



# Infant and young child feeding practices

Standard Operating Procedures for the Handling  
of Breastmilk Substitutes (BMS) in Refugee Situations  
for children 0-23 months

**ANNEXES**

August 2015 (version 1.1)



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## Standard Operating Procedures for the Handling of Breastmilk Substitutes (BMS) in Refugee Situations for children 0-23 months

### ANNEXES

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## ANNEX 1: KEY RESOURCES ON IYCF AND ARTIFICIAL FEEDING

### Resources highlighted by section of SOP:

Section of SOP	For information on:	Resource	Reference
<b>Overall management of artificial feeding in refugee settings</b>	Policy guidance	Operational Guidance for Emergency Relief Staff and Programme Managers on Infant and Young Child Feeding in Emergencies, version 2, IFE Core Group, 2007.	<a href="http://www.enonline.net/operationalguidanceiycfv2.1Addendum">http://www.enonline.net/operationalguidanceiycfv2.1Addendum</a> (2010) at: <a href="http://files.enonline.net/attachments/1001/ops-guidance-2-1-english-010307-with-addendum.pdf">http://files.enonline.net/attachments/1001/ops-guidance-2-1-english-010307-with-addendum.pdf</a>
		The International Code of Marketing of Breast-milk Substitutes (1981) and subsequent relevant World Health Assembly Resolutions, WHO.	<a href="http://www.who.int/nutrition/publications/code_english.pdf">http://www.who.int/nutrition/publications/code_english.pdf</a> and <a href="http://www.who.int">www.who.int</a>
		Policy of the UNHCR on the Acceptance, Distribution and Use of Milk Products in Refugee Settings, UNHCR, 2006.	<a href="http://www.unhcr.org/4507f7842.html">http://www.unhcr.org/4507f7842.html</a>
		Global Strategy on Infant and Young Child Feeding (2003) and Planning Guide for National Implementation (2007), WHO/UNICEF.	Strategy: <a href="http://www.who.int/nutrition/publications/infantfeeding/9241562218/en/">http://www.who.int/nutrition/publications/infantfeeding/9241562218/en/</a> Planning guide: <a href="http://www.who.int/nutrition/publications/infantfeeding/9789241595193/en/">http://www.who.int/nutrition/publications/infantfeeding/9789241595193/en/</a>
		Infant and Young Child Feeding Programming Guide, UNICEF, 2011.	<a href="http://www.unicef.org/nutrition/files/Final_IYCF_programming_guide_2011.pdf">http://www.unicef.org/nutrition/files/Final_IYCF_programming_guide_2011.pdf</a>
	Staff orientation	Module 1. Infant Feeding in Emergencies for Emergency Relief Staff, version 2.1 - E-learning & Orientation Package, IFE Core Group, 2010.	e-Learning: <a href="http://lessons.enonline.net">http://lessons.enonline.net</a> Orientation materials: <a href="http://www.enonline.net/iycfeorientationpackage">http://www.enonline.net/iycfeorientationpackage</a>
<b>Community Assessment of artificial feeding needs</b>	Detailed IYCF surveys	Standardised Expanded Nutrition Survey. Module 3: Infant and Young Child Feeding, version 2, UNHCR, 2013.	<a href="http://www.sens.unhcr.org/page.asp?content_id=33624">http://www.sens.unhcr.org/page.asp?content_id=33624</a>
	IYCF data collection	Infant and Young Child Feeding Practices, Collecting and Using data: A Step-by-Step Guide, CARE USA, 2010.	<a href="http://nutritioncluster.net/wp-content/uploads/sites/4/2013/12/final-iycf-guide-iycf-practices_eng.pdf">http://nutritioncluster.net/wp-content/uploads/sites/4/2013/12/final-iycf-guide-iycf-practices_eng.pdf</a>
	Age assessment	Talking about IYCF and Child Age: A Briefing, IFE Core Group, 2012.	<a href="http://www.enonline.net/iycfandchildage">http://www.enonline.net/iycfandchildage</a>

Section of SOP	For information on:	Resource	Reference
<b>Individual assessment of artificial feeding needs</b>	Simple rapid assessment	Module 2 on IFE, Core Manual, Section 3, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf">http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf</a>
	Full Assessment	Module 2 on IFE, Core Manual, Section 3, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf">http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf</a>
<b>Individual artificial feeding support services</b>	Breastfeeding support services	Module 2 on IFE, Core Manual, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf">http://files.enonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf</a>
		Community-based Infant and Young Child Feeding Counselling Package, UNICEF, 2013.	<a href="http://www.unicef.org/nutrition/index_58362.html">http://www.unicef.org/nutrition/index_58362.html</a>
	Relactation	Module 2 on IFE, Additional Material: Section 6, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf">http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf</a>
		Relactation: Review of Experiences and Recommendations for Practice, WHO, 1998.	<a href="http://www.who.int/maternal_child_adolescent/documents/who_chs_cah_98_14/en/">http://www.who.int/maternal_child_adolescent/documents/who_chs_cah_98_14/en/</a>
	Wet nursing	Module 1 on IFE, Section 4.4, IFE Core Group, 2001.	<a href="http://files.enonline.net/attachments/150/module1-manual-refer-ops-gv2-1.pdf">http://files.enonline.net/attachments/150/module1-manual-refer-ops-gv2-1.pdf</a>
	Minimising risks of artificial feeding in emergencies	Module 1. Infant Feeding in Emergencies for Emergency Relief Staff, version 2.1 - E-learning, See Lesson 3.4, IFE Core Group, 2010.	<a href="http://lessons.enonline.net">http://lessons.enonline.net</a>
	Common concerns about breastfeeding in emergencies	Module 1. Infant Feeding in Emergencies for Emergency Relief Staff, version 2.1 - E-learning, See Lesson 2.2, IFE Core Group, 2010.	<a href="http://lessons.enonline.net">http://lessons.enonline.net</a>
	Supporting caregivers of artificially fed infants	Module 2 on IFE, Additional Material, Section 9B, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf">http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf</a>
	Wet feeding	Module 2 on IFE, Additional Material, Section 9C, IFE Core Group, 2007.	<a href="http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf">http://files.enonline.net/attachments/140/module-2-v1-1-additional-english.pdf</a>
	Hazards of using infant formula	Policy of the UNHCR on the Acceptance, Distribution and Use of Milk Products in Refugee Settings, Section 4, UNHCR, 2006.	<a href="http://www.unhcr.org/4507f7842.html">http://www.unhcr.org/4507f7842.html</a>
<b>BMS type</b>	Codex standards for infant formula	Infants Codex 72/1981. Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants, Codex Alimentarius, 1981.	<a href="http://www.codexalimentarius.org/download/standards/288/CXS_072e.pdf">http://www.codexalimentarius.org/download/standards/288/CXS_072e.pdf</a>

