



Ministry of Health



IFAS

IRON AND FOLIC ACID
SUPPLEMENTATION
FOR PREGNANT WOMEN

**Participant's Manual for
HEALTHCARE PROVIDERS**

Participant's Manual for HEALTHCARE PROVIDERS October 2013

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Enquiries and Feedback:
Direct all correspondence to:
Head of Nutrition unit
Division of Nutrition
Ministry of Health
P.O. BOX 30016 GPO
Nairobi, 00100, Kenya

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These manuals have been developed as part of a process of strengthening service delivery of IFAS, which is one of the components within focused antenatal care [FANC]. This component is critical in accelerating reduction of anaemia among pregnant women in the country.

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Acronyms and Abbreviations

AMC	Average Monthly Consumption
ANC	Antenatal Clinic
BCC	Behaviour Change and Communication
BMI	Body Mass Index
CHWs	Community Health Workers
CME	Continuous Medical Education
D4D	Data from decision-making
DHIS	District Health Information System
DOT	Directly Observed Therapy
FANC	Focused Antenatal clinic
GI	Gastro-intestinal
IFA	Iron and Folic Acid
IFAS	Iron and Folic Acid Supplementation
IPTp-SP	Intermittent Preventive Treatment of Malaria in Pregnancy using Sulfadoxine - Pyrimethamine
KDHS	Kenya Demographic Health Survey
KEML	Kenya Essential Medicines List
KEMSA	Kenya Medical Supplies Agency
KNMS	Kenya National Micronutrient Survey
KSPA	Kenya Service Provision Assessment
MCH	Maternal and Child Health
MOH	Ministry of Health
MUAC	Mid-upper-arm circumference
NTD	Neural Tube Defects
OJT	On-the-job training
PNC	Post natal Care
SoH	Stock on Hand
WHO	World Health Organization

DAY ONE PROGRAMME

Time	Activity
Day 1:	
8:00- 8:30 am	Registration
8.30 - 9.00 am	Welcome remarks and Introductions Roles, Norms & Expectations
9.00 - 9.10 am	Pre-test assessment
9.10 - 10.30 am	Course Overview: Objectives, Program & Workshop Approach
10.30 - 11:00 am	Break
11:00 - 12.00 pm	Overview of IFAS in Kenya & Field Experiences on IFAS Implementation
12.00 - 1.00 pm	Introduction to Teach-back Methodology
1:00 - 2:00pm	Lunch
2:00 - 4:30 pm	Teach back preparations
4.30 - 5.00 pm	Tea Break & Departure

COURSE INTRODUCTION

Handout 1.1 Pretest Assessment

Indicate if the following statements are True (T) or False (F).

1. The 1,000 days between a woman's pregnancy and her child's 2 nd birthday do not offer a critical window of opportunity to shape healthier and more prosperous futures	
2. Folic acid requirements increase during pregnancy in response to the demands of maternal production of red blood cells, fetal placental growth, and most important, for the prevention of NTDs.	
3. Pregnant women need extra and varied food each day (one or more servings of the staple food) in addition to 3 extra meals to provide energy and nutrition for her and the growing baby	
4. One key benefit of iron and folic acid supplementation for pregnant women is - reduced risk of having low birth weight babies	
5. The new Kenya policy on combined iron and folic acid supplementation for pregnant mothers is not different from the previous policy guidelines	
6. Eating of vitamin-C rich foods like tomatoes and citrus fruits is an inhibiting factor for iron absorption in the body	
7. Managing side effects of taking iron supplements is not one of the key counseling messages that must be given to pregnant women	
8. Interpersonal communication, mass media and the community are some of the effective behaviour change communications channels identified to support adoption of iron folate supplementation	
9. Stocks-outs, accumulation of excess stocks, deterioration and expiry are all consequences of poor inventory management of IFAS commodities	
10. Stock-on hand, consumption, losses, adjustments are the essential data elements for assessing stock status of IFAS commodities	
11. Monitoring and evaluation is the routine tracking of program activities using indicators to determine whether a program has achieved its short-term goals and objectives in the longer term	
12. One of the benefits of supportive supervision is ensuring uniformity to set standards, identifying problems and solving them in a timely manner	

Handout 1.2 Course Objectives

The overall objective of this training is to improve IFAS accessibility and utilization rates among pregnant women in Kenya.

The specific objectives of the course, targeted at healthcare providers at different levels, are to:

- Increase knowledge on nutrition during pregnancy and the strategies of addressing anaemia during pregnancy;
- Improve knowledge on IFAS and the Kenya IFAS policy;
- Strengthen counseling skills on IFAS;
- Sensitize on how to use the IFAS BCC job aids;
- Improve skills on proper quantification and stock management of IFAS commodities;
- Improve monitoring and reporting for IFAS at all levels;
- To strengthen the supervision and action planning skills of the health workers.

Handout 1.3 Program Schedule

Session	Topic	Duration
Course Introduction		
	Welcome and introductions	25 minutes
	Pre-test assessment	10 minutes
	Course Overview: Objectives, program, workshop approach	15 minutes
	Introduction to Teach-back Methodology	45 minutes
	Overview of IFAS in Kenya and field experiences on IFAS implementation	60 minutes
Module 1 : Maternal Nutrition during Pregnancy		
	Overview of Maternal Nutrition	20 minutes
	Nutrition requirements during pregnancy	30 minutes
	Maternal Anaemia	45 minutes
Module 2 : Nutrition Interventions to address Anaemia in Pregnancy		
Session 2.1	Iron and Folic Acid Supplementation <ul style="list-style-type: none"> • Benefits of IFAS • National Policy on IFAS • Strategies for Effective IFAS Delivery within ANC 	60 minutes
Session 2.2	Increased Dietary Iron Intake during Pregnancy <ul style="list-style-type: none"> • Locally Available Food Sources of Iron • Enhancing and Inhibiting Factors for Iron Absorption • Sample Pregnant Woman's Diet Plan for Increased Iron Intake • Integrated Strategies for Reducing Anaemia in Pregnancy 	90 minutes
Session 2.3	Counselling on Key IFAS Messages <ul style="list-style-type: none"> • Definition of Counselling and Description of Counselling skills • Key Considerations when Conducting a Counselling Session • Key IFAS Education and Counselling Messages 	105 minutes
Module 3: Communication Strategies for IFAS		
	<ul style="list-style-type: none"> • Define Behaviour Change and Communication • Behaviour change communication channels for IFAS • Use of Different IFAS Materials for HCP, CHWs and Pregnant Mothers 	90 minutes
Module 4 : IFAS Commodity Management at Health Facilities		
	<ul style="list-style-type: none"> • Assessing Stock Status • Importance of Quantification • Quantification of IFAS using the consumption based method 	95 minutes
Module 5 : Monitoring and Evaluation		
	<ul style="list-style-type: none"> • Definition of Monitoring & Evaluation • Importance of Monitoring and Evaluation • IFAS Routine Indicators and their Key Data Sources • Support supervision • Action Planning 	120 minutes
	Post test	10 minutes

Handout 1.4 Definition and importance of Teach-back Methodology

Definition of Teach back

It is an integrated approach that blends learning training skills with teaching course content. Participants have 2 roles: Course participant and Trainers

Importance of Teach back

- It is based on adult learning principles such as:
 - Adults want training that is participatory
 - Gaining knowledge and skills applied to their jobs
 - Receiving positive reinforcement and feedback about areas of weakness
 - Sharing their knowledge and experiences
- It is structured to follow an experiential learning cycle
- It uses structured learning activities like presentations, group discussions, demonstrations, role plays, practical exercises, exercises, small groups
- Participants experience the same activities they will carry out in the roll out training and in the field

Benefits of teach-back

It provides participants with the opportunity to:

- Develop/refresh training skills
- Practice teach back training in a safe and supportive environment
- Receive feedback on training skills
- Enhance your own training style
- Observe other people's training styles

Handout 1.5 Teach-back Feedback Process

Steps to the teach back methodology

- You gain skills in training adults
- You practice teaching a particular course content
- You receive feedback on your performance
- Trainer/participant provides a self- assessment using the presentation checklist (Refer to the Handout--)
- Another trainer/and or participant provides feedback on skills to each other

Key points to note in creating a safe environment for teach back

- Participants can learn from each other
- Everyone has their own training style
- Provide positive and supportive feedback – Not critical
- Everybody has a role in creating a positive and supportive environment
- It takes eight to nine positive comments to undo the damage of one negative comment
- Training materials are provided to participants
- You are given time to prepare for teach-back

The most effective feedback should be:

- Honest, but gentle
- Positive
- Encouraging
- Build on each participant's strengths
- Focus on each participant's skills and abilities
- Identify areas that can be improved

Trainers should do the following:

- Offer praise before sharing constructive suggestions for improvement. They should direct comments toward behaviors that the participant has some control over changing.
- Begin comments with the first person by saying "I think" or "I saw"
- Use "I wish" statement for areas that can be improved

When receiving feedback:

- Ask for specific and descriptive feedback
- Ask clarifying questions, accept the feedback
- Neither defend nor justify the behaviour
- Listen carefully and reflect on the feedback
- Use relevant suggestions to improve on performance
- Feedback is offered as suggestions so it can be discussed but not really argued about

Examples of feedback

- How **NOT** to give feedback: *"I didn't like the way you lectured the participants. You stood behind the podium and your session was not interactive"*

Same feedback in a positive way:

- 'I liked the way you lectured and shared your information.
- I wish you had not stood behind the podium and that you had engaged the participants.
- My suggestion is that you don't stand behind the podium, try to move around the podium and utilize that as a backdrop.
- Also, I wish that you would utilize open-ended questions. This allows the participants to give feedback and to also share their experiences.

Tips for Using a Flip Chart

- Use wide-tipped pens or markers
- Print in large block letters
- Use different colored pens to provide contrast
- Use headings, boxes, cartoons and borders to improve the appearance of the page
- Use bullets (•) to delineate items on the page
- Leave plenty of white space(6 lines)
- Avoid putting too much information on one page
- When pages are prepared in advance, use every other page
- Hang flipchart pages with masking tape
- To hide a portion of the page, fold up the lower portion of the page and tape it
- Face the participants, not the flipchart, while talking

Handout 1.6 Presentation Checklist

Instructions on use

- This checklist is used to assess the participant/trainer performance when facilitating a session
- The assessment is done based on delivery, content, body language and use of visual aids
- The participant/trainer first provides a self- assessment using the presentation checklist
- Another participant provides assessment using the presentation checklist
- Finally the trainer provides the feedback on performance as well
- The total time allocation for the feedback should not be more than 5 minutes per participant

Presenter: _____ Evaluator: _____ Date: _____

Put an X where you agree with the statement.

