

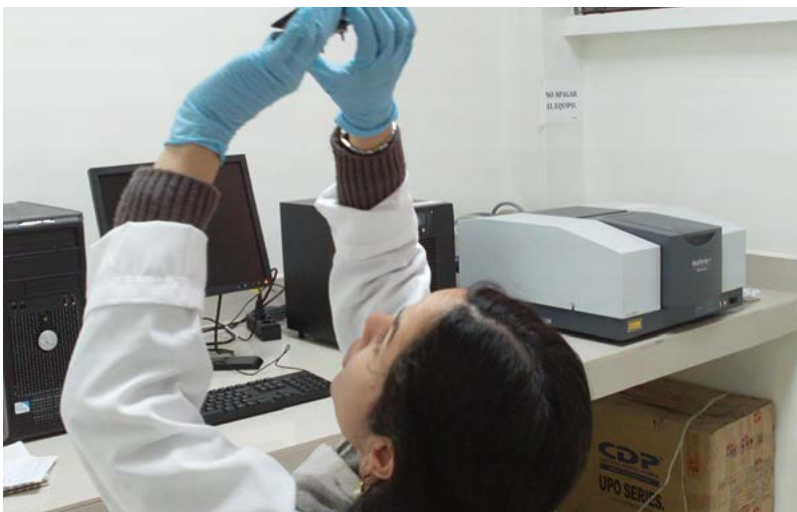
TRACKING NUTRITIONAL PROGRESS: IAEA CAPACITY BUILDING PROGRAMMES



1 Kuwait: The IAEA has helped to establish a body composition assessment suite at the Kuwait Institute for Scientific Research. Facilities include an isotope ratio mass spectrometer for analysis of deuterium and oxygen-18 enrichment, and dual energy X ray absorptiometry for assessment of bone mineral content. In collaboration with the Nutrition Department at the Ministry of Health, the equipment is being used to assess body composition and energy expenditure in Kuwaiti schoolchildren as part of the evaluation of a programme designed to curb the rise in childhood obesity in Kuwait. (Photo: C. Slater, IAEA)



2 Botswana: The IAEA has helped to establish facilities for analysis of deuterium enrichment by Fourier transform infrared (FTIR) spectrometry at the National Food Technology Research Centre (NFTRC). The NFTRC is a regional designated centre in the field of deuterium dilution techniques in human nutrition, and has hosted numerous regional training courses in this area. The facility has been used to evaluate a food supplementation programme in adults living with HIV and to assess breastfeeding practices of women in the region. (Photo: M.E. Valencia Juillerat, Mexico)



3 Ecuador: Through national and regional technical cooperation projects, the IAEA has helped to establish facilities for analysis of deuterium enrichment by FTIR spectrometry in 17 Latin American countries, including Ecuador. These facilities are used to evaluate national programmes designed to combat the double burden of malnutrition in the region, where micronutrient deficiencies and obesity exist side by side. (Photo: E. Aguilar Lema, Ecuador)



4 Costa Rica: With the help of the IAEA, the University of Costa Rica has established a laboratory for the assessment of body composition using deuterium dilution techniques. The procurement of an FTIR spectrometer enabled the local counterpart to obtain funds for refurbishment of the laboratory and installation of air conditioning. This facility was used to assess the impact of national programmes to decrease the prevalence of micronutrient deficiencies, obesity and non-communicable diseases in school age children. (Photo: E. Quintana Guzmán, Costa Rica)

Text : Christine Slater, IAEA Nutritional and Health-Related Environmental Studies Section