Section of SOP	For information on:	Resource	Reference
<b>Distribution of BMS</b>	Procedures to lessen dangers of artificial feeding	Module 1 on IFE, section 4.6 Core Manual, IFE Core Group, 2001.	<a href="http://files.enonline.net/attachments/150/module1-manual-refer-ops-gv2-1.pdf">http://files.enonline.net/attachments/150/module1-manual-refer-ops-gv2-1.pdf</a>
<b>Infants over 6 months</b>	Feeding infants 6-24 months	Guiding Principles for Feeding Non-Breastfed Children 6-24 Months of Age, WHO, 2005.	<a href="http://www.who.int/maternal_child_adolescent/documents/9241593431/en/">http://www.who.int/maternal_child_adolescent/documents/9241593431/en/</a>
	IYCF support in CMAM	Integration of IYCF Support into CMAM - Training Course, IFE Core Group and Collaborators, 2009.	<a href="http://www.enonline.net/integrationiycfintocmam">http://www.enonline.net/integrationiycfintocmam</a>
	Use of special nutritional products	Operational Guidance on the Use of Special Nutritional Products to Reduce Micronutrient Deficiencies and Malnutrition in Refugee Populations, version 1, compiled by the ENN for UNHCR, 2011.	<a href="http://www.unhcr.org/pages/52176e236.html">http://www.unhcr.org/pages/52176e236.html</a>
<b>HIV and infant feeding</b>	Key guidance on HIV and infant feeding	Guidelines on HIV and Infant Feeding 2010: Principles and Recommendations for Infant Feeding in the Context of HIV and a Summary of Evidence, WHO, 2010.	<a href="http://www.who.int/maternal_child_adolescent/documents/9789241599535/en/index.html">http://www.who.int/maternal_child_adolescent/documents/9789241599535/en/index.html</a>
		Questions and Answers on Infant Feeding in the Context of HIV, WHO (online only).	<a href="http://www.who.int/maternal_child_adolescent/topics/child/nutrition/hivif_qa/en/index.html">http://www.who.int/maternal_child_adolescent/topics/child/nutrition/hivif_qa/en/index.html</a>
		Guidance on Infant Feeding and HIV in the Context of Refugees and Displaced Populations, version 1.1, UNHCR, 2009.	<a href="http://www.unhcr.org/4acb0c111b.html">http://www.unhcr.org/4acb0c111b.html</a>
		Guidelines on HIV and Infant Feeding 2010: an Updated Framework for Priority Action, WHO, 2012.	<a href="http://www.unicef.org/nutrition/files/HIV_Inf_feeding_Framework_2012.pdf">http://www.unicef.org/nutrition/files/HIV_Inf_feeding_Framework_2012.pdf</a>
<b>Managing donations and inappropriate interventions</b>	Communications	Media Guide on Infant and Young Child Feeding in Emergencies, IFE Core Group.	<a href="http://www.enonline.net/iycfmediaguide">http://www.enonline.net/iycfmediaguide</a> (available in English, French, Arabic, German, Italian, Spanish)
		Model Joint Statement on IFE, IFE Core Group.	<a href="http://www.enonline.net/modelifejointstatement">http://www.enonline.net/modelifejointstatement</a>
		Key Messages on IFE for Mothers and Caregivers, IFE Core Group, 2010.	<a href="http://www.enonline.net/ifekeymessagesmothers">http://www.enonline.net/ifekeymessagesmothers</a>
		Ensuring Optimal Feeding of Infants and Children During Emergencies, WHO.	<a href="http://www.enonline.net/iycfewho">http://www.enonline.net/iycfewho</a>

Section of SOP	For information on:	Resource	Reference
	Handling milk and milk products in emergencies	Module 1. Infant Feeding in Emergencies for Emergency Relief Staff, version 2.1 - E-learning, See lesson 3.6, IFE Core Group, 2010.	<a href="http://lessons.enonline.net">http://lessons.enonline.net</a>
	Preventing and handling donations of BMS in emergencies	Module 1. Infant Feeding in Emergencies for Emergency Relief Staff, version 2.1 - E-learning, See lesson 3.5, IFE Core Group, 2010.	<a href="http://lessons.enonline.net">http://lessons.enonline.net</a>

## FULL LIST OF RESOURCES:

### **RESOURCES FOR NUTRITION, FOOD SECURITY AND PUBLIC HEALTH STAFF**

**En-net:** En-net is an online technical forum hosted and moderated by The ENN. It has a forum specifically on IYCF and can be used to post and discuss questions in this topic area. Go to [www.en-net.org.uk](http://www.en-net.org.uk)

#### **IFE Core Group (2010). Module 1. Infant Feeding in Emergencies for Emergency Relief Staff.**

**Orientation Package.** The package comprises e-learning lessons, which can be used in self-learning. The lessons do not have to be completed at one time but 'remember' where you've stopped so you can return and continue. Online at <http://lessons.enonline.net>.

The package also includes PowerPoint presentations and downloadable and print manuals available from <http://www.enonline.net/iycfeorientationpackage>.

### **POLICIES & STRATEGIES**

- 1. ICDC/ IBFAN (2006). Making Sense of the Code: Training Materials. Penang: ICDC/IBFAN.**  
Contact: ICDC, e-mail: [ibfanpg@tm.net.my](mailto:ibfanpg@tm.net.my) or IBFAN-GIFA, e-mail: [info@gifa.org](mailto:info@gifa.org)
- 2. IFE Core Group (2007). Operational Guidance for Emergency Relief Staff and Programme Managers on Infant and Young Child Feeding in Emergencies, Version 2.1., with Addendum. Oxford: IFE.**  
Available in 13 languages from <http://www.enonline.net/operationalguidanceiycfv2.1>. Addendum (2010) available in English from <http://files.enonline.net/attachments/1001/ops-guidance-2-1-english-010307-with-addendum.pdf>. Print copies in French and English available from the ENN, e-mail: [office@enonline.net](mailto:office@enonline.net).
- 3. IFE Core Group (2007). Generic Infant and Young Child Feeding in Emergencies Policy. Oxford: IFE.**  
Available in English from: <http://www.enonline.net/ifegenericpolicy>
- 4. IFE Core Group (2008). Generic Infant and Young Child Feeding in Emergencies Joint Statement. Oxford: IFE.** Available in English from: <http://www.enonline.net/modelifejointstatement>
- 5. UNICEF (2005). Innocenti Declaration 2005 on Infant and Young Child Feeding. New York: UNICEF.**  
Available in English, French, Arabic, Chinese, Italian, Russian and Spanish from: <http://www.unicef-irc.org/publications/435>.
- 6. UNHCR (2006). Policy of the UNHCR on the Acceptance, Distribution and Use of Milk Products in Refugee Settings. Geneva, UNHCR.** Available from: <http://www.unhcr.org/4507f7842.html> or <http://www.enonline.net/unhcrmilkpolicy2>
- 7. WHO (2004). Guiding Principles for Feeding Infants and Young Children during Emergencies. Geneva: WHO.** Available in English from: <http://whqlibdoc.who.int/hq/2004/9241546069.pdf?ua=1>
- 8. WHO (2003). WHO/UNICEF Global Strategy on Infant and Young Child Feeding, 2003. Geneva: WHO.**  
Available in English, French, Arabic, Chinese, German, Italian, Russian and Spanish from: <http://www.who.int/nutrition/publications/infantfeeding/9241562218/en/>

9. **WHO (2007). Planning Guide for National Implementation of the Global Strategy for Infant and Young Child Feeding. Geneva: WHO.** Available in English from: <http://www.who.int/nutrition/publications/infantfeeding/9789241595193/en/>
10. **WHO (1981). The International Code of Marketing of Breast-Milk Substitutes and subsequent relevant World Health Assembly Resolutions (The Code). Geneva: WHO.** Full Code and relevant WHA resolutions in downloadable pdf versions from: [www.ibfan.org](http://www.ibfan.org) and <http://www.who.int/nutrition/publications/infantfeeding/9241541601/en/>
11. **WHO (2008) The International Code of Marketing of Breast-Milk Substitutes Frequently Asked Questions. WHO : Geneva** Available in English from: [http://www.who.int/child\\_adolescent\\_health/documents/9241594292/en/index.html](http://www.who.int/child_adolescent_health/documents/9241594292/en/index.html)

## **ADVOCACY**

1. **IBFAN-Wemos (2001). Infant Feeding in Emergencies. Do You Know that Your Generous Donations of Breastmilk Substitutes Could Do More Harm than Good? 2nd ed. Panang: IBFAN.** Available in English from: [www.ibfan.org](http://www.ibfan.org)
2. **IBFAN (2002). Protecting Infant Health. A Health Workers' Guide to the International Code of Marketing of Breastfeeding Substitutes, 10th ed. Geneva: IBFAN.** Contact: IBFAN-ICDC International Code Documentation Centre, Penang, Malaysia at [ibfanpg@tm.net.my](mailto:ibfanpg@tm.net.my) or IBFAN Europe c/o GIFA, Geneva, Switzerland at [info@gifa.org](mailto:info@gifa.org) or IBFAN Regional Offices or WHO Child and Adolescent Health and Development (CAHD) Department, Geneva, Switzerland at [vallenasc@who.ch](mailto:vallenasc@who.ch)
3. **ICDC (2009). Focus on the Code and Infant Feeding in Emergencies.** Available in English, French, Arabic, Italian, Portuguese and Spanish from: [http://www.ibfan.org/code\\_watch-focus-emergencies.html](http://www.ibfan.org/code_watch-focus-emergencies.html) and <http://www.enonline.net/fex/36/focus>
4. **IFE Core Group (2007). Protecting Infants in Emergencies: the Role of the Public. Oxford: IFE.** Available in English from: <http://www.enonline.net/protectinginfantspublic>
5. **IFE Core Group (2007). Media Guide on Infant and Young Child Feeding in Emergencies. Oxford: IFE.** Available in English, French, Arabic, German, Italian and Spanish from: <http://www.enonline.net/iycfmediaguide>