Delivery		Content	
<input type="radio"/> The facilitator greeted the audience warmly.		<input type="radio"/> The opening got my attention.	
<input type="radio"/> I could hear the facilitator.		<input type="radio"/> The introduction told me what to expect from the session.	
<input type="radio"/> I could understand the facilitator.		<input type="radio"/> The purpose of the talk was clear.	
<input type="radio"/> The talk was delivered with warmth and feeling.		<input type="radio"/> The talk was designed in a logical way from beginning to middle and end.	
<input type="radio"/> The talk was delivered with personal conviction from both the mind and heart.		<input type="radio"/> The session was well-suited to the audience.	
<input type="radio"/> The presentation seemed practiced.		<input type="radio"/> The content was clear and well understand	
<input type="radio"/> The facilitator involved the audience.		<input type="radio"/> The facilitator summarized the main points before finishing.	
<input type="radio"/> The facilitator handled questions and comments with calm courtesy.		<input type="radio"/> The facilitator let us know when the talk was over.	
<input type="radio"/> The session contained effective examples and illustrations.		<input type="radio"/> The session ended on a strong final line or idea.	
<input type="radio"/> The facilitator defined technical terms well.		<input type="radio"/> The facilitator ended on time.	
Body Language		Visual Aids	
<input type="radio"/> The facilitator stood during the presentation.		<input type="radio"/> The facilitator used visual aids.	
<input type="radio"/> The facilitator had good eye contact with the audience.		<input type="radio"/> I could read the material from where I was sitting.	
<input type="radio"/> The facilitator showed no distracting movements or gestures.		<input type="radio"/> The visual aids got the point across in a clear and simple way.	
<input type="radio"/> The facilitator smiled.		<input type="radio"/> The facilitator did not block the screen or flipchart.	
<input type="radio"/> The facilitator used his/her hands to help communicate ideas visually.		<input type="radio"/> The facilitator talked to the audience rather than to the screen or flipchart.	
		<input type="radio"/> The visual aids used key words rather than sentences.	

Any other comments

Handout 1.7 Teach-back Program Schedule

SESSIONS	TOPICS	TIME	NAMES	SLOTS
DAY 2				
Module 1: Nutrition During Pregnancy	<ul style="list-style-type: none"> Explain the importance of maternal nutrition during pregnancy Describe the nutrient requirements during pregnancy Describe causes, symptoms and effects of anaemia during pregnancy 	1hr 40min (100 min)	1	8.30 – 10.10am 10.10 – 10.20am (feedback) 10.20 – 10.35am (tea break)
Module 2: Nutrition Interventions to Address Anaemia in Pregnancy				
Session 2.1 – Iron and Folic Acid Supplementation	<ul style="list-style-type: none"> Describe the benefits of IFAS during pregnancy Describe the national policy on IFAS for pregnant women Describe the experiences in IFAS delivery within ANC facilities 	1 hour (60min)	2	10.35 – 11.35pm 11.35 – 11.45pm (feedback)
Session 2.2 – Increased Dietary Iron Intake during Pregnancy	<ul style="list-style-type: none"> Describe key food sources of iron Describe enhancing and inhibiting factors for iron absorption Develop a diet plan for increased iron intake by a pregnant woman 	1 hr 30min (90min)	3	11.45 – 1.15pm 1.15 – 1.25pm (feedback) 1.25 – 2.25pm (lunch break)
Session 2.3 – Counselling on Key IFAS Messages	<ul style="list-style-type: none"> Define counseling and list the skills needed for effective counseling List key considerations for planning a counseling session Demonstrate how to counsel a pregnant woman on key IFAS messages 	1hr 45min (105min)	4	2.25 – 4.10pm 4.10 – 4.20pm (feedback)
DAY 3				
Module 3: Behaviour Change Communication Strategies for IFAS	<ul style="list-style-type: none"> Define behaviour change communication (BCC) Identify relevant BCC channels for IFAS Demonstrate understanding on use of the different IFAS materials 	1hr 30min (90min)	5	8.30 – 10.00am 10.00 – 10.10am (feedback) 10.10 – 10.25am (tea break)

SESSIONS	TOPICS	TIME	NAMES	SLOTS
Module 4: IFAS Commodity Management at Health Facilities	<ul style="list-style-type: none"> Define Quantification and related terms State the purpose of quantification Quantify the IFAS needs for a health facility using the Consumption method 	1hr 35min (95min)	6	10.25 – 12.00pm 12.00 – 12.10pm (feedback)
Module 5: Monitoring and Evaluation	<ul style="list-style-type: none"> Describe the importance of monitoring and evaluation for IFAS Identify routine DHIS data sources for IFAS indicators Practice use of existing MOH IFAS data collection and reporting tools Describe support supervision checklist for IFAS Develop an action plan for IFAS activities at various levels 	2 hours (120min)	7	12.10 – 1.10pm 1.10 – 2.10pm (lunch break) 2.10 – 3.10pm (session) 3.10 – 3.20pm (feedback)
Conclusion	<ul style="list-style-type: none"> Briefly discuss the way forward on implementation of action plans developed Review knowledge level acquired through a post-test assessment Give feedback on overall course evaluation 	30 min		3.20 – 3.50pm

Handout 1.8 Background of IFAS in Kenya

- According to the World Health Organization (WHO), it is estimated that 41.8% of pregnant women worldwide are anaemic. At least half of this anaemia burden is assumed to be due to iron deficiency with the rest due to conditions such as folate, vitamin B12 or vitamin A deficiency, chronic inflammation, parasitic infections and inherited disorders.
- In Kenya, the most current micronutrient survey in the country indicated the prevalence of anaemia among pregnant women to be high at 55.1% and 46.4% among non-pregnant women and 70% among pregnant women. Anaemia is a leading indirect cause of high maternal and neonatal deaths

According to the KDHS 2008-09, maternal deaths increased from 414/100,000 to 488/100,000. The Neonatal deaths decreased marginally from 33/1000 to 31/1000 live births. The Ministry of Health intends to decrease both maternal mortality and neonatal deaths to 147/100,000 and 11/1000 respectively by 2015.

Importance of IFAS

- According to WHO, daily IFAS is recommended as part of the ante natal care to reduce the risk of low birth weight, maternal anaemia, iron deficiency and neural tube defects commonly referred to as NTDs.
- WHO Guidelines recommends that all Pregnant Women should receive Iron and Folic Acid Supplementation (IFAS) regardless of anaemia status in countries where anaemia is >40%.
- IFA formulations: 60mg iron /400Qg folic acid should be given as a combined pill throughout pregnancy in accordance with WHO 2012
- Iron and Folic Acid Supplementation (IFAS) has been shown to reduce LBW which is primary cause of neonatal deaths. Folic Acid supplementation with 400Qg reduces incidence of neural-tube birth defects (NTDS) if taken before conception and within 28 days of pregnancy. Similarly IFAS sustains strength during pregnancy and ensures enough blood stores in the body during and after delivery
- IFAS is a component within Focused Antenatal Care (FANC)
- IFA Guidelines are included in the Kenya National Technical Guidelines for Micronutrient Deficiency , Food Security and Nutrition Policy 2012-2017 (FSNP/ FSNS) , National nutrition Action plan (2012-2017) and in the draft National Micronutrient Strategy 2012-2017).

Reasons for sub-optimal coverage and low compliance rates

- Low Antenatal clinic (ANC) attendance :97% attending at least once, 47% PW attend 4 ANC, 15% attend in 1st trimester [KDHS 2008-09]
- IFAS shortages: Kenya Service Provision Assessment (KSPA) 2010 showed that 41% facilities had iron while 74% had folic
- Low adherence and compliance: 2.5% women take >90 supplements. 30% do not take at all (KDHS 2008/9)
- KSPA indicated low pre- and in-service training on FANC & compromised quality of counselling at ANC /PNC
- Side effects of iron supplements like nausea, and vomiting
- Health workers insist on screening Pregnant Women for anaemia before IFA supplementation. Only 36% facilities have capacity to test anaemia (KSPA)
- Low health provider capacity - (Low Knowledge and awareness on IFAS and inadequate counselling materials, etc.

Kenya Strategies for Improving IFAS coverage and Compliance Rates

The Ministry of Health, in collaboration with partners, developed a multi-year plan titled 'Accelerating Reduction of Maternal Anaemia through IFAS supplementation of Pregnant Women [2012-2017]. Through this plan, the ministry aims to increase IFA coverage to 80% and to increase IFAS utilization from 2.5% to 30% (>90days) by end of 2017. The plan has five strategic components that need strengthening and they include: a) capacity development and service delivery strengthening; b) monitoring, evaluation and research; c) IFA commodities and supply chain management; and d) advocacy, partnership and behavior change communication (BCC). So far, the planned activities that have taken place include:

- A formative assessment aimed at understanding the underlying reasons, especially socio-cultural, for sub-optimal IFAS coverage and low utilization among targeted population in 2 districts.
- A national baseline KAP survey of key IFAS indicators, whose preliminary results are currently under review.
- Revision, printing and dissemination of the Kenya Policy on IFAS for pregnant women.
- Inclusion of the IFAS commodity in the KEML and subsequent procurement of both separate and combined IFAS formulations.
- Development of a national IFAS BCC strategy [2012-2017].
- Development of key IFAS messages and materials targeted at different audiences [health-workers, pregnant women, CHWs, and other influencers].
- Preliminary activities in preparation for mass media communication on IFAS targeting key audiences through multiple channels.

MODULE 1: MATERNAL NUTRITION DURING PREGNANCY

Handout 2.1 Recommended Dietary Allowances and Adequate Intakes for Women

Nutrition Requirements during Pregnancy

Fetal growth and pregnancy demand additional nutrients, and these requirements are defined in the new dietary reference intakes (DRIs), which include adequate intakes (AIs) and RDIs. See table 1 below.

Nutrient	Non Pregnant 14 - 18 yr. of Age	Non Pregnant 19 - 50 yr. of Age	Pregnant
Energy(kcal)	2368	2403	+10 - 1 st trimester +340 - 2 nd trimester +452 - 3 rd trimester
Protein(g)	46	46	71
Vitamin A(mcg RE)	700	700	770(> 18yr.) 750(≤ 18yr.)
Vitamin D (mcg)	5	5	5
Vitamin E (mg)	8	15	15
Thiamin(mg)	1	1.1	1.4
Riboflavin(mg)	1	1.1	1.4
Niacin(mg)	14	14	18
Vitamin B ₆ (mcg)	1.2	1.3	1.9
Folate (mcg)*	400	400	600
Vitamin B ₁₂ (mcg)	2.4	2.4	2.6
Biotin (mcg)	25	30	30
Pantothenic acid (mcg)	5	5	6
Choline (mg)	400	425	450
Calcium(mg)	1300	1000	1000(> 18yr.) 1300(≤ 18yr.)
Phosphorus(mg)	1250	700	700(> 18yr.) 1250(≤ 18yr.)
Magnesium(mg)	360	310	350(> 18yr.) 400(≤ 18yr.)
Fluoride(mg)	3	3	3
Iron(mg)	15	18	27
Zinc(mg)	9	8	11(> 18yr.) 12(≤ 18yr.)
Iodine(mcg)	150	150	220
Selenium(mcg)	55	55	60

* This is synthetic folic acid from fortified foods or supplements

Source: Institute of Medicine, Food and Nutrition board, National Academy of Sciences, *Dietary reference intakes*, Washington DC 2001

