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<i>information</i>		
Title	URANIUM AND THORIUM NUCLIDES SERIES DETERMINED IN MEDICINAL PLANTS COMMONLY USED IN BRAZIL	
Authors	P. Silva, L. Francisconi, S. Damatto	
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<i>Summary</i>		
<p>In recent years the study of medicinal plants has become the focus of ever more extensive research all over the world due to their diversity and potential as source of medicinal products. According to the World Health Organization approximately 80% of world population makes use of medicinal herbs due to their believed therapeutic action. Besides being used as medicine, medicinal plants are also largely used as dietary supplements. The presence of radionuclides in plants constitutes one of the main pathways for their transfer to man. The amount of radioactive nuclides from U and Th series in edible vegetables are relatively well known since they have been the main concern of research conducted worldwide. Medicinal plants, on the other hand, have been neglected in these studies, possibly because the ingestion of radioactive material through their consumption has not been recognized or was considered insignificant.</p> <p>The objective of the present study was to determine the content of natural radionuclides from ^{238}U and ^{232}Th series in 25 species of medicinal plants used in Brazil, both as medicine and as dietary supplement. The medicinal plant samples were obtained in specialized pharmacies and drugstores. The raw plant and their extracts, produced as recommended by the National Agency for Sanitary Vigilance, were analyzed by Instrumental Neutron Activation Analyses for the determination of U and Th and by Total Alpha and Beta Counting after Radiochemical Separation for determination of ^{226}Ra, ^{228}Ra and ^{210}Pb.</p> <p>In the raw plants the activity concentrations varied from 0,08 Bq kg⁻¹ to 8,0 Bq kg⁻¹ for thorium, from < LID to 22 Bq kg⁻¹ for uranium, from 1,8 Bq kg⁻¹ to 12 Bq kg⁻¹ for ^{226}Ra, from 33 Bq kg⁻¹ to 74 Bq kg⁻¹ for ^{228}Ra and from 10 Bq kg⁻¹ to 120 Bq kg⁻¹ for ^{210}Pb. In the extracts, the activity concentrations varied from 9 mBq kg⁻¹ to 137 mBq kg⁻¹ for Th and 145 mBq kg⁻¹ to 580 mBq kg⁻¹ for U.</p>		