## **TECHNICAL GUIDELINES & TRAINING MATERIAL**

### **Breastfeeding**

1. **IFE Core Group (2010). Module 1. Infant Feeding in Emergencies for Emergency Relief Staff. Orientation Package.**  
The package comprises e-learning lessons (<http://lessons.enonline.net>), integrated in UNICEF nutrition in emergencies training including an assessment (<http://www.unicef.org/nutrition/training/>), and a series of PowerPoint presentations. It is available from: <http://www.enonline.net/iycforientationpackage>
2. **ENN, IBFAN, Terre des hommes, UNICEF, UNHCR, WHO, WFP (2007, December). Module 2 on Infant and Young Child Feeding in Emergencies for Health and Nutrition Workers in Emergency Situations. Four Parts: Core Manual for Training Practice and Reference; Additional Material; Annexes; Overheard figures. Version 1.1.** Module 2 consists of five core parts, which can be covered in 5 hours of group teaching. Additional parts can be studied or taught separately. If included with the core part, the entire session would take 1 – 1.5 days. Available in English, French, Arabic and Bahasa from: <http://www.enonline.net/ifemodule2>
3. **ENN/NNP/IFE Core Group/IASC (2009). Integration of IYCF Support into CMAM.** Facilitator's guide and handouts for participants on 1 ½ day orientation on IYCF counselling in the context of community-based programmes for management of severe acute malnutrition. Available in English and French from: <http://www.enonline.net/integrationiycfintocmam>
4. **UNICEF (2011). Programming Guide: Infant and Young Child Feeding.** Available in English and French from: [http://www.unicef.org/videoaudio/PDFs/IYCF\\_programming\\_guide\\_May\\_26\\_2011.pdf](http://www.unicef.org/videoaudio/PDFs/IYCF_programming_guide_May_26_2011.pdf) and <http://www.enonline.net/unhcriycfprogrammingguide>. Also available by email from: [iycn@unicef.org](mailto:iycn@unicef.org)



**5. UNICEF (2013). Community-Based Infant and Young Child Feeding Counselling Package.**

Generic tools for programming and capacity development on community based IYCF counselling. Aimed for use in diverse country contexts, the package of tools guides local adaptation, design, planning and implementation of community based IYCF counselling and support services at scale. Contains training tools to equip community workers, using an interactive and experiential adult learning approach, with relevant knowledge and skills on the recommended breastfeeding and complementary feeding practices for children from 0 up to 24 months, enhance their counselling, problem solving, negotiation and communication skills, and prepare them to effectively use the related counselling tools and job aids.

To date, some 30 countries are at various stages of adapting the materials to the local context, building capacity and rolling out community based IYCF counselling and communication using the package. Adapted materials are available for Philippines, Nepal, India, Madagascar, Nigeria, and Kenya (Daadab).

Available in English and French from: [http://www.unicef.org/nutrition/index\\_58362.html](http://www.unicef.org/nutrition/index_58362.html)

For more information about the package, roll out and implementation plans, please contact France Begin at: [fbegin@unicef.org](mailto:fbegin@unicef.org) or email [jycn@unicef.org](mailto:jycn@unicef.org)

### Artificial Feeding

**1. ENN/Gribble, K. (2007). Why Infant Formula Causes Deaths Due to Diarrhoea in Emergencies. London: ENN.**

Explains the causes of diarrhoea, how breastfeeding prevents diarrhoea and how infant formula makes infants vulnerable to diarrhoea and the risks during emergencies. Available in English from: <http://www.ennonline.net/infantformuladiarrhoea>

**2. UNICEF (1999, May-June). Cup Feeding Information. BFHI News. New York: UNICEF.** Contact: [pubdoc@unicef.org](mailto:pubdoc@unicef.org)

**3. WHO in collaboration with FAO (2006). Safe Preparation, Storage and Handling of Powdered Infant Formula. Guidelines. Geneva: WHO.** Available in English, French, Arabic, Chinese, Russian and Spanish from: <http://www.who.int/foodsafety/publications/powdered-infant-formula/en/>

**4. WHO (2009) Acceptable Medical Reasons for Use of Breastmilk Substitutes. Geneva: WHO** Available in English, Portuguese and Spanish from: [http://www.who.int/child\\_adolescent\\_health/documents/WHO\\_FCH\\_CAH\\_09.01/en/index.html](http://www.who.int/child_adolescent_health/documents/WHO_FCH_CAH_09.01/en/index.html)

**5. Infant Formula Label - Generic.** Available in English from: <http://www.ennonline.net/infantformulagenericlabel>

### HIV and infant feeding

**1. WHO (2010). Guidelines on HIV and Infant Feeding 2010. Principles and Recommendations for Infant Feeding in the Context of HIV and a Summary of Evidence.** Available in English from: [http://www.who.int/child\\_adolescent\\_health/documents/9789241599535/en/index.html](http://www.who.int/child_adolescent_health/documents/9789241599535/en/index.html)

### Monitoring and Evaluation

**1. Care USA (2010) Infant and Young Child Feeding Practices, Collecting and Using Data, a Step by Step Guide.** Available in English from: <http://www.ennonline.net/iycfdataguide>

**2. IASC (2007). Initial Rapid Assessment (IRA) Draft. Geneva: IASC.** Available in English from: <http://nutritioncluster.net/resources/mira-manual-2012/>

**3. WHO, UNICEF, USAID, AED, UCDAVIS, IFPRI (2008). Indicators for Assessing Infant and Young Child Feeding Practices.** Available in English from: <http://www.who.int/nutrition/publications/infantfeeding/9789241599757/en/index.html>

**4. WHO /Linkages (2003). Infant and Young Child Feeding. A Tool for Assessing National Practices, Policies and Programmes. Geneva: WHO.** Available in English from: <http://www.who.int/nutrition/publications/infantfeeding/9241562544/en/>

**5. UNHCR (2013 version 2). Standardised Expanded Nutrition Survey Guidelines for Refugee Populations. Geneva: UNHCR.** Available from: <http://www.sens.unhcr.org>

## **ANNEX 2: POLICY GUIDANCE RELATED TO ARTIFICIAL FEEDING AND THE USE OF BMS**

### **1. The Code**

The International Code of Marketing of Breastmilk Substitutes was adopted by the World Health Assembly (WHA) (the governing body of the World Health Organisation) in Resolution 34.22 in 1981. The 1981 Resolution and subsequent relevant WHA Resolutions are collectively referred to as 'The Code'. All provisions of the Code apply in emergencies and some portions of the Code are specific to emergencies.

The Code is intended to protect the mothers/carers of both breastfed and non-breastfed infants and young children from commercial influences on their infant feeding choices. The Code sets out the responsibilities of the infant food industry, health workers, governments and organisations in relation to the marketing of breastmilk substitutes, feeding bottles and teats. The Code does not ban the use of infant formula or bottles but controls how they are produced, packaged, promoted and provided.

Adoption of and adherence to the Code is a *minimum requirement*. All Member States are called upon to support the implementation of the entire provisions of the Code (WHA 34.22). All of the provisions of the code are applicable in all emergency settings worldwide. In 1994, the Code outlined conditions that must be met in emergencies regarding donated supplies of BMS. Acts of non-compliance to the code are called *violations*. Typically, violators of The Code are companies who manufacture BMS.

#### ***WHA Resolution 47.5: The Code and donations***

This Resolution states that there should be *"no donations of free or subsidised supplies of breastmilk substitutes and other products covered by the Code in any part of the healthcare system."*

The health care system is defined by the Code to include governmental, non-governmental or private institutions or organisations engaged, directly or indirectly, in healthcare for mothers, infants and pregnant women, and nurseries or childcare institutions. It also includes health workers in private practice. It does not include pharmacies or other established sales outlets.