Handout 2.2 Importance of Nutrients during Pregnancy

Nutrient	Function	Effect on pregnancy outcome
Energy	<ul style="list-style-type: none"> Additional energy is required during pregnancy and fetal growth. Metabolism increases by 15% in pregnancy. Energy for pregnant female are same as for non-pregnant female in the first trimester, but then increase an additional 340 - 360 kcal/day during second trimester and another 112kcal/day in the third trimester 	<p>Under weight: higher risk of spontaneous abortion, stillbirths, neonatal death, congenital malformations, perinatal mortality and low birth weight</p> <p>Overweight & obese: increased risk of intrauterine fetal demise or miscarriage, or delivery of very preterm (≤ 32weeks) infant or infant with cardiac defect and macrosomia (birth weight greater than 4000g). obese women have two fold increased risk of delivering an infant with NTDs</p>
Protein	<ul style="list-style-type: none"> There is an additional protein requirement for a pregnant woman to support the synthesis of maternal fetal tissues, but magnitude is uncertain. Protein requirement increases throughout gestation and is maximum during third trimester. 0.66g/kg/day for first half of pregnancy 71g/day for second half of pregnancy For each additional fetus another 25g/day of protein 	Protein deficiency during pregnancy has adverse consequences, but limited intakes of protein and energy usually occur together making it difficult to separate the effects of energy deficiency from those of protein deficiency
Carbohydrates	135 - 175g/day is recommended amount to provide enough calories in the diet and prevent ketosis and maintain appropriate blood glucose during pregnancy	
Folic acid	<ul style="list-style-type: none"> Folic acid requirements increase during pregnancy in response to the demands of maternal erythropoiesis and fetal placental growth, and most important, for the prevention of NTDs. RDA for folic acid in pregnancy is 600mcg IOM recommends that 400mcg of the 600mcg/day be provided by folate fortified foods or supplements because it is better absorbed 	<ul style="list-style-type: none"> Folic acid deficiency is marked by reduced rate of DNA synthesis and mitotic activity in individual cells NTDs
Vitamin B₆	<ul style="list-style-type: none"> RDA during pregnancy is 1.9mg/day 1.9mg/day provides for increased needs associated with synthesis of nonessential amino acids and vitamin B dependent niacin synthesis from tryptophan 	
Ascorbic acid	<ul style="list-style-type: none"> RDA during pregnancy 80 -85mg/day 	<ul style="list-style-type: none"> Few studies have suggested an association between low plasma levels of vitamin C and preeclampsia
Vitamin A	<ul style="list-style-type: none"> RDA is 770mcg of retinol equivalents or 2564 IU Vitamin A concentrations correlate with birth weight, head circumference, length and gestation duration 	<ul style="list-style-type: none"> Women who are taking vitamin A analog, acutance for acne and become pregnant are at extremely high risk of fetal anomalies

Vitamin D	<ul style="list-style-type: none"> • Adequate intake is 5mcg/day • Low vitamin D levels during pregnancy predispose to preeclampsia 	<ul style="list-style-type: none"> • Maternal vitamin D deficiency, is associated with neonatal hypocalcaemia and hypoplasia • Fetal bone mineralization is affected by vitamin D deficiency
Calcium	<ul style="list-style-type: none"> • Approximately 30g of calcium is accumulated during pregnancy, almost all of it in the fetal skeleton • Most fetal accretion occurs during last trimester of pregnancy an average of 300mg/day • Allowable intakes during pregnancy is 1000mg/day for women > 19 yrs. 	<ul style="list-style-type: none"> • Multiparous women with poor calcium intake can develop osteomalacia
Iron	<ul style="list-style-type: none"> • A marked increase in maternal blood supply during pregnancy greatly increases demand for iron • A pregnant woman must consume an additional 700 to 800 mg of iron throughout pregnancy • 500mg for hematopoiesis and 250 – 300mg for fetal and placental tissues • Most accretion occurs after the 20th week of gestation when maternal demands are greatest • RDA for iron is 27 mg/day • It is recommended that all pregnant women, even those eating a balanced diet should take iron supplements 	<ul style="list-style-type: none"> • Rarely do women become pregnant with sufficient iron stores to cover the physiologic needs of pregnancy • Iron supplementation is necessary to prevent iron deficiency anemia • Maternal anemia is defined by a hematocrit less than 32% and hemoglobin less than 11g/dl • An anemic woman poorly tolerates hemorrhage with delivery which subsequently increases cardiac stress • An anemic woman is prone to infection during child birth or period
Zinc	<ul style="list-style-type: none"> • RDA for zinc is 11-13mg during pregnancy 	<ul style="list-style-type: none"> • Women in developing countries with low plasma zinc concentrations are 2.5 times more at risk for delivering infants with LBW
Sodium	<ul style="list-style-type: none"> • Hormonal environment of pregnancy affects sodium metabolism • Increased maternal blood volume leads to increased glomerular filtration • Consumption of iodized salt should remain above 2-3g/day 	<ul style="list-style-type: none"> • Restriction of dietary sodium or use of diuretics in pregnant women is not recommended
Iodine	<ul style="list-style-type: none"> • RDA for iodine during pregnancy is 220mcg/day • Iodine is important for thyroxine hormone which is critical in metabolism of macronutrients 	<p>Maternal iodine deficiency has been recognized as a cause of neonatal cretinism</p>

Handout 2.3 Recommendations for Weight Gain during Pregnancy

Table 3 Recommendations for total rate of weight gain during pregnancy by pre-pregnancy BMI

Pre-pregnancy BMI	BMI (kg/m ²)	Total weight gain (kg)	Rates of weight gain 2 nd and 3 rd trimester (Mean range in kg/wk.)
Underweight	< 18.5	12 - 18	0.45 (0.45 - 0.60)
Normal	18.5 - 24.9	11 - 16	0.45 (0.36 - 0.45)
overweight	25.0 - 29.9	7 - 11	0.27(0.23 - 0.32)
Obese (includes all classes)	≥ 30	5 - 9	0.23 (0.18 - 0.27)

Source: IOM 2009 Weight Gain during pregnancy: reexamining the guidelines

Handout 2.4 Maternal Anaemia

Definition of Maternal Anaemia

It is estimated that 41.8% of pregnant women worldwide are anemic (WHO, 2008). At least half of this burden is assumed to be due to iron deficiency with the rest due to conditions such as folate, vitamin B₁₂ or vitamin A deficiency, chronic inflammation, parasitic infections and inherited disorders. A pregnant woman is considered to be anemic if her hemoglobin concentration during the first and third trimester of gestation is lower than 11 g/dL, at sea level; in the second trimester of pregnancy, the hemoglobin concentration usually decreases by approximately 5 g/L (WHO, 2001). When anemia is accompanied by an indication of iron deficiency (e.g. low ferritin levels), it is referred as iron deficiency anemia.

Transfer of iron from the mother to the fetus is supported by a substantial increase in maternal iron absorption during pregnancy and is regulated by the placenta. Serum ferritin usually falls markedly between 12 and 25 week of gestation, probably as a result of iron utilization for expansion of the maternal red blood cell mass. Most iron transfer to the fetus occurs after week 30 of gestation, which corresponds to the time of peak efficiency of maternal iron absorption.

Effects of Maternal Anemia

- Increased risk of perinatal mortality
- Maternal iron deficiency early in pregnancy can result in low birth weight
- Maternal anemia can cause preterm delivery
- Effect of maternal iron deficiency on infant health; preterm infants are likely to have more perinatal complications, to be growth-stunted, and to have low stores of iron and other nutrients.

MODULE 2: NUTRITION INTERVENTIONS TO ADDRESS ANAEMIA IN PREGNANCY

SESSION 2.1: IRON AND FOLIC ACID SUPPLEMENTATION

Handout 3.1: Benefits of Iron and Folic Acid Supplements for Pregnant Women

Iron Supplements	Folic Acid Supplements
Reduces risk of maternal anaemia	Reduces risk of delivering infant with neural tube defects (NTDs)*
Reduces risk of having low birth weight babies	Helps in absorption of iron**
Reduces risk of iron deficiency	Prevents microcytic anaemia caused by folic acid deficiency
Ensures sufficient blood stores in the body during and after delivery	
Sustains strength during pregnancy	

** If folic acid supplementation is started after the first 28 days of pregnancy, it will not help prevent birth defects.*

*** 400Qg (0.4mg) of folic acid per day produces an optimal haemoglobin response in pregnant women.*

Additional Notes on Benefits of Combined Iron and Folic Acid Supplements

The new combined IFAS is a single tablet which contains both 60mg Iron (equivalent to 200mg ferrous sulphate) and 400Qg (0.4mg) Folic Acid. It is procured specifically for use as a daily supplement for pregnant women attending ANC facilities.

The main benefits of the combined IFAS

1. The pregnant woman will consume fewer tablets compared to the separate iron and folic acid supplements (daily intake of 1 instead of 2 tablets). This will help improve adherence to taking complete dose of the supplements
2. In some cases, the tablet available at the facilities is sugar coated, and therefore tastes better

Handout 3.2(a): Kenya Policy Guideline on combined IFAS for Pregnant Mothers

The IFAS policy provides guidelines on the purpose of IFAS supplementation, frequency, dosage, duration, administration, possible side effects and their management.



NATIONAL POLICY GUIDELINE ON COMBINED IRON AND FOLIC ACID (IFA) SUPPLEMENTATION FOR PREGNANT MOTHERS IN KENYA

Purpose of IFA supplementation

To reduce maternal anaemia, risks of low birth weight, neural tube defects in pregnancy and improve overall pregnancy outcomes

Supplementation Composition of Combined tablet/capsule	Iron - 60mg Folic acid : 400ug(o.4 mg)
Frequency	One daily
Duration	From conception to delivery
Target Group	All pregnant women
Type of supplements	They are in tablets or capsule form and may appear in different colours
Administration	Should be taken with meals
Possible side effects and Recommended Action to take should side effects occur	
Possible side effect	Recommended action to take
1. Effect on gastrointestinal tract	
<ul style="list-style-type: none"> • Epigastric pain, nausea, diarrhea or constipation may be experienced. • Faeces may turn black due to unabsorbed iron 	<ul style="list-style-type: none"> • Avoid taking high dose vitamin C supplements together with IFA tablet. • Eat plenty of fruits and vegetables • Emphasize that IFA supplement should be taken with meals • This is not harmful and IFA supplementation should continue
2. Inhibiting drug absorption	
<ul style="list-style-type: none"> • Iron preparations inhibit the absorption of tetracyclines, sulphonamides and trimethoprim. 	<ul style="list-style-type: none"> • Withhold IFA supplementation until treatment is completed.

Note: IFA Supplementation should be part of Focused Antenatal Care (FANC) and mothers should be encouraged to visit their nearest health facility every month.

