Report for IASC Nutrition Cluster Project:

Consultation on the Dietary Management of Moderate Malnutrition Organized by WHO in collaboration with UNICEF, UNHCR, WFP

Date: 30 September to 3 October 2008 Venue: WHO HQ, Geneva, Switzerland

Moderate malnutrition (MM) is defined as a weight-for-age between -3 and -2 z-scores below the median of the WHO child growth standards. It can be due to a low weight-for-height (wasting) or a low height-for-age (stunting) or to a combination of both. Similarly, moderate wasting and stunting are are defined as a weight-for-height and height-for-age, respectively, between -3 and -2 z-scores.

MM affects many children in poor countries. Children with moderate malnutrition have an increased risk of mortality and MM is associated with a high number of nutrition - related deaths. If some of these moderately malnourished children do not receive adequate support, they may progress towards severe acute malnutrition (severe wasting and/or oedema) or severe stunting (height-for-age less than -3 z-scores), which are both life-threatening conditions. Therefore, the management of MM should be a public health priority.

In contrast to severe malnutrition, programmes for the management of MM in children have remained virtually unchanged for the past 30 years, and it seems timely to review efforts to improve their efficacy and effectiveness.

WHO organised a consultation on this topic with the following objectives:

- To provide an estimate of nutritional requirements of children with MM (as defined above). These nutritional requirements will be examined separately for children who are moderately wasted and those who are stunted.
- To examine if current approaches for MM management, based either on dietary counseling or on the provision of food supplements, provide all nutrients needed for the recovery of children with MM.
- To formulate recommendations to improve the dietary management of MM, either through dietary counseling or food supplementation.
- To recommend which type of research is needed to address current knowledge gaps.

Four background papers were commissioned by WHO in advance of the meeting and circulated among participants:

- 1. Nutrient content of diets suitable for feeding moderately malnourished children;
- 2. Foods and ingredients suitable for use in moderately malnourished children;
- 3. Nutrition counselling for moderately malnourished children;
- 4. Food supplements used to treat moderate malnutrition in children.

In addition to these background papers, a call for abstracts was circulated to a large number of agencies implementing programmes or carrying out research on the management of MM. During the meeting, authors were asked to present key elements of their initiatives to improve management of MM. The presentations were followed by discussions and working group sessions to develop consensus statements and identify areas for research on the improved dietary management of MM. About 70 participants took part in the meeting.

There was agreement during the meeting that nutritional requirements in relation to energy for moderately wasted children lies between those of a well nourished child and those of severely wasted children during their recovery phase. These children also need at least an additional 25 kcal/kg/day. WHO will set up within the next 6 months a technical group that will define specifications of diets or food supplements suitable for the recovery of moderately wasted children.

Some uncertainties remain on diets needed for the recovery of stunted children. It is possible that currently used diets lack some specific nutrients needed for bone growth, including available phosphorus, zinc, sulfur and magnesium. The effect of antinutrients on the recovery of stunted children is unknown. Trials with linear growth as main outcome are needed to better define diets needed by these children.

The meeting also concluded that animal source foods are superior to unprocessed plant foods to promote growth, and that more attention should be given to the essential fatty acid content of the diets given to malnourished children. Reformulation of foods currently used in food aid programmes is expected as an immediate follow-up of this meeting.

See following link for detailed report:

http://www.who.int/nutrition/publications/moderate_malnutrition/mm_report/en/index.html