Available from: <http://www.ibfan.org/English/resource/who/fullcode.html>

## **2. Operational Guidance on Infant and Young Child Feeding in Emergencies (IYCF-E) version 2.1 (2007) with addendum (2010)**

The Operational Guidance on IYCF-E (2007) is a key policy document developed by the IFE Core Group to guide programmers and policy makers on IYCF-E. The Operational Guidance includes The Code (and is endorsed in WHA Resolution 23.23, 2012) and adds further guidance applicable to emergency situations. It draws on technical guidance, empirical evidence, and experience from past emergencies. Key provisions of the Code have been integrated and built upon, to respond to the particular challenges that emergencies pose to Code implementation.

Section 6 of the Operational Guidance deals with minimising the risks of artificial feeding in emergency contexts.

The Operational Guidance on IYCF-E (2007) states the following on **donations of BMS**:

*In emergencies, donations of BMS are not needed and may put infant's lives at risk. This information should be provided to potential donors (including governments and the military) and the media, both in emergency preparedness and particularly during the early phase of an emergency response (Ops Guidance on IYCF-E, section 6.1.1).*

*Soliciting or accepting unsolicited donations of BMS should be avoided. Instead, interventions to support artificial feeding should budget for the purchase of BMS supplies along with other essential needs to support artificial feeding, such as fuel, cooking equipment, safe water and sanitation, staff training, and skilled personnel (Ops Guidance section 6.1.2)*

The Operational Guidance is available in 13 languages.

Available from: <http://www.enonline.net/operationalguidanceiycfv2.1>

## **3. UNHCR milk policy**

The UNHCR Milk Policy, related to the acceptance, distribution and use of milk products in refugee settings, was revised in 2006. This policy aims to assist and guide the use of milk products, such as DSM, Dried Whole Milk and liquid UHT milk, infant formula and therapeutic milks. This policy recognises that indiscriminate distribution and use of these products in refugee situations has a negative impact on infant feeding. This policy addresses practical aspects of UNHCR's handling of milk products in refugee situations in order to minimise the risk to infant feeding.

Available from: <http://www.unhcr.org/4507f7842.html> or <http://www.enonline.net/unhcrmilkpolicy>

#### **4. WHO Guidelines on HIV and Infant Feeding (2010)**

This document updates previous WHO guidance on HIV and infant feeding (last revised in 2006) on the basis of new evidence. The new 2010 guidelines recognize the important impact of antiretroviral (ARV) interventions during the breastfeeding period, to reduce postnatal transmission of HIV from the mother to the infant, and recommend that national authorities in each country decide which infant feeding practice should be promoted and supported by their Maternal and Child Health Services. This differs from the previous recommendations in which health workers were expected to individually counsel all HIV-infected mothers about the various feeding options, and it was then for mothers alone to decide between them.

Where national authorities promote breastfeeding and ARVs, mothers known to be HIV-infected are now recommended to breastfeed their infants until at least 12 months of age. The recommendation that replacement feeding should not be used unless it is AFASS (acceptable, feasible, affordable, sustainable and safe) remains, but the acronym is replaced by more common, everyday language and terms. There is guidance on what to do in the absence of ARVs, in recognition that ARVs will not be rolled out everywhere immediately.

*Available from:* [http://www.who.int/maternal\\_child\\_adolescent/documents/9789241599535/en/index.html](http://www.who.int/maternal_child_adolescent/documents/9789241599535/en/index.html)

### **ANNEX 3: CONSIDERATIONS REGARDING UNHCR PARTNER CAPACITY APPRAISAL**

UNHCR operations rely on partners. Partners on IYCF will need to be aware of the specific IYCF context and will need the right set of human resources, operational resources and partnerships with other agencies to successfully deliver the specific aspect/s of IYCF programming that they are responsible for.

Table 2 on the following page provides an example list of artificial feeding related services, along with required organisational capacities and UNHCR support functions. This can be used as a tool to ensure that all required functions are covered by partners.

**Table 2: Examples of agency capacities required for artificial feeding support services**

<i>Role (service)</i>	<i>Capacities required</i>	<i>Partner Organisation/s responsible</i>	<i>UNHCR role</i>
<b>Population level functions</b>			
IYCF population level assessment	<i>Health/ nutrition assessment (ideally including an IYCF specialist in assessment or at a minimum capacity in assessment design and analysis)</i>		Undertake initial screening upon arrival In collaboration with partner(s), analyse data and ensure appropriate interventions are in place to meet needs
Procuring BMS	<i>Procurement</i>		Give permission for procurement
Storage of BMS and logistics	<i>Storage capacity, logistics skills and capacity</i>		Monitor storage conditions
Targeted distribution of BMS	<i>Health/ medical clinic in kind or via voucher systems</i>		Analyse data in collaboration with partner(s); monitor distribution
Setting up 'baby tents' (or equivalent)	<i>Logistics, health and nutrition staff</i>		Monitor implementation
<b>Individual level functions</b>			
Individual assessment of infants and young children for IYCF support	<i>Individuals trained in health and nutrition assessment/ screening</i>		Analyse data in collaboration with partner(s); monitor
Breastfeeding counselling – basic and skilled	<i>Nutrition/ health staff including skilled breastfeeding counsellors</i>		Monitor
Complementary feeding support and counselling	<i>Nutrition/ health staff</i>		Monitor
Growth and health monitoring	<i>Nutrition/ health staff</i>		Monitor
Artificial feeding counselling and follow up	<i>Community nutrition/ health workers</i>		Monitor

The sort of information that UNHCR operations should seek to appraise possible partners for IYCF roles include:

- Evidence that all managers and staff are orientated in key operational guidance on IYCF-E
- The agency has the required operational capacity to deliver the agreed IYCF functions e.g. staff capacity (with the right skills and training), logistical capacity (e.g. vehicles, warehouse), etc.
- The agency has strong partnerships with the right stakeholders to deliver the agreed IYCF functions (e.g. other NGOs, government health clinics, MOH, etc.)
- The agency has headquarters or institutional support for IYCF.

Training and orientation materials are available to help to build human resource capacities. See Annex 2 for more information.

## **ANNEX 4: INFORMATION TO SUPPORT SCENARIO DEFINITION OF AN INFANT FEEDING SITUATION**

A Scenario Definition involves the systematic collation and analysis of secondary information. It is a secondary data analysis that aims to determine the extent of the disaster and the number of affected people and to sketch out the strategic humanitarian priorities.

Secondary data analysis should include an assessment of predominant IYCF feeding practices in the refugee population, pre-crisis, during previous crises (where relevant) and in the current crisis where possible. Pre-crisis secondary information is particularly important as it helps recognize pre-existing vulnerabilities and risks that may be exacerbated as a result of the disaster. This information should be collected in the area of origin as well as in the new hosting area of the refugee population. Pre-crisis information can also serve as the baseline for assessing the impact of the disaster. Lessons learnt from similar past events – in terms of priority needs and interventions – are also valuable. In-crisis secondary information includes all the information directly related to the disaster and not collected through the community level assessment. It gives an accurate appreciation of the current crisis situation and, when compared with pre-crisis information, helps assess the impact of the disaster. The common operational datasets (CODs) are one of the main sources of secondary information. Other sources are listed in Table 3 on the following page. *(Extract from IASC MIRA, March 2012)*

**Table 3: Sources of pre- and in-crisis information (Adapted from IASC Multi-Cluster/  
Sector Initial Rapid Assessment (MIRA) Provisional Version, March 2012**

Pre-crisis information	In-crisis information
1. Existing UNHCR and other UN programmes	1. Existing UNHCR and other UN programmes
2. National institutions (ministries, research institutes, universities, etc.)	2. National institutions (ministries, local offices of emergency preparedness, etc.)
3. Large survey (Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), censuses, etc.)	3. Media reports
4. International development institutions (i.e. World Bank)	4. Assessment reports from UN agencies, Nutrition/Health/Food Security/WASH clusters and international NGOs
5. Sector fact sheets	5. Situation reports (OCHA, clusters, government)
6. Common Operational Datasets	6. Humanitarian profiles
7. United Nations as well as local and international NGOs survey reports	7. Geospatial data from UNISAT, Google Earth, etc.
8. United Nations global data sets or country portals	8. Satellite imagery from UNISAT or private providers
9. Geospatial data	9. Social media
10. Online databases (i.e. EM-DAT, Prevention Web)	10. Funding appeals
11. Previous Flash appeals and Consolidated Appeals Process (CAPs)	
12. WHO country epidemiological profiles	
13. ALNAP evaluation reports, After Action reviews	
14. DevInfo, World Bank's world development indicators, Millennium Development Goals	

When interpreting data from the scenario definition, UNHCR staff should be especially sensitive to a number of **'alerts'** regarding feeding practices in a community that indicate risk. Table 4 gives examples of 'alerts' and their operational implications.



