

Innovative tools and indicators for program planning and advocacy: mathematical modelling tools and new indicators for infants, young children and women of reproductive age.

Background/Scope:

Ensuring optimal nutrition is a global public health priority. With the current global food crisis, realistic and affordable nutrition intervention strategies are urgently needed to help offset the potentially devastating effects on population nutritional status. In this respect, mathematical modelling and new infant, young child and women's indicators can play an important role in nutrition program planning, monitoring and evaluation. Mathematical models have been developed to formulate and/or test population-specific food-based recommendations, to select amongst alternative nutrition intervention strategies, to develop social protection packages in food insecure areas and to generate evidence with which to advocate for strategies such as fortification. Currently, only a handful of nutritionists are experienced in their use. However, they will soon be made available to the wider nutrition community, as user-friendly software is developed.

There have also been many new developments in practical indicators for program planning and advocacy. Recently, a set of core infant and young child feeding indicators has been endorsed for use in the assessment of complementary feeding behaviours and practices. A validation study of dietary diversity as a proxy indicator of micronutrient quality for women's diets has just been completed. Such indicators can be used to target high risk populations or for program planning, monitoring and evaluation. This workshop will present these new tools and indicators with a focus on their contribution to program planning for improved food and nutrition security. The speakers will describe concepts and new indicators and share their experiences in their development and application.

Objectives:

1. To introduce recently developed mathematical modelling approaches and new indicators for assessing infant, young child and women's dietary practices that can be used to identify optimal nutrition intervention strategy designs, inform program planning decisions and for advocacy purposes.
2. To illustrate various applications of the mathematical modelling approaches through case-studies from Indonesia and Save the Children UK. These case studies will show how mathematical modelling can be used to formulate and test population-specific food-based recommendations, identify "problem" nutrients in local diets (i.e., those that cannot be provided in adequate amounts using locally available foods), compare the cost - nutritional benefits of alternative nutrition intervention strategies and identify the minimum cost of a nutritionally adequate family diet to guide nutrition program planning decisions.
3. To explain the development and validation of several new indicators for use in maternal and child program planning, monitoring and evaluation.

Session Chairs: To be announced

Presentation titles and speakers:

Mathematical modelling and linear programming

(30 minutes for presentations with 15 minutes discussion following presentations)

Topic 1: *Applications of mathematical modelling for nutrition intervention strategy design, program planning and advocacy: the concepts.*

Speaker 1: Dr Elaine Ferguson, London School of Hygiene and Tropical Medicine, London, UK (10 minutes)

Topic 2: *The cost-to-nutritional benefits of alternative intervention strategies to improve the nutrient intakes of Indonesian children.*

Speaker 2: Dr Umi Fahmida, SEAMEO-TROPMED Regional Centre for Community Nutrition, University of Indonesia, Jakarta, Indonesia (10 minutes)

Topic 3: *Affordability of nutritious diets and the development of appropriate social protection packages.*

Speaker 3: Abigail Perry, Save the Children UK, London, UK (10 minutes)

New child feeding and women's dietary diversity indicators

(30 minutes for presentations with 15 minutes discussion following presentations)

Topic 4: *Indicators for assessing infant and young child feeding practices*

Speaker 4: Dr. Kathryn Dewey, Professor of Nutrition, Director of the Program in International and Community Nutrition, University of California, Davis (10 minutes)

Topic 5: *Development of responsive feeding indicators for young children*

Speaker 5: Dr. Maureen Black (to be confirmed*), Professor of Pediatrics, University of Maryland School of Medicine (10 minutes)

Topic 6: *Validation of simple indicators of dietary diversity as proxy indicators of micronutrient diet quality for women of reproductive age in resource-poor settings*

Speaker 6: Gina Kennedy, Wageningen University, Netherlands (10 minutes)