: A disaccharide is a sugar (a carbohydrate) composed of two monosaccharides. It is formed when two sugars are joined together and a molecule of water is removed. For example, milk sugar (lactose) is made from glucose and galactose whereas cane sugar (sucrose) is made from glucose and fructose.

Oligosaccharide: An oligosaccharide is a saccharide polymer containing a small number (typically two to ten) of simple sugars (monosaccharides). Oligosaccharides can have many functions including cell recognition and cell binding.

Vitamer: A vitamer of a particular vitamin is any of a number of chemical compounds, generally having a similar molecular structure, each of which shows vitamin-activity in a vitamin-deficient biological system.

Anti oxidant: A substance (as beta-carotene or vitamin C) that inhibits oxidation or reactions promoted by oxygen, peroxides, or free radicals

Anthocyanins: A group of floral pigments, existing as glycosides in combination with glucose or cellobiose molecules, which range from red to blue and are often pH dependent; soluble in water and alcohol but not in ether.

Reactive oxygen species (ROS): Species such as superoxide, hydrogen peroxide, and hydroxyl radical. At low levels, these species may function in cell signalling processes. At higher levels, these species may damage cellular macromolecules (such as DNA and RNA) and participate in apoptosis (programmed cell death).