**Table 4: Example alerts in the population, sources of information and operational implications**

Alert	Source of information	Operational implications
There is a history of artificial feeding in the population	Secondary data	<p>There may be infants and young children who are not breastfed.</p> <p>There may be infants and young children who are mixed fed.</p> <p>There may be an expectation for infant feeding supplies amongst caregivers.</p> <p>Access to good WASH and health services will be especially important.</p> <p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>A clear plan and strong communication to the population, to the humanitarian community and to service providers will be needed.</p>
There are reports of artificial feeding in the affected population	Initial rapid assessment, staff observations (including clinic staff, community service staff and other field workers)	<p>There is a need to identify whether these are isolated cases or indications of a bigger need.</p> <p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, and inform relevant UNHCR staff and partners.</p>
There are reports of mothers stopping breastfeeding	Initial rapid assessment, staff observations (including field staff, community service staff and other field workers)	<p>There is a need to identify whether these are isolated cases or indications of a bigger need.</p> <p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, and inform relevant UNHCR staff and partners.</p>
There are demands from caregivers for BMS	Initial rapid assessment, staff observations (including field staff, community service staff and other field workers)	<p>There is a need to identify whether these are isolated cases or indications of a bigger need.</p> <p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, and inform relevant UNHCR staff and partners.</p>

Alert	Source of information	Operational implications
There are reports of unaccompanied/ motherless infants	Initial rapid assessment of demographics, type of disaster and reports that mothers have been disproportionately affected in the crisis; health clinic reports, and feeding programme reports	<p>There is a need to identify whether these are isolated cases or indications of a bigger need.</p> <p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, and inform relevant UNHCR staff and partners, including referral for specialist support.</p> <p>Assessment of the maternal situation, e.g. whether mothers have been disproportionately affected by an emergency/disease.</p>
Malnourished infants <6 months are presenting to clinics	Health clinic reports, feeding programme reports	<p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, including referral for specialist support, and inform relevant UNHCR staff and partners.</p>
Presentation of individual cases of artificial feeding to clinics	Health clinic reports	<p>Artificial feeding assessment must be included in any rapid assessments being conducted.</p> <p>Health and protection staff must be alerted.</p> <p>There is a need to establish immediate actions in these cases, including referral for specialist support, and inform relevant UNHCR staff and partners.</p>
There is a history of donations of BMS in previous emergencies	Lessons learned, agency experience, Code violations reported	Act to prevent donations, be alert to arrival of donations and prepare plan for handling donations that do arrive (see Sections 11 and 12).

Table 5 gives examples of types of IYCF scenarios that may exist in refugee contexts.

**Table 5: Examples of IYCF scenarios**

Scenario	Example population group	Considerations	Scale of concern (1=low, 3=high)
Breastfeeding is the norm in the population. Isolated cases presenting to clinics requesting infant formula for motherless infants.	Sudanese refugees in South Sudan	Need to identify capacity to assess and manage isolated cases.	1
Breastfeeding is practised by most mothers to begin with. However, mixed feeding is common, linked to care practices. Many mothers stop breastfeeding when infant is 1 year of age, often corresponding to a second pregnancy.	Syrian refugees in Lebanon	Risk of significant demands for infant formula from the population. There may be expectation for supplies for infants >6 months of age. Complementary feeding needs will be especially important to address.  More detailed population/community level assessment needed.  Clear position by UNHCR and communication regarding what will be provided or not in terms of infant formula/target age group, will be essential.  Skilled breastfeeding support will be needed.	3
Artificial feeding is the norm for a significant proportion of the infant population. A significant proportion (e.g. >5% or more) are likely never to have breastfed.	Lebanon	More detailed population based assessment to identify the scale of support needed.  An intervention to support non-breastfed infants will be required.  Reliance on presentation of cases to clinics risks not identifying all of those in need of protection, and it also may result in infants presenting late, when they are sick/malnourished – active case finding or outreach programmes may be needed.	3
Infants have been receiving replacement feeding through an EMTCT programme.	Somali refugees in Kenya	Establish how to identify the EMTCT caseload, in order to target artificial feeding support.  In an emergency, review the population-level recommended feeding options for the affected population, to apply for newborns. (See Part 6)	3

## ANNEX 5: INFORMATION TO SUPPORT RAPID ASSESSMENT OF AN INFANT FEEDING SITUATION

A Rapid Assessment usually happens at the beginning of an emergency to measure key indicators on various issues. IYCF indicators should be included in such assessments, and examples of indicators that can be included are given in Table 6.

**Table 6: Indicators relating to artificial feeding that can be included in rapid assessments**

Indicator title	Indicator Description	Method
Exclusive breastfeeding under 6 months	Proportion of infants 0-5 months of age who are fed exclusively with breastmilk	Opportunistic sampling (see below) and adapted method (Annex 7)
Bottle feeding	Proportion of children 0-23 months of age who are fed with a bottle	Opportunistic sampling (see below) and adapted method (Annex 7)
Not breastfed	Proportion of infants 0 - <12 months and 12 - <24 months not breastfed	Opportunistic sampling (see below) and adapted method (Annex 7)
Any untargeted distribution of infant formula, dried or liquid milk to the affected population	Confirmed distribution of infant formula, dried or liquid milk to the affected population	Opportunistic sampling (see below) and adapted method (Annex 7)
Additional qualitative indicator	Indicator description	
Maternal reports of difficulties with breastfeeding	Confirmed maternal reports of difficulties with breastfeeding	Opportunistic sampling (see below) and adapted method (Annex 7)
Reports of difficulties meeting IYCF needs	Confirmed reports of difficulties meeting IYCF needs of children	Opportunistic sampling (see below) and adapted method (Annex 7)

These indicators are consistent with the IYCF questions recommended by the Global Nutrition Cluster and the multi-sectoral initial rapid approach by OCHA (correct Sept 2013). A full list of MIRA IYCF indicators is provided in Annex 6.

**For more information on the Nutrition Cluster and OCHA indicators on IYCF, go to:**

<https://ir.humanitarianresponse.info>

UNHCR and partners can also make the most of opportunities to include IYCF data collection in other assessments and activities that are happening (opportunistic sampling). Examples include:

### **a) Reception Centres**

In the early stages of an emergency the reception centre can be an important point at which to identify 'at risk' infants. However, the reception centre can also be particularly overwhelmed in an emergency, and UNHCR should work closely with partners who may have more capacity to add a critical feeding question(s), for example partners who are checking vaccination status.

The aim at reception centres would be, at a minimum, to identify infants <6 months and ask if the infant is being breastfed (see Simple Rapid Assessment (SRA) questionnaire in Annex 8, Table 8), and to refer infants whose mothers are requesting BMS for IYCF investigation and support. If time allows, additional questions from the SRA can be asked to identify breastfed infants in need of IYCF support. Early identification of problems with breastfeeding will enable targeted support and may reduce the risk of infant formula being later requested.

### **b) Other UN agency and NGO operations**

In the post rapid phase or in chronic emergencies, UNHCR staff should seek opportunities to integrate IYCF into scheduled assessments of other UN agencies and NGOs. For example, SRA questions (in part or full) can be added to:

- MUAC screening
- WFP household food security assessment
- Vaccination/registration stations of NGO partners
- Programme coverage assessments

*"An exhaustive MUAC screening was conducted in Lebanon during the Syria crisis. What a missed opportunity to assess breastfeeding status amongst infants". UNHCR, July 2013*

### **c) UNHCR operations and supported programmes**

Artificially fed and non-breastfed infants can be identified using the SRA (Annex 8) in:

*Supplementary Feeding Programmes (SFPs) targeting pregnant and lactating women:* While SFPs target 'lactating' women, in reality, they target mothers of infants as breastfeeding status of mothers is often unchecked. It will be important to handle this sensitively and be

clear of implications of identifying cases, e.g. reassurance of mothers and clear guidance for staff that non-breastfeeding mothers will not be excluded from the SFP programme.