Dr. S.K. Sharif MBS, MBChB, M.Med, DLSMH, MSc
DIRECTOR OF PUBLIC HEALTH AND SANITATION

Date: 28th January, 2013

Handout 3.2 (b): Additional Notes on Key Sections of the Kenya IFAS Policy

Issue	What to Remember
IFAS Target Group	<ul style="list-style-type: none"> ALL pregnant women because their physiological iron requirements are very high and the amount of iron absorbed from the diet is not sufficient to meet her requirements, especially within developing countries, such as Kenya. IFAS should be given to all pregnant women regardless of their Haemoglobin status. This is the recommendation for settings where anaemia rates among pregnant women are a severe public health problem at ≥40%.
Dosage	The combined IFAS tablet has 60mg elemental iron and 0.4mg folic acid. The formulation of the IFAS is 200mg ferrous sulphate (which is equivalent to 60mg elemental iron) and 400Qg (0.4mg) folate. This formulation of IFAS is easily absorbed and used by the body.
Treatment of Anaemia	If a pregnant woman is diagnosed with anaemia in a clinical setting, she should be treated with daily iron (120mg of elemental iron) and folic acid (400Qg or 0.4mg) supplementation until her haemoglobin concentration rises to normal. She can then switch to the standard antenatal dose to prevent recurrence of anaemia.
Malaria-endemic areas	Provision of IFAS should be implemented together with other measures to prevent, diagnose and treat malaria.
Integration of IFAS	IFAS should ideally be given as part of an integrated programme of antenatal and neonatal care that promotes: adequate gestational weight gain, screening of all women for anaemia ta antenatal and postpartum visits, use of complementary measures to control and prevent anaemia (e.g. hook worm control) and a referral system to manage moderate and severe anaemia.
Cost	Free in all government ANC facilities

Handout 3.3 Strategies for Effective IFAS Delivery within ANC Facilities

Key Challenges affecting Coverage and Utilization	Possible Strategies to improve IFAS delivery
Late and infrequent ANC visits by pregnant women	<ul style="list-style-type: none"> • Sensitization of women, through multiple communication channels, on importance of early and frequent ANC visits at health facilities
Physical barrier to ANC facilities	<ul style="list-style-type: none"> • Increased use of outreach ANC visits by health workers in hard-to-reach areas
Inadequate knowledge among ANC mothers on effects of anaemia during pregnancy	<ul style="list-style-type: none"> • Sensitization of women, through multiple communication channels, on the effects of anaemia, and various strategies for controlling and preventing anaemia, including IFAS.
Inadequate knowledge among ANC mothers on added iron demand during pregnancy	<ul style="list-style-type: none"> • Sensitization of women, through multiple communication channels, on the importance of iron supplementation during pregnancy to meet the increased iron demands
Inadequate number of health staff at health facilities	<ul style="list-style-type: none"> • Recruitment of more staff to ensure quality time for nutrition counselling, including on IFAS key messages • Maximize the limited time available through group education and counselling on IFAS using job aids such as video clips, counselling cards, among others
Poor data collection and reporting of key IFAS indicators	<ul style="list-style-type: none"> • Training of front-line health workers on how to use existing DHIS data collection and reporting tools for IFAS indicators
Frequent stock-outs of IFAS (separate and combined tablets)	<ul style="list-style-type: none"> • Training of front-line health workers on proper quantification, forecasting and ordering of IFAS commodities
Inadequate knowledge on new IFAS policy requiring ALL women to receive IFAS, regardless of Hb status	<ul style="list-style-type: none"> • Sensitizing of front-line health workers on the new national IFAS policy guidelines through different communication channels

SESSION 2.2 INCREASED DIETARY IRON INTAKE DURING PREGNANCY

Handout 4.1 Locally Available Food Sources of Heme and NonHeme Iron

- There are two forms of dietary iron: heme and non-heme.
- Heme iron is derived from hemoglobin. It is found in animal foods that originally contained hemoglobin, such as red meats, fish, and poultry. Your body absorbs the most iron from heme sources.
- Iron in plant foods such as lentils, beans, and spinach is non-heme iron. Our bodies are less efficient at absorbing non-heme iron, but most dietary iron is non-heme iron.
- Plant food sources of iron should either be processed to enhance absorption of the iron, or they should be eaten together with iron-enhancing substances such as citrus fruits and meat
- Below is a list of good and moderate sources of iron

Good and Moderate sources

Good Sources [with heme iron]	Moderate Sources [with non-heme iron]
<ul style="list-style-type: none"> • Beef or Chicken liver • Red meat • Fish • Poultry • Sea food 	<ul style="list-style-type: none"> • Breakfast cereals (enriched with iron) • Beans and Peas – e.g. red kidney, lima, chick peas, split peas • Seeds – pumpkin, sesame and sunflower • Nuts – e.g. peanuts, pecans, walnuts, almonds, pistachios, cashews • Green leafy vegetables – e.g. <i>Terere</i>, <i>Managu</i>, <i>Kunde</i>, Spinach, <i>Sukuma Wiki</i>, Amaranth • Green pepper • Dried Fruit – e.g. Apricots, Peaches, Raisins, Prunes

Handout 4.2 Iron Absorption: Enhancing and Inhibiting Factors

Enhancers such as Vitamin C and meat help in the absorption of iron in the body, while inhibiting substances such as polyphenol-containing beverages (coffee and tea) reduce the absorption of iron in the body and are associated with increased risk of anaemia in pregnant women. Food processes, such as germination of legumes and fermentation of whole grain cereals is recommended for enhancing iron absorption in food.

The tables below summarize the enhancing and inhibiting substances/factors and recommended actions.

Enhancing Factors/substances

Enhancing Factors	Recommended Action
<ul style="list-style-type: none"> Vitamin C found in citrus fruits (e.g. oranges, lemon, pineapple, kiwi, passion, guava, mango) and vegetables (tomato) 	<ul style="list-style-type: none"> Eat vitamin C rich foods with iron food sources. This will increase the absorption of iron in the food. Example: tomatoes with sukumawiki or tomatoes with beans
<ul style="list-style-type: none"> Animal blood and muscle products, for example, meat, poultry and fish 	<ul style="list-style-type: none"> Eat animal blood and muscle products which are rich in readily absorbable iron
<ul style="list-style-type: none"> Germinated and Fermented foods, for example, fermented porridge flour and germinated legumes (beans and peas) 	<ul style="list-style-type: none"> Germinate and ferment legumes to improve the bioavailability of iron. These processes reduce the content of phytate in these foods

Inhibiting Factors/substances

Inhibiting Factors	Recommended Action
<ul style="list-style-type: none"> Phytates found in whole grain cereals (e.g. maize, millet, rice, wheat, sorghum); legumes, nuts and seeds 	<ul style="list-style-type: none"> Germinate or ferment whole grain cereals to reduce phytate content
<ul style="list-style-type: none"> Polyphenols found in beverages such as cocoa, tea, coffee; also found in legumes (green and brown lentils), egg plants and green leafy vegetables (e.g. spinach) 	<ul style="list-style-type: none"> Avoid drinking tea, coffee and cocoa with iron-containing meals
<ul style="list-style-type: none"> Calcium salts found mostly in milk and cheese products 	<ul style="list-style-type: none"> Avoid consumption of calcium rich foods while eating iron-containing foods

Handout 4.3 Sample Day's Meal Plan for a Pregnant Woman

Breakfast

Orange juice
 Wimbi porridge, 1 cup
 Whole grain bread(enriched with margarine), 2slice
 Milo with milk, 1 cup
 Water

Mid-Morning Snack

Boiled sweet potato, 3 pieces
 Milo with milk 1 cup
 Water *

Lunch

Beef stew with carrots and peas,1 serving
 Chapatti, 2 pieces
 Sukuma wiki,1 serving
 Orange
 Water

Mid-afternoon Snack

Yoghurt, 1 cup
 Water

Dinner

Liver stew with tomatoes and carrots, 1 serving
 Boiled rice, 1serving
 Steamed cabbage, 1 serving
 Water

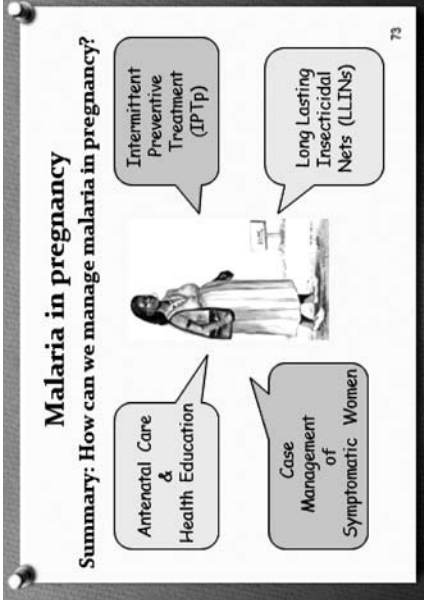
Evening Snack

Milo with milk, 1 cup
 Banana, 1 piece

NB: Quantities of food should be adjusted to meet individual energy needs to promote adequate weight gain

* Ensure at least 3 litres of water is consumed during the day

Handout 4.4 Added Strategies for Anaemia Prevention and Control

Strategies	Key Points to Remember
<p>Prevention and Control of Malaria in Pregnancy (MIP)</p> 	<ul style="list-style-type: none"> • Though there has been a marked decline in malaria prevalence in the country over the years, malaria still accounts for up to 30% of outpatient attendance and almost 20% of admissions at health facilities • Pregnant women are more likely than non-pregnant women to have malaria because their resistance to infection is lower • Malaria infection is associated with adverse effects on the pregnancy outcome (miscarriages, stillbirths, low birth weight) and maternal morbidity (anaemia or severe illness) • Malaria parasites hide in the placenta making the mother anaemic • MOH policies and guidelines on MI prevention and control: <ol style="list-style-type: none"> a) All pregnant women living in malaria epidemic areas will have access to Intermittent Preventive Treatment (IPTp) with at least two free Sulfadoxine Pyrimethamine (SP) doses, taken four weeks apart (from 16 to 40 weeks); <ul style="list-style-type: none"> ▪ IPTp-SP should be given as early as possible in the SECOND trimester. Folic acid at a daily dose of $\geq 0.5\text{mg}$ (currently found in the separate iron and folic acid supplements), should be delayed for two weeks (14 days) after taking SP as folic acid of $\geq 0.5\text{mg}$ reduces the efficacy of the SP. b) Pregnant women living in malarious areas should receive a long lasting insecticide insecticidal net (LLINs); c) Pregnant women attending ANC clinics should receive education and counseling on MIP prevention and control d) Other preventive measures: use of insect repellents; wearing protective clothing over the whole body, using mosquito screening in house windows, eaves and main doors; and use of indoor residual sprays (IRS) in recommended areas

<p><i>Prevention and Control of Hook Worm Infestation</i></p>	<ul style="list-style-type: none"> • Association of anaemia with helminthic infestations has been seen in the world and by eliminating it, anemia may be reduced with positive effects on maternal outcome. • Hookworm infestation which results in chronic blood loss from the intestines, leads to both nutrient deficiency and anaemia. A single dose of anthelmintic treatment early in the second trimester, along with IFAS is recommended for pregnant women as one of the ways to address anaemia in pregnancy • MOH Policy: All pregnant women should receive presumptive treatment of hookworm infestation with mebendazole 500mg , as early as possible in the SECOND trimester • The pregnant women should be counselled on appropriate sanitation and hygiene to prevent hook worm infestation.
<p><i>Food Fortification</i></p>	<ul style="list-style-type: none"> • Fortification is the practice of deliberately increasing the content of an essential micronutrient, i.e. vitamins and minerals (including trace elements) in a food, so as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health • Food fortification is a cost effective intervention that improves the micronutrient status of targeted populations, though it tends to have a less immediate but nevertheless much wider and more sustained impact • Fortified foods need to be consumed in adequate amounts by a large proportion of the targeted individuals in a population. Children under 5 and Women of reproductive ages are some of the key vulnerable populations targeted with fortified foods to reduce incidence of key micronutrient deficiencies such as iron, vitamin A and iodine. • In June 2012, the Kenyan government amended the Food, Drug and Substance Act and gazette mandatory fortification of cereals (maize and wheat), fats and oil with critical minerals and vitamins including vitamin A, B, zinc, iron and folic acid.

