Editors Note:
Welcome to our final bulletin of Annual Operational Plan 7. A major milestone has been the gazettement of mandatory fortification of wheat flour, maize flour and oil. The weather conditions have also improved leading to better food security and reduced cases of acute malnutrition.

In this issue we also recognize Mrs Flora Abio for her outstanding work in Tana River District.

Terry Wefwafwa, HSC Head Division of Nutrition

NTF Working Group Updates
Capacity
- Reviewed guidelines and materials for On Job Training, High Impact Nutrition Interventions and action plans.
- Plans to develop a framework for broader capacity development (costing, performance evaluation etc)

Nutrition information
- Revised nutrition survey guidelines, validated 18 nutrition survey results and disseminated monthly and quarterly nutrition updates.
- Plans to develop nutrition website and improve District Health Information System.

Urban
- Plans to rollout urban nutrition strategy

Response Advisory
- Continues to guide development of contingency action plans
- Plans to strengthen program joint support supervision.

Fortification of Wheat Flour, Maize flour and Oil Goes Mandatory

Fortification of the commonly consumed commodities is a necessity in Kenya in order to achieve the goal of being a prosperous nation. The Ministry of Public health and Sanitation has been working with Kenya Bureau of Statistics, development partners and industries to have standards for fortification of these commodities developed. The government has amended the Food, Drug and Substance Act to have mandatory fortification which was gazetted on 15th June, 2012. This is the second set of foods in which mandatory fortification is being applied after mandatory fortification of salt with iodine.

Mandatory fortification will create a level playing field for all industries and it will benefit all Kenyans who consume these foods. The nutrients that are being added to flours are the same ones that are removed during processing and Kenyans will no longer say that the processed foods are less nutritious. Vitamin A that will be added to oil will make oil more nutritious and it is the best vehicle to carry this vitamin since it is a fat soluble vitamin. The vitamins that will be added to these foods are essential and yet not readily available in the unbalanced diets that many vulnerable Kenyans consume.

The government has set up systems of ensuring that quality is maintained at production, market level and household level. The Division of Nutrition is coordinating the program and has brought together various actors from the Kenya Bureau of Standards, the National Public Health Laboratory, Kenya Medical Research Institute and development partners to plan on how the monitoring will be conducted.

Micronutrient Powders (MNP) in Kenya
- Micronutrient powders are sachets with dry powder that contain micronutrients (Vitamin A, iron and zinc) which are added to solid or semi-solid foods that is ready for consumption.
- MNPs are recommended where the quality of complementary foods for children does not contain all the essential nutrients such as vitamins and minerals.
- MNPs are part of the Home Fortification strategy to increase the micronutrient status of children in Kenya. National Micronutrient Deficiency Control Council (NMDCC) has provided guidance on use of MNPs for children 6-23 months as indicated in the table below.
- MNPs will be delivered through the health system initially for free while other avenues are explored and agreed upon. A phased approach will be used to distribute MNPs countywide due to funding limitations.

<table>
<thead>
<tr>
<th>Target group</th>
<th>Infants and children 6–23 months of age, starting at the same time as complementary foods are introduced into the diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>One sachet after every 3 days and no more than one per day</td>
</tr>
<tr>
<td>Duration and time interval for distribution</td>
<td>Every month as children attend Child Health clinic</td>
</tr>
<tr>
<td>Composition per sachet</td>
<td>15 micronutrients including iron, vitamin A and zinc among others</td>
</tr>
</tbody>
</table>
Accelerating anaemia reduction through Iron and Folic Acid Supplementation for Pregnant Women

Maternal deaths in Kenya have been on the increase as evidenced in the last two demographic health surveys; 488 maternal deaths per 100,000 live births were recorded in 2008, compared with 414 deaths per 100,000 live births in 2003 (KDHS 2008). Anaemia is a leading indirect cause of these high maternal deaths (Kenya Service Provision Assessment, 2010).

♦ Half of pregnant and non pregnant women are anaemic (Micronutrient Survey 1999). Micronutrient survey of 2011 will provide more recent results on micronutrient situation.
♦ Risk factors: low intake of haeme iron from animal sources, consumption of staples with low bio-available iron, inadequate intake of foods that enhance iron absorption from the diet such as vitamin C, consumption of foods such as tea that inhibit iron absorption, parasitic infection, malaria, chronic infections, heavy blood loss and culturally-restricted food intake.
♦ Effects of anaemia: risk of maternal and peri-natal mortality, pre-term delivery, low birth weight (LBW) and foetal impairment.
♦ The supplementation strategy has experienced difficulties like low coverage (2.5%) and stock outs whereby only 41% of health facilities had iron tablets (Kenya Service Provision Assessment Report 2010).
♦ MOPHS through the Division of Nutrition has embarked on a robust 5-year plan (2012-2017) aimed at accelerating reduction of anaemia among pregnant women through strengthening Iron and Folic Acid (IFA) supplementation.

IFA Supplementation Action Plan: Focus Areas and Expected Outcomes

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Issue Addressed</th>
<th>Expected Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies and legislation</td>
<td>Advocacy to prioritize nutrition</td>
<td>Enactment of Food and Nutrition Security Policy, Micronutrient Strategy and technical guidelines</td>
</tr>
<tr>
<td>Capacity development and service delivery</td>
<td>Health workers knowledge, attitudes and practices on IFA interventions</td>
<td>Improved quality of IFA supplementation service delivery at all levels</td>
</tr>
<tr>
<td>Advocacy, partnership and communication</td>
<td>Behaviour change communication for demand creation</td>
<td>Increased awareness and support for IFA interventions</td>
</tr>
<tr>
<td>IFA commodities and supply chain management</td>
<td>Forecasting, procurement, distribution and storage mechanisms</td>
<td>Effective and efficient supply chain management system</td>
</tr>
<tr>
<td>Monitoring, evaluation and research</td>
<td>Need to strengthen M&amp;E at all levels from health facility to national level.</td>
<td>Quality and timely implementation of evidence-based IFA interventions</td>
</tr>
</tbody>
</table>

Influencing the Influencers: Engagement of Men and Grandmothers to improve maternal diets and feeding practices of infants and young children

Background information
♦ PATH, APHIAPlus and the Ministry of Public Health and Sanitation are implementing a public health evaluation on the effect of engaging grandmothers and men on maternal diets and feeding practices of children 6 – 24 months in Western province.