*Community service workers:* In UNHCR operations, community health workers are a valuable link to the community and can help to identify at risk infants and refer cases.

*Presentation of cases to health clinics:* Infants presenting to clinics requesting infant formula or presenting acutely malnourished/sick must be referred to full individual assessment of feeding practices. These individual cases must be reported to UNHCR, and further investigation will be needed in the context of the situation/scenario to determine whether these are isolated cases or an 'alert' to a bigger need.

Additional opportunities: baby tents/child friendly spaces; medical screening; vaccination points; Community Nutrition Workers (CNWs) outreach MUAC screening; during pre- and post-natal follow up; through community service and protection programming staff; through psychosocial support staff.



UNHCR/S. Baldwin/May 2013

## ANNEX 6: IYCF INDICATORS FOR COMMUNITY-LEVEL ASSESSMENT

These indicators are consistent with the IYCF questions recommended by the Global Nutrition Cluster and the multi-sectoral initial rapid approach (MIRA) by OCHA (correct Sept 2013).

**For more information on the Nutrition Cluster and OCHA indicators on IYCF, go to:**

<https://ir.humanitarianresponse.info>

**Table 7: Full list of MIRA indicators on IYCF**

2013 Indicator title	2013 Indicator Description	Appropriate Phase	Source / method	General guidance
Early initiation of breastfeeding	Proportion of children 0-23 months who were put to the breast within one hour of birth	Preparatory; Phases I, II, III and IV	Preparatory, Phase III and IV: representative IYCF survey. Phase I and II: use key informant interviews and opportunistic sampling to give an ALERT indication	WHO IYCF core indicator. For preparatory, the WHO core indicator should be used as a baseline where the denominator is children born in the last 24 months (Proportion of children born in the last 24 months who were put to the breast within one hour of birth). For Phases III-IV, an <i>adapted</i> indicator should be used where the same methodology is used but the denominator is infants born since onset of the emergency. (Proportion of children born since the onset of the emergency who were put to the breast within one hour of birth). In Phase I and II, the denominator used should be infants born since onset of the emergency. In these phases opportunistic sampling will be necessary, e.g. at facilities providing obstetric services/ newborn support (see Annex 6)
Exclusive breastfeeding under 6 months	Proportion of infants 0-5 months of age who are fed exclusively with breastmilk	Preparatory; Phases I, II, III and IV	Preparatory, Phase III and IV: representative IYCF survey. Phase I and II: use key informant interviews and opportunistic sampling to give an ALERT indication	WHO IYCF core indicator. For preparatory and Phases III and IV, core WHO indicator should be measured. In Phases I and II, it is not possible to accurately assess the exclusive breastfeeding rate in the population. Baseline information and IYCF 14 (not breastfed) will be key information in Phases I and II

2013 Indicator title	2013 Indicator Description	Appropriate Phase	Source / method	General guidance
Continued breastfeeding at one year and at 2 years	Proportion of children 12-15 months of age and 20-23 months of age who are fed breastmilk	Preparatory; Phases III and IV	Representative IYCF survey	The WHO IYCF core indicator reports continued breastfeeding at 1 year. In emergencies, it is important to also monitor continued breastfeeding rate at 2 years (WHO IYCF optional indicator) as children 1-2 years are also at significant risk of increased morbidity and mortality if not breastfed in this context
Children ever breastfed	Proportion of children born in the last 24 months who were ever breastfed	Preparatory; Phases I, II, III and IV	Preparatory, Phase III and IV: representative IYCF survey. Phase I and II: use key informant interviews and opportunistic sampling to give an ALERT indication	WHO IYCF core indicator. For preparatory phase, the core WHO Indicator should be used as a baseline where the denominator is infants born in the last 24 months. For measurement in Phases I-IV, an adapted indicator should be used where the denominator should be infants born since onset of the emergency. In phases I and II, opportunistic sampling will be necessary, e.g. piggy backed onto reproductive health sampling or anthropometric screening or food security assessment
Predominant breastfeeding under 6 months	Proportion of infants 0-5 months of age who are predominantly breastfed	Preparatory; Phases III and IV	Representative IYCF survey	WHO IYCF optional indicator
Bottle feeding	Proportion of children 0-23 months of age who are fed with a bottle	Preparatory; Phases I, II, III and IV	Preparatory, Phase III and IV: representative IYCF survey. Phase I and II use key informant interviews and opportunistic sampling to give an ALERT indication	WHO IYCF optional indicator. This indicator determines the use of bottles which carry risk; it is <b>not</b> an indicator of use of infant formula or breastmilk substitutes, since it records <i>any item</i> fed using a bottle including breastmilk, water, semi-solids, etc.
Minimum dietary diversity	Proportion of children 6-23 months of age who receive foods from 4 or more food groups	Preparatory; Phases III and IV	Representative IYCF survey	This indicator is adapted from the WHO IYCF core indicator for children 6-23 months



2013 Indicator title	2013 Indicator Description	Appropriate Phase	Source / method	General guidance
Minimum meal frequency	Proportion of children 6-23 months who received solid, semi-solid or soft foods the minimum number of times or more.	Preparatory; Phases III and IV	Representative IYCF survey	WHO IYCF core indicator
Minimum acceptable diet	Proportion of children 6-23 months of age who receive a minimum acceptable diet (apart from breastmilk)	Preparatory; Phases III and IV	Representative IYCF survey	WHO IYCF core indicator
Introduction of solid, semi-solid or soft food	Proportion of children 6-8 months of age who received solid, semi-solid or soft foods during the previous day	Preparatory; Phases III and IV	Representative IYCF survey	WHO IYCF core indicator. Need guidance on sample size
Not breastfed	Proportion of infants 0 - <12 months and 12 - <24 months not breastfed	Preparatory; Phases I,II,III, IV	Preparatory, Phases III and IV: Indicator produced from data collected from MICS/ DHS. Phase I and II will use key informant interviews and opportunistic sampling to give an ALERT indication	This is not a standard indicator. However it is possible to calculate this indicator using standardised data collected to produce WHO IYCF core indicators. Preparatory, Phases III and IV: calculate this indicator based on standardised data collected. In phases I and II, an indication of the proportion of non-breastfed infants should be estimated based on key informant interviews and opportunistic sampling
Any distribution of infant formula, dried or liquid milk to the affected population	Confirmed distribution of infant formula, dried or liquid milk to the affected population	Phases I, II, III and IV	Key informant interviews (include logistics and any agencies involved in distribution, as well as health and nutrition staff and caregivers). Distribution reports. Observations	This is an alert to problems. Any general distribution of these products to the affected population is a concern as there is a risk of spill over to infants and young children

2013 Indicator title	2013 Indicator Description	Appropriate Phase	Source / method	General guidance
Any inappropriate distribution of infant formula, dried or liquid milk to children 0 - <2 years	Confirmed distribution of infant formula, dried or liquid milk to children 0 - <2 years	Phases I, II, III and IV	Key informant interviews (include logistics and any agencies involved in distribution, as well as health and nutrition staff and caregivers). Distribution reports. Observations	This is an alert to problems. Inappropriate distribution is where distribution is not in accordance with the Operational Guidance on IFE in meeting criteria for assessment of need, skilled support available, guaranteed continuity of supplies, individual follow up, availability of storage and preparation facilities, appropriate labelling, and monitoring for spill over to breastfed infants
Maternal reports of difficulties breastfeeding	Confirmed maternal reports of difficulties breastfeeding	Phases I, II, III, IV	Key informant interviews (include mothers of children under 2 years, caregivers, health workers, protection staff)	This is an alert to problems. Reported difficulties should be triangulated with relevant other information and will require further investigation
Reports of difficulties meeting IYCF needs	Confirmed reports of difficulties meeting IYCF needs of children	Phases I, II, III, IV	Key informant interviews (include mothers of children under 2 years, caregivers, health workers, protection staff)	This is an alert to problems regarding complementary feeding and artificial feeding in the population and support needed (e.g. cooking facilities). Questions should be open and ask caregivers regarding any difficulties. This alert should be triangulated with information from food security, WASH, etc.
Adequacy of food and conditions available for complementary feeding	Adequacy of available food and conditions to feed children under 2 years in population	Phases I, II, III, IV	Food basket/pipeline analysis	This is an alert to problems regarding complementary feeding in the population. Expert analysis and informed judgement on adequacy and appropriateness of food available and facilities to prepare food for complementary feeding