SESSION 2.3 COUNSELING ON KEY IFAS MESSAGES

Handout 5.1 Definition of Counselling and Effective Counselling Skills

Difference between advising, educating, and counselling

- Giving advice is directive.
- Educating is conveying information from an expert to a passive receiver.
- Counselling is non-directive, non-judgemental, dynamic, empathetic interpersonal communication to help someone learn how to use information to make a choice or solve a problem.
- Goals of counselling
 1. To effectively communicate behaviours the client can practice to improve nutrition and health status
 2. To help the client try small do-able actions to improve a particular behaviour
 3. To judge when the client should be referred for further clinical assessment

Effective Counselling Skills

- Using helpful non-verbal communication
- Using responses or gestures that show interest
- Showing empathy - that you understand the client's feelings
- Asking open-ended questions
- Reflecting back what the client says
- Avoiding words that sound judgmental
- Accepting what a client thinks and feels
- Recognizing and praising what a client is doing correctly
- Giving practical help
- Giving a little relevant information at a time
- Using simple language
- Making one or two suggestions and not giving commands

Handout 5.2 Conducting a Counselling Session

Before the counselling starts:

1. Make sure you have at least 15 minutes to spend with the client.
2. Choose a place where the client will be comfortable and there will be no intrusions.
3. Understand the content of the materials you need to counsel your client.
4. Have the following tools and materials handy :
 - Nutrition counselling materials
 - Functioning and accurate weighing scale
 - Accurate height/length board
 - MUAC tape
 - Guide for meal planning showing foods in different food groups
 - Nutrition Brochures
 - Data collection forms
 - Referral forms
 - Register or calendar to record the next appointment
 - Notes on previous actions if this is a follow-up visit
5. Agree with the client on goals, or expected outcomes, based on anthropometric, dietary, and clinical assessment results. Do not give the client more than three goals because too many changes at one time will be overwhelming. Other goals should be added incrementally as the first ones are achieved. Goals should be specific and achievable.
6. Plan with the client how to achieve the goals set

Challenges in counselling pregnant women on IFAS

- Counsellors may lack information or experience counselling on IFAS.
- Counsellors may have limited time to counsel individual client on IFAS
- Clients may have issues that need more attention than IFAS.

Addressing challenges in counselling pregnant women on IFAS

- Inadequate skill: HW should receive training on nutrition/IFAS counselling of pregnant women
- Time constraints: Involve CHWs in counselling pregnant women; provide group counselling sessions
- Client urgent needs: refer for clinical treatment or counselling; provide at least one key message on IFAS and schedule a return visit for follow-up and further counselling

Handout 5.3 The GATHER Approach to Counselling**GATHER approach to counselling**

- G – Greet
- A – Ask
- T – Tell
- H – Help
- E – Explain
- R – Return

Greet the client. Ask her/him to sit down and exchange introductions. Discuss her/his status and well-being since the last visit.

Ask how the client feels about her/his nutritional and health status and food intake.

- Ask about symptoms and nutrition problems and concerns.
- Do a nutrition assessment (body mass index, or BMI, weight changes, and biochemical, dietary, and/or clinical assessments) or share the results if you have already done this assessment.
- Identify nutritional needs (e.g., gaining weight, adhering to daily intake of iron and folic acid supplements, using dietary approaches) with the client.
- Find out what the client has done to address the said problems.

Tell the client about alternative ways to address her/his nutrition problems.

- Use the available counselling job aids that are related to the client's problems.
- Help the client set specific, measurable, achievable, realistic, and time-bound (SMART) goals to address the problems.

Help the client make informed choices.

- With the client (accompanied by spouse or other family member), find approaches and actions to reach the goal the client has set.
- As much as possible, let the client come up with choices that are practical and relevant to her context.

Explain fully the choices the client has made.

- Discuss barriers to implementing the choices.
- Ask the client to explain the actions, doing demonstrations if necessary.
- Summarize (or ask the client to summarize) what has been agreed and how it will be done.

Reassure the client and **give a Return** date for the next visit. Ask the client to repeat the date.

Handout 5.4 Checklist of Recommended Counselling Techniques

Skills and techniques	Did the counsellor . . .	Place a ffl
Establish a relationship	• Greet the client (shake hands if appropriate)?	
	• Offer the client a seat?	
	• Introduce herself/himself to the client?	
	• Lean forward when talking?	
	• Make eye contact when talking to the client?	
	• Show interest in the client?	
	• Maintain professional conduct?	
Question	• Ask questions relevant to the topic of discussion?	
	• Ask open-ended questions?	
	• Use closed-ended questions to get basic information such as demographic data?	
	• Avoid over-use of closed-ended questions?	
	• Use a questioning style that reflects interest, concern, and care rather than interrogation?	
Listen well	• Look at the client?	
	• Listen carefully and actively?	
	• Use body language to indicate attention to the speaker?	
	• Make eye contact to indicate interest and care?	
	• Treat the client with respect and acceptance?	
	• Use encouraging words such as “Yes” and “Okay”?	
	• Occasionally sum up the client’s statements?	
	• Notice the client’s verbal and non-verbal cues?	
	• Wait after asking questions to allow the client to formulate responses or questions?	
Empathize	• Recognize and praise what the client is doing correctly?	
	• Reflect the client’s statements to show she/he was understood?	
	• Accept what the client thinks and feels?	

Skills and techniques	Did the counsellor . . .	Place a ffl
Provide information	<ul style="list-style-type: none"> Clearly communicate important nutrition information based on the client's knowledge, cultural values, and beliefs? 	
	<ul style="list-style-type: none"> Use simple language? 	
	<ul style="list-style-type: none"> Give a little relevant information at a time? 	
	<ul style="list-style-type: none"> Make one or two suggestions without giving commands? 	
Clarify	<ul style="list-style-type: none"> Check what the client said to ensure correct understanding? 	
	<ul style="list-style-type: none"> Use phrases like, "Are you saying that..?" "Did I understand you correctly when you said ..." and "Correct me if I am wrong ..."? 	
	<ul style="list-style-type: none"> Avoid words that sound judgemental? 	
Find solutions	<ul style="list-style-type: none"> Suggest acceptable, affordable, and feasible options? 	
	<ul style="list-style-type: none"> Help the client find practical and realistic solutions? 	
	<ul style="list-style-type: none"> Convince the client to implement solutions? 	
	<ul style="list-style-type: none"> Help the client verbalize what other people may say about the suggested solutions? 	
Summarize	<ul style="list-style-type: none"> Summarize the information the client has shared? 	
	<ul style="list-style-type: none"> Check whether the client understood the important concerns or information? 	
	<ul style="list-style-type: none"> Praise and reaffirm things the client is doing right? 	
Follow up	<ul style="list-style-type: none"> Discuss appropriate follow-up with the client? 	
	<ul style="list-style-type: none"> Encourage the client to adhere to the follow-up plan? 	

Handout 5.5 Critical Messages on IFAS for Pregnant Women

Area of focus	Key Messages
Increased nutrition demand during pregnancy	During pregnancy, you need to eat more food to meet your body needs and that of the unborn baby
	Eat at least 3 main meals and 2 snacks
	Eat more iron-rich foods such as: meat, poultry, beans, peas, sukuma wiki and spinach
Consequences of malnutrition during pregnancy	Malnutrition during pregnancy endangers the health and life of the mother and child
Causes, signs, symptoms and effects of anaemia during pregnancy	Anaemia may be caused by inadequate intake of iron-rich foods, and infections such as malaria, hookworm infestation and HIV
	Signs and symptoms of anaemia include: skin paleness, weakness, shortness of breath, fatigue
	Anaemia can lead to increased maternal and neonatal deaths
Importance of IFAS during pregnancy	IFAS supplements ensure a healthy pregnancy and a healthy baby
	Iron supplements are necessary for reducing anaemia and the risk of having low birth weight babies
	Iron supplements sustain body strength and ensures enough body blood stores during and after delivery
	Folic acid, when taken within the first 28 days after conception prevents neural tube defects
	Folic acid helps in the absorption of iron and reduces the risk of folic acid anaemia
IFAS Intake	One tablet of the combined IFAS should be taken daily for the whole duration of pregnancy starting as early as possible in pregnancy
	All pregnant women should take iron and folic acid supplements throughout their pregnancy period
	Iron and folic acid supplements should be taken together with meals
	The combined IFAS has the correct amount of iron and folic acid dose and can be taken safely throughout pregnancy
Management of Side Effects	Take iron and folic acid supplements with meals to reduce chances of experiencing nausea
	Some of the side effects of taking iron supplements include nausea, diarrhoea and black coloured faeces
	Black coloured faeces, which is a possible side effect of taking iron supplements, is not harmful to your health and should not stop you from taking IFAS
	IFAS is safe and cannot harm the unborn baby
Storage of IFAS	Keep the IFAS tablets in a cool safe place out of the reach of children
Availability of IFAS	Iron and folic acid supplements are available at all government health facilities for free (no cost)

Handout 5.6: Case Studies using GATHER Counselling Approach

Case Study 1

Mugwe is a mother of three children and is currently expectant with her fourth child. She is 5 months pregnant and has come to the ANC clinic at Muhoroni dispensary accompanied by her mother-in-law. This is her first ANC clinic visit since she got pregnant, and the only reason that made her come to the clinic was to get a Mother Child Health (MCH) Booklet, and to seek treatment for the high fever she was experiencing. Mugwe is in her mid-thirties and is looking forward to delivering a healthy baby like the rest of her three children. She has been instructed to wait and see the nurse for her first ANC profile. She has been waiting in line for over one hour since it is an ANC clinic day with many clients waiting to see the two nurses on duty at the dispensary.

The role play will consider the following scenario: One of the nurses is counseling Mugwe after taking her ANC profile.

Case Study 2

Jamilla is coming to the ANC clinic within Mtwapa Health Centre for the second time. She is 22 years old and is 6 months pregnant. In her previous visit to the clinic, she met with the nurse who counselled her together with several other women on many pregnancy-related issues, including HIV and Malaria Control, birth-planning, among others. She received 2 week supply of separate iron and folate supplements, and had been taking the tablets as prescribed, that is, daily intake of 3 ferrous sulphate tablets and 1 folate tablet. After a week of taking the IFA supplements, she started experiencing nausea with occasional diarrhoea. Her stool had also turned black, prompting her to quickly stop taking the supplements. She has come to the clinic to receive an insecticide treated net and medication for malaria prevention.

The role play will consider the following scenario: The MCH nurse has about 5-10 minutes to counsel Jamilla after giving her the ITN and IPTp-SP

MODULE 3: BEHAVIOUR CHANGE AND COMMUNICATION STRATEGIES FOR IFAS

Handout 6.1 Definition of BCC and relevant channels for IFAS

1. Definition of Behaviour Change Communication

Behaviour change communication (BCC) is aimed at bringing about changes in knowledge, attitudes, and practices among specific audiences as well as changes in social norms. Multiple communication channels and tools can be used to influence desired changes. Channels are modes of transmission that enable messages to be exchanged between senders and receivers.

2. Relevant BCC channels for IFAS

Some of the BCC channels that have been identified as effective in supporting the adoption of IFAS appropriate practices and health seeking behaviour are as follows:

- Interpersonal communication (IPC)
- Community based and
- Mass media channels

Additional Notes on BCC channels

The table below gives the different channels, definitions and specific activities that can be done at different levels to empower and engage individuals and communities on IFAS.

