

Determination of total chromium in some vegetables and fruits grown in urban and rural areas

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Abstract Cr is a toxic, nonessential element to plants. Cr toxicity in plants is observed at multiple levels, from reduced yield, through effects on leaf and root growth, to inhibition on enzymatic activities and mutagenesis. In our study we have determined the levels of total chromium in different part of vegetables and fruits grown in urban and rural areas to establish the potential human exposure through food chains. Atomic absorption spectrometry in air/acetylene flame was used to estimate and evaluate the levels of this metal in vegetables and fruits. Chromium's concentration in vegetables samples was between 0.06 and 2.16 mg/Kg while in fruit sample varies between <LD and 0.95 mg/Kg.

Keywords: chromium, vegetables, fruits, atomic absorption spectrometry