## ANNEX 7: GUIDE TO CALCULATING NON-BREASTFED INDICATOR USING DATA FROM THE UNHCR STANDARDISED EXPANDED NUTRITION SURVEY (SENS) IYCF MODULE

UNHCR recommends to include IYCF (SENS module 3) in nutrition surveys conducted among refugees. This annex is in complement to the SENS instructions for calculating IYCF indicators. The variable names and codes refer to the standard coding in the SENS guidelines. For more information about SENS, go to: <http://www.sens.unhcr.org/>

Breastfeeding status	Proportion of children 0-23 months old who were fed breastmilk during the previous day	Number of children 0-23.99 months who were fed breastmilk during the previous 24 hours (IF6=1 / YESTBF=1)  <u>Divided by</u> Number of children 0-23.99 months  Exclude from analysis children with answers 8 ('Don't know') or where information is missing for IF6 (YESTBF=8, YESTBF=(.)).
	Proportion of children 0-23 months old <u>who were not fed breastmilk</u> during the previous day	Number of children 0-23.99 months who were not fed breastmilk during the past 24 hours (IF6=2 / YESTBF=2)  <u>Divided by</u> Number of children 0-23.99 months  Exclude from analysis children with answers 8 ('Don't know') or where information is missing for IF6 (YESTBF=8, YESTBF=(.)).
	<i>(Disaggregated)</i> Proportion of children 0-11 months old who were fed breastmilk during the previous day	Number of children 0-11.99 months who were fed breastmilk during the previous 24 hours (IF6=1 / YESTBF=1)  <u>Divided by</u> Number of children 0-11.99 months  Exclude from analysis children with answer 8 ('Don't know') or where information is missing for IF6 (YESTBF=8, YESTBF=(.)).
	<i>(Disaggregated)</i> Proportion of children 0-11 months old <u>who were not fed breastmilk</u> during the previous day	Number of children 0-11.99 months who were not fed breastmilk during the previous 24 hours (IF6=2 / YESTBF=2)  <u>Divided by</u> Number of children 0-11.99 months  Exclude from analysis children with answer 8 ('Don't know') or where information is missing for IF6 (YESTBF=8, YESTBF=(.)).

## ANNEX 8: SYSTEM FOR INDIVIDUAL IYCF ASSESSMENT AND REFERRAL

The recommended system for individual IYCF assessment and referral is displayed in Figure 1. The flow chart starts at the point at which an infant presents in a programme, for example, when an infant first reaches a reception centre, or at whatever point 'simple rapid assessment' takes place.

This system includes two stages: Simple Rapid Assessment (SRA) and Full Assessment (FA). This annex provides information to help in both stages of individual assessment, provides summary information on IYCF support services that UNHCR and partners should provide and shows (in figure 1) how all of these fit together.

### a) Simple Rapid Assessment

Table 8 gives a list of IYCF questions that can be used in an SRA, usually carried out at an initial point of contact with the infant mother (or caregiver) pair, by a non-nutrition or health staff member.

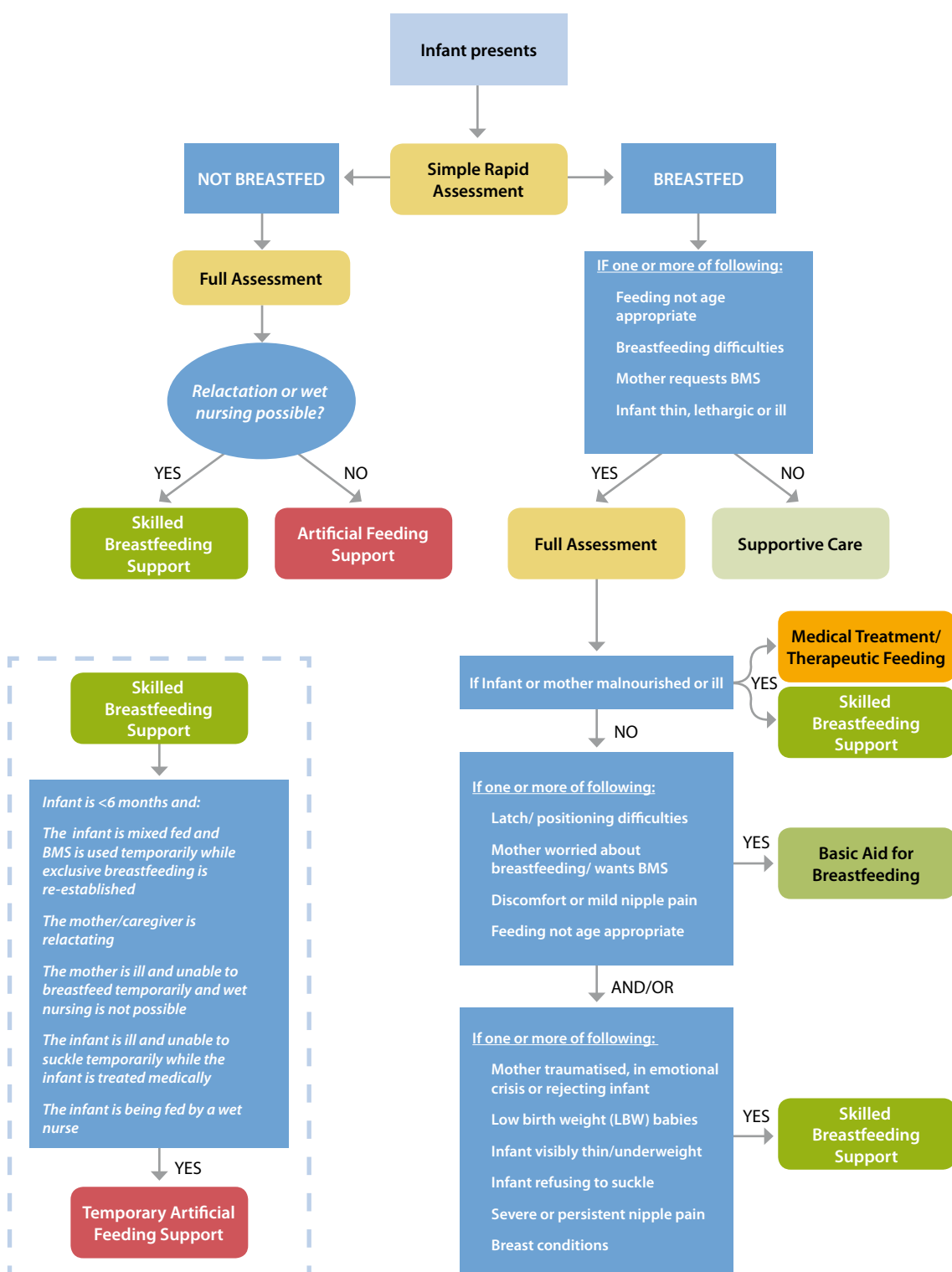
**Table 8: Simple Rapid Assessment (SRA) of IYCF questions**

No.	Question	Record	Action
1*	Is the mother present with the infant?	Yes/No	If no but available, locate the mother. If no mother or mother unavailable, refer for further investigation of care situation.
<b>Age-appropriate feeding</b>			
2*	Date of birth of infant? Or How many years was [NAME] on his/her last birthday? And how many additional months is [NAME] beyond the last completed year?	DOB: OR Age in months:	
3*	Are you or someone else breastfeeding him/her?	Yes/ No	If no, refer for FA
4	Is the baby getting anything else to drink or eat?	Yes/ No	If <6 months and yes, or >6 months and no, refer for FA
<b>Breastfeeding ease</b>			
4	Is the baby able to suckle the breast?	Yes/ No	If no, refer for FA
5	Have you any other difficulties breastfeeding?	Yes/ No	If yes, refer for FA
<b>Look at the baby's condition</b>			
6	Does the baby look very thin?	Yes/ No	If yes, refer for FA
7	Is the baby lethargic, perhaps ill?	Yes/ No	If yes, refer for FA

\* Minimum questions to include to identify non-breastfed infants <6 months of age.