IFAS BCC Strategy	Definition	Examples Of BCC Channels For IFAS
Interpersonal Communication (IPC)	<ul style="list-style-type: none"> • IPC channels describe those that enable exchange between people to person. It includes one-on-one communication as well as small group interactions. • IPC channels are interactive; they are able to unpack complex information, personalise information, can build behavioural skills, increase self-efficacy and can increase intentions to act. 	<p>IPC for Health care providers</p> <ul style="list-style-type: none"> • One-on-one (individual) counseling of the mothers • Group counseling of mothers • Health talks at health facility • Use existing facility based group's e.g. Mother to Mother support groups or mentor groups • CMEs, Facility in-charges feedback meetings <p>IPC For Community Health Workers</p> <ul style="list-style-type: none"> • Focused community dialogue with mothers in different women group forums • Door to door/household health education
Community based	<ul style="list-style-type: none"> • Community based channels are designed to reach entire communities and will usually be dealing with community-wide issues. • These can stimulate dialogue, motivate collective solutions, provide social support, and provides feedback to broader community. 	<ul style="list-style-type: none"> • Community dialogue • Barazas • Health days • Stakeholder forums • Road shows • Community media • Community mobilization • Rallies, and cultural events
Mass media channels	Mass media both print and electronic reaches a large audience in a short period of time.	<ul style="list-style-type: none"> • Television • Radio, billboards, newspapers, posters, brochures • New Media: web based communication social networking e.g. twitter, Facebook, you-tube.

NOTE: For additional strategies refer to Hand-out 3.3: Strategies for Effective IFAS Delivery within ANC Facilities

Handout 6.2 IFAS BCC Materials for Health Care Providers, Community Health Workers and pregnant mothers

Types of IFAS materials and Target audiences

There are different materials designed for diverse target audiences in the IFAS interventions. The target audiences for these materials are Health care providers, Community health workers, pregnant mothers and influencers. This section gives behaviour change objectives for the different audiences and the type of materials intended for use.

I. Healthcare Providers BCC Materials

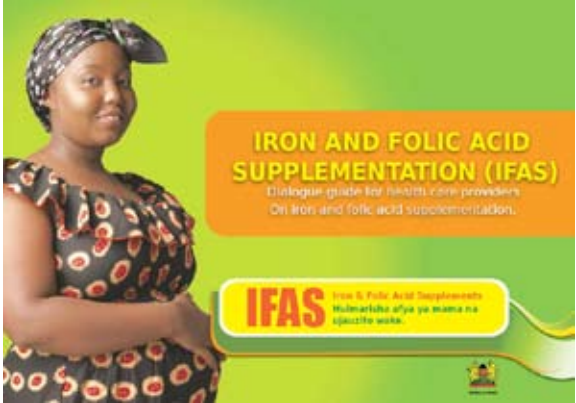
Type of materials

- IFAS counselling Job aid
- Algorithm for counselling
- Posters

Objectives of the healthcare providers' materials are to achieve:

- Increased number of healthcare providers' who prescribe IFAs to all women regardless of HB status per the policy.
- Increased number of healthcare providers' who counsel on; importance of IFAs, duration and dosage
- Increased number of healthcare providers' who counsel pregnant mothers on management of side effects
- Increased number of healthcare providers' who provide information on importance of Anemia prevention and effects of anaemia during pregnancy
- Increased number of healthcare providers' who provide information on good dietary practices (diversity, frequency, amount) during pregnancy
- Improved capacity of healthcare providers' who administer and monitor IFA commodities use

The following are samples of the Healthcare Providers BCC Materials

Type of material	Type of material and target audience
	<ul style="list-style-type: none"> Counselling job aid for healthcare providers It is used at ANC service delivery point at the health facility level for counselling pregnant mothers

 <p>IRON AND FOLIC ACID SUPPLEMENTATION (IFAS) Dialogue guide for health care providers On iron and folic acid supplementation.</p> <p>IFAS Iron & Folic Acid Supplements Muharisha alye ya mama na ajantto wako.</p>	<p>Counselling job aid for health care providers contextualised for the coastal region</p>
 <p>IRON AND FOLIC ACID SUPPLEMENTATION (IFAS) Dialogue guide for health care providers On iron and folic acid supplementation.</p> <p>IFAS Iron & Folic Acid Supplements Muharisha alye ya mama na ajantto wako.</p>	<p>Counselling job aid for health care providers contextualised for the North Eastern region</p>
 <p>Be a champion; give pregnant women the chance to have a healthy pregnancy.</p> <p>Counsel and support pregnant women on the use of Iron and Folic Acid Supplementation (IFAS) to:</p> <ul style="list-style-type: none"> • Prevent Anaemia • Prevent Neural Tube Defects • Prevent risk of low birth weight • Prevent unsafe pregnancy and delivery <p>IFAS Iron & Folic Acid Supplements Muharisha alye ya mama na ajantto wako.</p>	<p>Posters placed strategically at the ANC to remind healthcare providers to counsel mothers and benefits of counselling</p>
 <p>Give complete and accurate information on Iron and Folic Acid Supplements (IFAS).</p> <p>Ensure that you counsel mothers on benefits of IFAS</p> <p>Ensure you provide IFAS to all pregnant women regardless of their life status</p> <p>Ensure you provide complete dosage to be taken daily from conception to delivery</p> <p>Ensure you counsel pregnant mothers on managing side effects of IFAS</p> <p>IFAS Iron & Folic Acid Supplements Muharisha alye ya mama na ajantto wako.</p>	<p>Posters placed strategically at the ANC to remind healthcare providers on the key information to share on IFAS</p>

Pregnant Women IFAS BCC Materials

Type of material		
Posters		
 <p>“Iron and Folic Acid Supplements (IFAS) keep me and my unborn baby healthy.”</p> <p>Taking IFAS daily during pregnancy will help:</p> <ul style="list-style-type: none"> • Sustain your strength • Prevent Anaemia • Reduce risk of low birth weight <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p> <p>Visit your nearest health care provider to get more information on IFAS.</p>	 <p>“Tembe za Iron na Folic Acid Supplements (IFAS) huiimarisha afya yangu na ujauzito wangu.”</p> <p>Kumeza Tembe za IFAS kila siku kwa muda wa ujauzito husaidia:</p> <ul style="list-style-type: none"> • Upate ukosefu wa damu • Upate nguvu • Ujifunge mtoto mwenye uzani uliyo sawa <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p> <p>Tembelea kituo cha afya upate maelezo zaidi juu ya IFAS.</p>	 <p>“Tembe za Iron na Folic Acid Supplements (IFAS) huiimarisha afya yangu na ujauzito wangu.”</p> <p>Kumeza Tembe za IFAS kila siku kwa muda wa ujauzito husaidia:</p> <ul style="list-style-type: none"> • Upate ukosefu wa damu • Upate nguvu • Ujifunge mtoto mwenye uzani uliyo sawa <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p> <p>Tembelea kituo cha afya upate maelezo zaidi juu ya IFAS.</p>
Posters which can be used at the Health facility (ANC), markets, churches		
 <p>Iron and Folic Acid Supplements (IFAS).</p> <p>Why can I get Iron and Folic Acid Supplements (IFAS)?</p> <p>What can the other symptoms of Iron/Folic Acid deficiencies do?</p> <p>What do I need to know about IFAS?</p> <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p>	 <p>Iron and Folic Acid Supplements (IFAS).</p> <p>Wanapaswa kuwa na Folic Acid</p> <p>Wanapaswa kuwa na Iron na Folic Acid</p> <p>Wanapaswa kuwa na Iron na Folic Acid</p> <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p>	 <p>Iron and Folic Acid Supplements (IFAS).</p> <p>Wanapaswa kuwa na Iron na Folic Acid</p> <p>Wanapaswa kuwa na Iron na Folic Acid</p> <p>Wanapaswa kuwa na Iron na Folic Acid</p> <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p>
Leaflets are given to mothers at the ANC and at the different women group meetings in the community		
Calendars		
 <p>Month 1</p> <p>Monday Tuesday Wednesday Thursday Friday Saturday Sunday</p> <p>Week 1</p> <p>Week 2</p> <p>Week 3</p> <p>Week 4</p> <p>IFAS Iron & Folic Acid Supplements Huiimarisha afya ya mama na ujauzito wake.</p>	<p>The calendar is provided by the health care provider after counselling. It is designed to help the pregnant mother monitor her IFAS daily intake</p>	

III. Potential Mother BCC Materials

- **Types of materials**

a). Posters which can be used at the family planning clinic, outpatient, colleges, universities,

Objectives of the potential mothers' materials are:

- Increase number of potential mothers aware of folic acid deficiency and prevention measures
- Increase number of potential mothers taking folic acid when planning conception and within 28 days after conception

Potential Mother BCC Materials

Type of material	Where it can be used
	<p>Posters which can be used at the family planning clinic, outpatient, colleges, universities</p>

IV. Influencers BCC Materials (partners)


- **Types of materials**

a). Posters which can be used at the outpatient clinics, focussed dialogue with men on IFAS in male support groups, men in churches

Objectives of the influencers' materials are to:

- Increased awareness on influencers role in improving adherence of IFAS among the pregnant mothers
- Increased number of partners who remind pregnant mothers to take IFAS daily during pregnancy
- Increase the awareness on their involvement in ANC service delivery
- Increase their knowledge on importance of pregnant mothers ANC attendance and taking IFAS
- To increase their knowledge on IFAS and appropriate dietary practices

Influencers BCC Materials (partners)

Type of material	Where it can be used
	<p>Poster which can be used at the outpatient clinics, focused dialogue with men on IFAS in male support groups, men in churches</p>

Handout 6.3 Case study scenarios on use of different IFAS BCC materials

Scenario 1: Counseling regarding side effects using health care providers counseling job aid and Mothers calendar

Joyce is six months pregnant; she is making a second visit to the ANC clinic. She did her first ANC visit when she was four months pregnant. During her last visit she was given 20 IFA tablets which she took 15 and stopped because she was experiencing nausea and occasionally vomited. As the ANC provider on duty at the health facility counsel Joyce on management of side effects, IFAS dosage and duration using the Health provider counseling job aid. Assist the Joyce to understand how to monitor IFAS intake using the mother's calendar. Refer to HCP Counseling job aid page 12 and 14

*The role play will demonstrate proper use of **Healthcare providers counselling job aid and the mothers calendar***

Scenario 2: Dialogue on early ANC attendance and benefits of IFAS using the Community health workers job aids

Zubeda is a mother of four; she is currently four months pregnant. She delivered her last child under the care of a traditional birth attendant. She is planning to go for ANC when she is 8 months pregnant because she is generally feeling healthy. Educate her using the CHW dialogue cards on the importance of early ANC visit and opportunity of starting IFAS early. Discuss with her the benefits of IFAS. Refer to CHW Dialogue cards page 8

*The role play will demonstrate proper use of **Community Health workers Job aid***

Scenario 3: Demonstrate how to use the client posters and leaflets at the health facility

Mary is a health worker at the Westlands Dispensary; she is preparing to give health talk on IFAS to mothers who have come for ANC services at the clinic. The only materials available to her are posters and leaflets. Simulate a health talk session with the mothers using the posters and leaflets.