Methodology
♦ Evaluation design: Quasi experimental study design involving two study sites, separately for grandmothers and fathers (Viguru and Kitagwa sub-locations - Vihiga county) and a comparison area (Mambai sub-location in Sabatia county).
♦ Duration: 2010 – August 2012
♦ Data collection methods: Formative assessment, baseline survey, interventions with grandmothers and men and an endline survey projected for August 2012.
♦ Interventions: Family centered approach engaging grandmothers and men in local dialogue groups as well as community activities focused on improving their support for mothers to adopt optimal maternal nutrition and infant and young child feeding practices. The study is also validating a complementary feeding monitoring tool developed by PATH’s IYCN project and already pretested in the country.

Results
♦ A progress report was shared during the World Breastfeeding day in August 2012.
♦ Data analysis is currently ongoing and findings are expected by November 2012.
Admission of severely malnourished under 5 children indicate nutrition situation is still fragile in Kenya

⇒ Kenya is one of the countries that suffered the effects of a devastating drought in the Horn of Africa in 2011. The number of under-five severely malnourished children treated in 2011 reached 62,000. This was three times the number reached in each of the previous two years as illustrated in the figure below. Mandera, Wajir and Turkana accounted for 56% of total admissions in 2011. The above counties experienced high levels of food insecurity in 2011.

⇒ Admission trends in first half of 2012 are slightly below admissions during the same period in 2011 as result of scale up of nutrition interventions and better short rains performance in some districts. Among the 10 nutrition surveys validated in 2012, two (Mandera West and Mandera Central) have shown significant reduction in acute malnutrition rates while 4 (Wajir South, Makueni, West Pokot and Isiolo) have indicated no significant difference with 2011 results. The nutrition situation is therefore still fragile requiring sustained response through the implementation of High Impact Nutrition Intervention (HiNi) and other multisectoral interventions.

Division of Nutrition responds to the rising Non Communicable Diseases (NCDs).

kenya is increasingly facing the emergence of diet related Non Communicable Diseases (NCDs) especially in the urban areas as a result of changes in lifestyle patterns that are characterized by physical inactivity and excessive intakes of diets that are highly refined, sugars, fats and salt. Currently, 28% of all deaths documented in Kenya are as a result of NCDs such as cardiovascular diseases, type 2 diabetes and certain types of cancers. The newly established Healthy Diets and Wellness Program is set to reverse the rise of NCDs. The program is focussing on strategies that promote the intake of healthy and optimal diets as well as physical activity using the lifecycle cohorts’ approach.

<table>
<thead>
<tr>
<th>Preschool children</th>
<th>Overweight (OV) % or Obesity (OB) %?</th>
</tr>
</thead>
<tbody>
<tr>
<td>KDHS, 2008/09</td>
<td>18</td>
</tr>
<tr>
<td>OV and OB- KDHS, 2003</td>
<td>23</td>
</tr>
<tr>
<td>OV and OB - KDHS, 2008/09</td>
<td>25</td>
</tr>
<tr>
<td>OV and OB (rural) 2008/09</td>
<td>20.1</td>
</tr>
<tr>
<td>OV and OB (urban) 2008/09</td>
<td>39.8</td>
</tr>
<tr>
<td>OV and OB KDHS, 2008/09 (Nairobi)</td>
<td>41.4</td>
</tr>
</tbody>
</table>

**Invitation to submit publication materials to the Kenya Nutrition Bulletin**

The nutrition bulletin is a quarterly publication of the Division of Nutrition, Ministry of Public Health and Sanitation.

**The deadline for submissions for next bulletin is Sep 15, 2012.**

To send your contributions, contact:

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A long serving Nutritionist makes the difference in Tana River

Flora Abiyo graduated from Karen college of Nutrition in June 1988 with a certificate in nutrition, and has been working as a Nutritionist at Hola District hospital for the last 24 years, with 8 of those serving as an acting District Nutrition Officer.

In 2007, Flora, the Nursing Officer and Public Health Officer were trained on Infant and Young Child Nutrition (IYCN) and Baby Friendly Hospital Initiative (BFHI) as Trainers of Trainers. With support of partners such as National Drought Management Authority, APHIA and International Medical Corps, 137 Mother to Mother Support Groups (M2MSG) of 1,851 mothers and BFHI committee were formed. Over 60 community health workers have since been trained and IYCN activities implemented. Achievements include:

♦ BFHI score of 89.5% at Hola District hospital (Provincial assessment team report 2011).
♦ Increased deliveries (90% of expected deliveries) as reported by Pumwani model health facility in Hola District.
♦ Exclusive breastfeeding rate of 67% against national average of 32% (Survey report 2012).

BSFP impact monitoring

♦ WFP coordinated the BSFP 2011/2012 closeout review workshop on 25th and 26th June 2012.
♦ CDC made a presentation on cohort monitoring which was conducted in Turkana and Wajir counties.
♦ The final report will be shared by WFP later in the year.