

Title Mineral and trace element concentrations in cultivars of tomatoes
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Citation Food Chemistry, Volume 104, Issue 2, 2007, Pages 489-499
Keywords Tomatoes; Tenerife island; Mineral; Trace element; Multivariate analysis; Method of cultivation; Region of cultivation; Sampling period

Abstract

The concentrations of minerals (P, Na, K, Ca and Mg) and trace elements (Fe, Cu, Zn and Mn) were determined in 167 tomato samples belonging to five cultivars (Dorothy, Boludo, Dunkan, Dominique and Thomas) produced on the island of Tenerife. The contribution to the intake of minerals and trace elements was in general low, with special emphasis on the contributions of K and Mg. The cultivar, cultivation method, period of sampling and region of production in the island influenced the concentrations of minerals and trace elements of the tomatoes. Trace elements seemed more influenced by the cultivar than the minerals, and the cultivation method affected mineral contents more than trace element contents. The period of sampling had an important influence on the mineral and trace elements. Many correlations were observed between the minerals and trace elements studied. Applying discriminant analysis, the tomato samples tended to be classified according to the cultivation method, period of sampling and region of cultivation.