The role play will demonstrate proper use and reference of posters and leaflets

Scenario 4: Demonstrate how to conduct a focused dialogue session with men at a health facility who belong to the male support group. Use the IFAS poster designed for partners.

The role play will demonstrate proper use and reference of the influencer posters

Module 4: IFAS COMMODITY MANAGEMENT AT HEALTH FACILITIES

Handout 7.1 Assessing Stock Status

Consequences of Poor Inventory Management

- stock-outs
- accumulation of unwanted excess stocks with associated problems of space utilisation/ stores congestion, disposal, theft
- deterioration and expiry of items
- serious financial losses due to all the above
- poor service provision to patients/clients

Suppose you were asked to assess the stock status of a supply of IFA supplements in a health facility. For example, you found 100 IFA tablets. If you know that the clinic dispenses about 25 IFA tablets every month, you can use the following simple formula to determine whether the iron supplements supply will last about four months as follows:

$$\frac{\text{How much of a certain product we have}}{\text{How much we use during a given period}} = \text{How long product will last}_{(\text{in number periods})}$$

Or in this case

$$\frac{100 \text{ tablets on hand}}{25 \text{ tablets per month}} = 4 \text{ months supply of tablets}$$

You have just assessed the stock status of the IFA in the MCH clinic.

Handout 7.2: Essential Data Items

Three essential data items are necessary to be able to make decisions:

Data Item	Definition	Example
Stock on hand	The quantities of usable stock available	The health center has 300 IFA tablets in the store on the last day of the month. At a national level, 500,000 tablets of IFA are on hand, based on stock-on-hand data from the health centers, and national warehouse
Consumption	The quantity of stock dispensed to users or used during a particular time period	In the last month, the health center dispensed 1,045 IFA tablets to clients.
Losses and adjustments	Losses are the quantity of stock removed from the pipeline for any reason other than consumption by clients or use at the service delivery point (due to expiration, theft, damage, etc.). Adjustments are the quantities of stock issued to or received from other facilities at the same level of the pipeline. Also, adjustments may be administrative corrections made to stock keeping records— For this reason, adjustments may involve either positive or negative changes to stock.	The past month, the district hospital had— <ul style="list-style-type: none"> • 30 IFA tabs expire (loss) • 4 packs of IFA stolen (loss) • Loaned another health facility 12 packages of IFA supplements (negative adjustment). • Received 20 IFA supplements (positive adjustment).

Handout 7.3 How to Assess Stock Status

Our formula for assessing stock status can be expressed in terms familiar to logisticians

This	... is the same as
Amount we have	Stock on hand
Amount we use	Rate of consumption / average monthly consumption
How long it lasts	Months of stock

By substituting logistics terms, the equation becomes:

$$\frac{\text{Stock on hand}}{\text{Average monthly consumption}} = \text{Months of Stock}$$

Essential Data	How it is calculated	Points to Note
Stock on Hand	<ul style="list-style-type: none"> To calculate the months of stock-on-hand, you first need, to know the quantity of stock on hand. You can find stock on hand data in your stock keeping record (bin card). The most accurate source is a physical inventory 	Physical inventory is the process of counting, by hand the total number of units of each commodity in your store or health facility, at any given time.
Average Monthly Consumption	<ul style="list-style-type: none"> The average of the quantities of product dispensed to users or patients in the most recent three months, as appropriate. You can use consumption data to determine the AMC; you can find actual consumption data in only one place. Consumption records To calculate the AMC, first calculate a simple average by finding the sum of a set of monthly consumption numbers and divide the total by the number of months used 	Average monthly consumption is the average of the quantities of product dispensed to clients in the last recent 3 months
Month of Stock	$\frac{\text{Stock on hand}}{\text{Average monthly consumption}} = \text{Months of Stock}$	When you calculate months of stock, your calculation will usually have a decimal. If one month is 1.0, 0.25 months is equal to approximately one week. Therefore, do not round to the nearest whole month; we want to include one-tenth of a month.

Exercise:

The following is the number IFAS dispensed during the last three months at the ANC clinic.

Month	Quantity Dispensed
June	1,200
July	1,500
August	1,150

Assess the stock status of the clinic.

Hint:

Use formula below

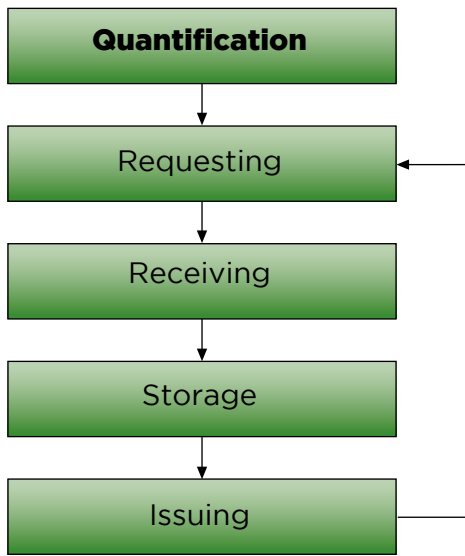
$$\frac{\text{Stock on hand}}{\text{Average monthly consumption}} = \text{Months of Stock}$$

Handout 7.4 Quantification and Requesting for Resupply at Facility level

Inventory management is the process of requesting for, receiving, storing and issuing of health commodities to various sites or service dispensing points.

Quantification is the first step in the inventory management cycle that ensures:

- Continuous supply (reduce stocks)
- Minimal wastage through expiry, damages or losses
- Transparency and accountability through good record keeping



Inventory Management Cycle

Key Terms

- **Quantification** is defined as the process of estimating the quantities of products required for a specific health service, and determining when the products should be delivered to ensure an uninterrupted supply.
- **Total Consumption:** This refers to the total quantities of health commodities dispensed to clients over a specific period of time
- **Average Monthly Consumption (AMC):** This refers to the average of the quantities of product dispensed to users or patients in the most recent three months
- **Stock on Hand (SoH)/ Physical Inventory:** The total quantities of usable stock of each commodity available at a specific period of time. This is based on a physical count
- **Lead time:** The time between when new stock is ordered and when it is received and available for use
- **Safety Stock:** This is the additional buffer, cushion, or reserve stock kept on hand to protect against stock-outs caused by delayed deliveries, markedly increased demand, or other unexpected events.
- **Quantity on order:** The amount of commodity that has been ordered by a health facility
- **Minimum month of stock:** This is the lowest level of stock of a given commodity that triggers re-ordering
- **Maximum months of stock:** This is the highest level of stock of a given commodity that a health facility should hold at any point in time.

Handout 7.5 Key Steps used in Consumption based Method

Step 1: Select Period

Select the consumption period for which the consumption is to be calculated. A longer period for example 3 months is better because it gives more information and captures patterns in scale up and attrition over time

Step 2: Calculate Total Consumption

Calculate the total consumption over the selected period in step 1 above. The source of data on consumption is the Daily activity register (MoH 409); specifically row (D) i.e. Page total of Quantity Dispensed.

Step 3: Determine the AMC

This is determined as follows:

Step 4: Calculate Maximum Stock Level

The maximum months of stock is usually set by the program and includes the projected buffer stock. Depending on the nature of commodity and lead times, the maximum months of stock can be for example 4 months. The maximum stock level is determined as follows:

Step 5: Determine the Quantity for Re-supply

The quantity for re-supply is also known as quantity to order and is determined as follows:

Handout 7.6 Exercise on Quantification

Determine the quantity for re-supply of IFA supplements in Makutano Health facility based on the following information. Assume the maximum months of stock is 4 months and the stock on hand on 30/9/2012 was 6,000 tabs.

Date	Quantity dispensed (tabs)
6 /8/2012	600
7/8/2012	240
13/8/2012	180
14/8/2012	330
20/8/2012	270
21/8/2012	450
27/8/2012	540
28/8/2012	90
3/9/2012	300
4/9/2012	360
10/9/2012	480
11/9/2012	210
17/9/2012	180
18/9/2012	390
24/9/2012	120
25/9/2012	270
30/9/2012	180

Hints:

- $\frac{\text{Total Consumption}}{\text{Period (months)}} = \text{Average Monthly Consumption}$
- $\frac{\text{Total Consumption}}{\text{Period (months)}} = \text{Average Monthly Consumption}$
- $\text{Maximum stock level} = \text{AMC} \times \text{Maximum months of stock}$
 $\text{Maximum stock level} = \text{AMC} \times \text{Maximum months of stock}$
- $\text{Quantity for Resupply} =$
 $\text{Maximum stock level} - \text{closing stock or Physical count}$
 $\text{Quantity for Resupply} =$
 $\text{Maximum stock level} - \text{closing stock or Physical count}$

MODULE 5 MONITORING AND EVALUATION

Handout 8.1 Supportive Supervision Concepts

Support Supervision is a process that promotes quality at all levels of the health system by strengthening relationships within the system, focusing on the identification and resolution of problems, optimizing the allocation of resources, promoting high standards, team work and better two-way communication (Marquez and Kean 2002).

Benefits of Supportive supervision

- Helping service providers to achieve work objectives by improving their performance,
- Ensuring uniformity to set standards, identifying problems and solving them in a timely manner,
- Making a follow-up on decisions reached during previous supervision visit,
- Identifying staff needs and providing opportunities for personal development and
- Reinforcing administrative and technical link between high and lower levels

Comparison of Traditional and Supportive supervision

Action	Traditional Supervision	Supportive Supervision
Who performs	External supervisors designated by the service delivery organization	External supervisors designated by the service delivery organization; staff from other facilities; colleagues from the same facility (internal supervision); facility health committee; community health committees; staff themselves through self-assessment
When supervision happens	During periodic visits by external supervisors	Continuously: during routine work; team meetings; and visits by external supervisors
What happens during supervision encounters	Inspection of facility; review of records and supplies; supervisor makes most of the decisions; reactive problem-solving by supervisor; little feedback or discussion of supervisor observations	Observation of performance and comparison to standards; provision of corrective and supportive feedback on performance; discussion with clients; provision of technical updates or guidelines; onsite training; use of data and client input to identify opportunities for improvement; joint problem solving; follow-up on previously identified problems
What happens after supervision	No or irregular follow-up	Actions and decisions recorded; ongoing monitoring of weak areas and improvements; follow-up on prior visits and problems

Attributes of a Supervisor

A Supervisor should have the following attributes:

- Familiar with Healthcare system;
- Familiar with IFAS services to be provided at each level of health system, based on the IFAS policy
- Ability to address both administrative and programmatic issues and needs in IFAS health services;
- Committed, responsible and have strong interpersonal skills;
- Ability to train, motivate and support supervisees; and
- Flexible, respectful and hardworking attitude.

Core competencies of a Supervisor

A person who performs supportive supervision should have the following competencies:

- Conceptual skills: ability to listen, probe and analyze situations, problems and formulate solutions;
- Sufficient knowledge about IFAS health services and health system;
- Ability to coach, train and convey information to others and learn from them;
- Sufficient knowledge of concept of quality improvement (QI) including supportive supervision and mentoring and the use of national guidelines and SOPs;
- Deep understanding of the roles and responsibilities of both supervisors and mentors and align oneself with mentors; and
- Ability to provide and receive feedbacks after each visit and write reports.

