

Zn in vegetables: a review and some insights

ABSTRACT

Zn is an important element in both industrial and biological sense. The great industrial importance of Zn has made this element a potential hazard to vegetable consuming humans. In this review, the important biological role of Zn and the human Zn dietary requirement as well as its toxicity are discussed. The Zn in various commonly consumed vegetables have also been reviewed. Based on a range to previous studies, it is confirmed that human activities such as metal mining and smelting as well as the application of manure fertilizer could contribute to Zn enrichment in both cultivation soil and the vegetable tissues. Zn in vegetable tissues also been discovered to have a strong and positive correlation with some element such as K, Fe, Mn and Cd. Due to Zn's industrial importance, it will always be a possibility of the occurrence of high Zn enrichment due to anthropogenic activities. Despite the biological importance, the constant monitoring of Zn in various food crops should not be neglected.