ASSESSING INTERVENTIONS: IAEA TECHNICAL COOPERATION ENHANCES NUTRITION PROGRAMMES

Malnutrition — in all its forms — is a significant development challenge, affecting childhood health, workplace productivity, and national health programmes in countries around the world. While the effects of undernutrition are well recognized, there is less recognition of the fact that the long term impact of obesity or inappropriate nutrition can also be very damaging to health and to national economies. Increasingly, countries around the world are taking action to implement nutritional or physical activity interventions designed to improve the future health of children, as well as the health of their populations in general. Such interventions may include the promotion of exclusive breastfeeding, school breakfast or lunch programmes, nutrition awareness campaigns, food fortification, and investment in sports activities and facilities.

The IAEA, through its Technical Cooperation (TC) programme, is working with its Member States to help them to assess the efficiency and effectiveness of such intervention programmes, in order to ensure that government efforts are having the desired effect, and that resources are being well applied. For such assessments, reliable data are essential, and it is here that nuclear science and technology come into play.

Nuclear techniques can be used to collect a range of important nutrition-related data to: assess body composition, measure the total daily energy expenditure of persons, monitor the efficacy of breastfeeding programmes, determine bone mineral density and measure micronutrient bioavailability from foods. Nuclear techniques can also be used to assess vitamin A status. The data gathered using these techniques allow governments to make evidence-based decisions about nutrition programmes, promotion of sports in schools and food fortification, and support the development of effective national nutritional programmes.

IAEA TC projects around the world have contributed to developing and evaluating interventions to curb the dramatic increase in childhood obesity in the Middle East and to building capacities in the Asia and the Pacific region. The projects have also played a role in the design and improvement of interventions aimed at preventing and controlling obesity and related health risks in Africa and Latin America. TC projects have built capacity in using nuclear techniques to assess body composition in 17 countries in Latin America and the Caribbean, 23 in Africa and 10 in the Asia and the Pacific region.

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Beneficiaries of the IAEA Technical Cooperation Programme.
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