Resources Needed for Supportive Supervision

- Reliable transport;
- Adequate time for preparation, travel, field visit, reporting and follow-up activities ;
- Travelling allowances;
- Supportive supervision tools and stationery;
- Monitoring and Evaluation tools; and
- Support for periodic review meetings

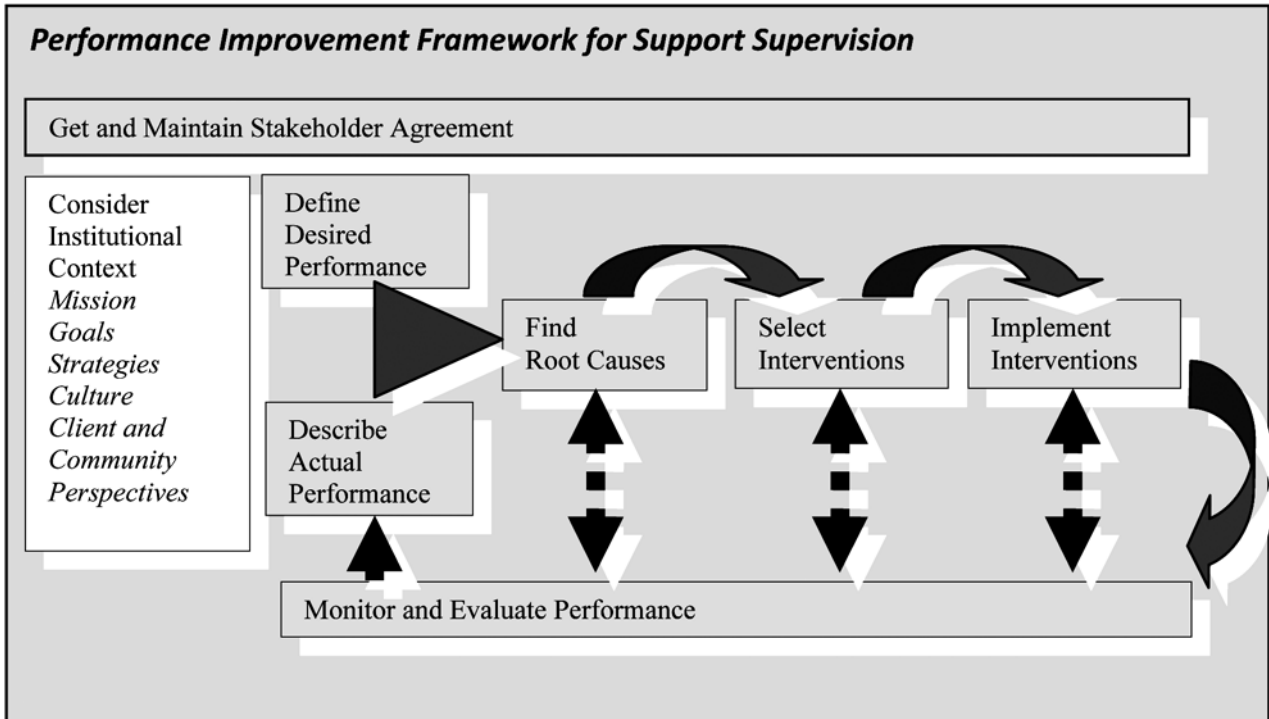
Areas to be covered during support supervision of IFAS at Health Facilities

- Availability and knowledge on the national IFAS policy
- Availability of reporting forms and registers
- Coverage of pregnant women who have received IFAS
- Counseling on IFAS
- Healthcare workers trained on IFAS
- Availability and use of IFAS calendars and job aids
- Availability of IFAS commodities
- Availability and adequacy of recording and reporting tools for each intervention
- Ordering of the tools (Stock of the forms)
- Correctness and completeness of recording - If all the variables in the forms/registers are correctly and completely filled
- Management -How the data forms/registers are filed and stored
- Level specific clarity on recording and reporting and roles and responsibilities
- Data use - level-specific dissemination of reports/data
- Data flow from health facility to national level
- Feedback on data quality, data recording, data backup, reporting and analysis

Handout 8.2 Supportive Supervision Checklist for IFAS

Focus Area	What to assess	Observation / Comments
Awareness of revised national policy guidelines on IFAS	<ul style="list-style-type: none"> Are the health workers aware of the new policy on combined iron and folic acid supplementation for pregnant women? 	
	<ul style="list-style-type: none"> Have the health workers received any recent sensitization, through CMEs or OJT on IFAS for pregnant women? 	
Prescription of the iron and folic acid supplements by health worker to pregnant mother	<ul style="list-style-type: none"> At what contact points are ANC clients provided with IFAS? 	
	<ul style="list-style-type: none"> How many IFAS tablets are given to each ANC client? 	
	<ul style="list-style-type: none"> How is the health worker confirming that the ANC client has actually taken the previously prescribed IFAS? 	
Counseling services provided by the health worker to the pregnant woman	<ul style="list-style-type: none"> At what contact points are ANC clients counseled on IFAS? 	
	<ul style="list-style-type: none"> What key counseling messages are provided to ANC clients on first and return visits? 	
	<ul style="list-style-type: none"> Are there any job aids available at the health facility to guide the health worker in counseling on IFAS? 	
	<ul style="list-style-type: none"> If counseling job aids are available, are they being used by the health worker in the counseling session? 	
	<ul style="list-style-type: none"> Are IFAS messages part of the key counseling messages provided to ANC clients? 	
	<ul style="list-style-type: none"> Who is responsible for counseling ANC clients on IFAS? 	
	<ul style="list-style-type: none"> Are there any ANC-IFAS outreach services undertaken by the health facility? 	
Educating pregnant women on IFAS	<ul style="list-style-type: none"> What opportunities are there for educating ANC clients on IFAS? 	
	<ul style="list-style-type: none"> What communication channels are being used for educating ANC clients on IFAS? (video clips, health talks at waiting bay) 	
	<ul style="list-style-type: none"> Availability of any IEC materials with specific messages on IFAS (e.g. posters, brochures, banners, wall branding) 	
IFAS Commodity Management	<ul style="list-style-type: none"> Availability of adequate stock of combined IFAS at the MCH clinic 	
	<ul style="list-style-type: none"> Awareness and use of consumption-based method of quantifying for iron and folic acid supplements for pregnant women attending ANC at the health facility 	
IFAS Data Collection and Reporting	<ul style="list-style-type: none"> Are the health workers who are providing IFAS to pregnant women recording the number of IFAS dispensed and the number of pregnant women who receive IFAS? 	
	<ul style="list-style-type: none"> What data collection tools are being used to record IFAS data? 	
	<ul style="list-style-type: none"> What summary tool is being used to summarize IFAS data on number of pregnant women receiving iron and folic acid supplements? 	

Handout 8.3 Performance Improvement Framework for Support Supervision



Handout 8.4 Sample Action Plan of IFAS Activities

Strategic Objectives:

1. Increase coverage of IFAS in _____ County
2. Increase uptake of IFAS by pregnant mothers from 8% to 25% by 2014 and to 80% by 2017.

OBJECTIVE	ACTIVITY	RESPONSIBLE PERSONS	RESOURCES	BY WHEN	INDICATORS
1. Advocacy for IFAS Policy	Sensitization of stakeholders	County nutrition coordinator	<ul style="list-style-type: none"> • IFAS BCC Materials • Policy • Conference package 	Mid-November 2013	No. of stakeholders sensitized
2. Gap Analysis of IFAS in the county.	<ul style="list-style-type: none"> • Develop checklist for baseline assessment. • Sample and visit sample facilities. 	County & Sub-county HMT, and stakeholders.	<ul style="list-style-type: none"> • Tea & snacks, lunch • Fuel • Checklist 	End of November	Finalised Gap analysis report
3. Capacity building of frontline Healthcare providers.	<ul style="list-style-type: none"> • Sensitization and target setting for Healthcare workers and community health workers. • Action planning 	County & Sub-county HMT and stakeholders.	<ul style="list-style-type: none"> • Venue • Conference package • BCC Materials • Fuel 	Last week of November to Mid-December	<ul style="list-style-type: none"> • No. of health workers sensitized • No. of CHWs sensitized
4. Social Mobilization for BCC.	<ul style="list-style-type: none"> • Identification of effective channels of communications. • Dissemination of IFAS messages. 	County HMT	<ul style="list-style-type: none"> • Tea & snacks • Stationery • BCC materials • Air-time • Lunch allowance 	Mid-January 2014	<ul style="list-style-type: none"> • No. of health talks • No. of radio sessions • No. of mothers reached with the key messages • No. of materials disseminated
5. Support supervision, OJTs & mentorship.	<ul style="list-style-type: none"> • OJT • CME • Scheduled supervision 	County HMT	<ul style="list-style-type: none"> • Fuel • Lunch allowance • Stationery 	Mid-January & ongoing	<ul style="list-style-type: none"> • No. of support supervisions done • No. of OJTs conducted • No. of CMEs conducted • No. of action plans developed • No. of HCW with capacity to counsel mothers on IFAS
6. Improving IFAS logistics & supplies	<ul style="list-style-type: none"> • Provision of tools • Quantification and forecasting. 	CHMT Facility	<ul style="list-style-type: none"> • IFAS Logistics • M&E Tools 	End November & ongoing	<ul style="list-style-type: none"> • No. of stock orders • No. of deliveries to facilities with stock-outs
7. Monitoring & Evaluation	<ul style="list-style-type: none"> • Timely & accurate reporting. • Feedback meetings. 	CHMT HMT	<ul style="list-style-type: none"> • M&E tools • Teas & snacks • Transport reimbursements 	End November & ongoing	<ul style="list-style-type: none"> • No. of facilities submitting timely & accurate reports to DHIS.

Handout 9.1 Post test Assessment

Indicate if the following statements are True (T) or False (F).

1. The 1,000 days between a woman's pregnancy and her child's 2 nd birthday do not offer a critical window of opportunity to shape healthier and more prosperous futures	
2. Folic acid requirements increase during pregnancy in response to the demands of maternal production of red blood cells, fetal placental growth, and most important, for the prevention of NTDs.	
3. Pregnant women need extra and varied food each day (one or more servings of the staple food) in addition to 3 extra meals to provide energy and nutrition for her and the growing baby	
4. One key benefit of iron and folic acid supplementation for pregnant women is - reduced risk of having low birth weight babies	
5. The new Kenya policy on combined iron and folic acid supplementation for pregnant mothers is not different from the previous policy guidelines	
6. Eating of vitamin-C rich foods like tomatoes and citrus fruits is an inhibiting factor for iron absorption in the body	
7. Managing side effects of taking iron supplements is not one of the key counseling messages that must be given to pregnant women	
8. Interpersonal communication, mass media and the community are some of the effective behaviour change communications channels identified to support adoption of iron folate supplementation	
9. Stocks-outs, accumulation of excess stocks, deterioration and expiry are all consequences of poor inventory management of IFAS commodities	
10. Stock-on hand, consumption, losses, adjustments are the essential data elements for assessing stock status of IFAS commodities	
11. Monitoring and evaluation is the routine tracking of program activities using indicators to determine whether a program has achieved its short-term goals and objectives in the longer term	
12. One of the benefits of supportive supervision is ensuring uniformity to set standards, identifying problems and solving them in a timely manner	





IFAS

Iron & Folic Acid Supplements
Huimarisha afya ya mama na
ujauzito wake.