

Technical Cooperation Programme

September 2011

## Supporting exclusive breastfeeding in the Dominican Republic

## The challenge...

Despite World Health Organization recommendations that babies should be exclusively breastfed for the first six months to improve infant nutrition, the goal of exclusive breastfeeding remains unmet in the Dominican Republic. Self-reporting figures from national health surveys suggest that exclusive breastfeeding of children under 6 months of age has declined substantially in recent years, from 25% in 1996 to as little as 10% in 2002 and 8% in 2007.

## The project...

As part of a technical cooperation project to assess body composition, the IAEA worked with the Dominican Ministry of Health in Santo Domingo to assess maternal self-reports of exclusive breastfeeding by measuring the transfer of human milk from mother to baby. Measurements were made using the stable (non-radioactive) isotope deuterium. A single oral dose of deuterated water is administered to the mother and its appearance in the baby's saliva samples is measured over a two week period. This allows nutrition professionals to quantify breast milk consumption and to determine whether human milk has been the sole source of fluids consumed by the infant.

The study involved 30 mothers enrolled in a breastfeeding counselling programme. Despite the fact that all participants had reported breastfeeding exclusively, the results of the assessment indicated that only 30% were breastfeeding exclusively.





## The impact...

The project successfully established the capacity for nutrition professionals in the Dominican Republic to measure the human milk consumption of infants, and to determine if breastfeeding is exclusive. The objective measurements will strengthen the evaluation of public health efforts to improve the frequency of exclusive breastfeeding in the first six months of life. Such an improvement will enhance the nutritional well-being of young children, improving their health and rates of survival.

The results also demonstrated that nutrition counselling strategies should recognize that mothers may believe they are breastfeeding exclusively without realising that this should exclude the provision of drinks such as water, tea and juice.