CHAPTER 12

Cereals and Pseudocereals: General Introduction, Classification, and Nutritional Properties

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ABSTRACT

Cereals are the crops, which belong to the Gramineae family and are composed of endosperm, germ, and bran. According to FAO cereals crops refer to those crops, which are harvested for dry use and can be utilized in different food formulations. They are generally classified according to their genus but when two or more genera are grown and harvested together they are usually referred to as mixed grains. However, some plant species like buckwheat, quinoa, and chia belong to a dicotyledonous family and they are referred to as pseudocereals. Cereals usually contain 12–14% moisture on dry weight basis and apart from moisture content cereals contain inedible substances such as cellulose along with traces of minerals, vitamins, carbohydrates mainly starches (comprising 65–75% of their total weight), as well as proteins (6–12%) and fat (1–5%). They are considered as the staple foods for mankind worldwide and represent the main constituent of animal feed. Most recently, cereals have been additionally used for energy production, for