Assessment of Certain Essential Elements in Some Common Edibles from Dadara and Agyathuri Villages of Kamrup District of Assam

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ABSTRACT Accumulation of certain essential elements as well as few non-essential heavy metals in some cereals and legumes, and several vegetables that are locally grown by the Sunni Muslims in two villages of Kamrup district of Assam, situated in the north-eastern region of India, have been assessed using atomic absorption spectroscopy. The samples recorded varied concentration of essential elements, but low iron in most of the samples viz. in coriander leaf, sweet gourd leaf, amaranthus leaf etc. Interestingly, selenium was recorded in all the samples examined except in pigeon pea. On the other hand, non-essential heavy metal such as cadmium was recorded in very low concentration in most of the samples. The aim of this study was to assess the concentration of different essential elements namely calcium, cobalt, copper, iron, magnesium, manganese, sodium, selenium and zinc, as well as few non-essential metals such as cadmium, nickel and lead in some locally grown edibles from this region. The significance of presence or absence of these essential and non-essential elements in the daily diet of the population has also been discussed.