Staff conducting an SRA will need basic training in IYCF to carry out an SRA and will need to know where to refer infants for a full assessment (according to the first tier of the assessment flow chart in figure 1). See Annex 1 for suitable training materials.

**Figure 1: Flow chart for process of individual assessment of an infant**



## **b) Full Assessment**

Where indicated, the infant mother (or caregiver) pair can be referred for a Full Assessment (FA), which is a longer assessment carried out by trained health or nutrition staff. A full assessment aims to find out:

- Whether BMS use is truly indicated or not (including whether relactation or wet nursing are possible).
- If truly indicated, whether BMS use is likely to be temporary or long term (until over six months of age) and the best system to support, manage and monitor the case.
- Where BMS is indicated, to observe resources within the household to support the use of BMS and to observe the caregiver managing artificial feeding to identify problems.
- If BMS is not indicated, where to refer the infant for appropriate IYCF support.
- Whether there is a need for further investigation at the community level: is this an isolated case or an indication of a wider problem?

Where a request is made for BMS supply in the context of HIV, it is important to investigate:

- Is this an infant already established on replacement feeding?
- Is this infant being wet nursed or is a wet nurse available (e.g. family member)?
- Does the infant have access to ARV?
- Is this an appropriate intervention for a newborn infant? (See HIV section in SOP)

Tables 9 and 10 are checklists that health and nutrition workers can use to carry out a full assessment of an artificially fed infant, which will include observations within the household and observation of an artificial feed. These are taken from the IFE Core Group, Infant Feeding in Emergencies Module 2, v1.1, 2007 Section 9B, Full Assessment Step 3. See IFE Module 2 for a full description.

**Table 9: What resources are available in the household?**

<b>Breastmilk Substitute</b>	
Breastmilk substitute (or ingredients and recipe provided) is suitable for age	
Quantity used since last distribution is appropriate	
Quantity remaining is sufficient until next distribution	
Caregiver has no difficulty obtaining sufficient formula or other ingredients; assured to age 6 months at least	
Expiry date clearly marked, and not past	
Instructions written in user's own language	
Preparer or another household member is able to read label instructions	
<b>Storage</b>	
Safe storage/tightly closed containers used for ingredients	
Milk feeds prepared in advance only if refrigeration available	
Any drinking water boiled in advance is stored in special container (clean, with a cover)	
<b>Preparation facilities</b>	
Adequate fuel is available for boiling water (and for boiling bottle and teat at each feed, if used)	
Adequate drinking water is available for preparing several feeds per day (at least 1 litre)	
Adequate other water and soap are available for washing utensils and hands	
Clean surface is available to put utensils on (and a clean cloth to cover them)	
Suitable means of measuring milk and water (if a feeding bottle, the top is cut off)	
<b>Extra caregiver time</b>	
Time to prepare 6-8 fresh feeds per day, if no refrigeration	

**Table 10: How does the caregiver manage the feeding?**

<b>Preparation</b>	
Caregiver washes hands	
Cup (or bottle and teat if used) covered, in clean place	
Bottle and teat (if used) are boiled just before the feed	
Bottle and teat (if used) have been soaking in bleach, and are now rinsed with clean boiled water	
Water to prepare feed is brought to a rolling boil	
Caregiver measures proportions of milk and water correctly	
<b>Feeding technique</b>	
Infant is fed with cup, and takes most or all of the milk	
Infant is fed with feeding bottle	
Infant is fed with another method	
<b>Interaction and end of feed</b>	
Infant is held throughout the feed	
Caregiver interacts lovingly with the infant during the feed	
Infant finishes the milk feed	
None of this feed is kept for the infant to take later (milk could be drunk by mother or older child)	
<b>Adequacy of milk feeds</b>	
Number of feeds given per day appropriate to age or weight	
Amount given at each feed appropriate	
<b>Age-appropriate feeding</b>	
Under 6 months, only milk is given	
Over 6 months, milk and complementary foods are given	

After completing Full Assessment, the health nutrition or community worker who made the visit first praises the caregiver for all that she is doing well.

He/she also:

- is supportive of the caregiver's efforts, and is not critical
- discusses any difficulties and helps her to think of ways to overcome them. This must include any difficulties in ensuring that the milk provided is used only for the infant
- explains again this infant's exact needs, number of feeds per day, amount of each feed and the risks of him/her not having the right amount
- shows the caregiver how to clean (and if necessary sterilize) utensils, and prepare and give the feeds more safely
- tries to gain the confidence of other family members or neighbours, and encourage them to help the caregiver



- arranges for further follow-up of the infant, both in the clinic, and at home with reassessment with FA if necessary.

### c) IYCF support services

UNHCR and partners will need to ensure that the required IYCF support services are in place so that health workers can refer infant mother (or caregiver) pairs following individual SRA or FA. Table 11 describes the different IYCF support services that will be required in most refugee settings. In emergencies requiring large scale artificial feeding support, such as following the Haiti earthquake, 'baby tents' or 'baby corners' have been used to provide both breastfeeding and artificial feeding support services (see Case Study 4). Figure 1 describes how these services and the SRA and FA fit together.

**Table 11: IYCF Support services required**

Intervention	Who	When	Aim
Supportive Care	Health or nutrition worker	Follows simple rapid assessment for those who do not require special assistance for infant feeding.	To help mothers to continue to breastfeed by providing them with adequate nutrition, helpful maternity services, appropriate health services and continuing assistance and social support.
Basic Aid for Breastfeeding	Health or nutrition worker or trained peer supporter	Follows full assessment for those women who need basic breastfeeding support	To provide basic breastfeeding support to ensure effective suckling, build the mother's confidence and help milk flow, increase milk production and encourage age-appropriate feeding.
Skilled breastfeeding support	Health and nutrition workers with further breastfeeding training	Follows full assessment for those women who need further breastfeeding support	To help women to overcome particular problems with breastfeeding to restore effective breastfeeding and/or relactate.
Medical care/ therapeutic feeding	Medical staff/ health and nutrition workers	Follows full assessment for those women and infants who are malnourished or ill	To reinstate health and nutrition status.
Artificial feeding options	Health and nutrition workers	Follows full assessment for women who are not breastfeeding and do not wish to relactate or women indicated under skilled breastfeeding support	Where feeding with mother's milk is not possible (temporarily or otherwise), to provide other breastmilk options (wet nursing or donated breastmilk) or, if this is not possible, to provide the most appropriate form of BMS if conditions are met.

**ANNEX 9: RESOURCES TO SUPPORT THE ARTIFICIALLY FED INFANT**

Nutrition and health workers will need to provide initial counselling and regular follow up to the caregiver of an artificially fed child. This annex provides a checklist for initial counselling, a checklist of things to cover during follow up visits, guidance on volume and frequency of BMS feeds for infants 0 - <6 months, guidance on the safe preparation of BMS and guidance on cup feeding. Nutrition and health workers can use these resources to support caregivers.

**a) Initial counselling**

Before BMS is given, the items in Table 12 should be covered with the caregiver. Some of these will require a home visit. Where checklists are used these should be kept on file for monitoring.

**Table 12: Checklist for initial counselling**

Item to cover during initial counselling	Check
Observe what resources are available in the household to support artificial feeding (Full Assessment, Annex 8)	
Observe the caregiver managing an artificial feed (Full Assessment, Annex 8)	
Identify any problems following observations and decide with caregiver how to overcome these	
Explain what BMS will be given and when and where to receive it	
The advantages of cup feeding and how to cup feed (Annex 9)	
Warning of potential hazards of using BMS	

**b) Follow up**

Health and nutrition workers should have regular follow up visits with every infant who is artificially fed. Items in Table 13 should be covered at each visit and the checklist kept on file for monitoring.

**Table 13: Checklist for follow up visits**

Items to check and discuss during follow up visits	Check
Check and record infant status (morbidity and mortality) and weight (record on growth chart)	
Observe feed preparation: Check that preparation is hygienic and safe	
Observe a feed: Check feeding is safe	
Find out any difficulties the caregiver may be facing and discuss practical solutions and/or refer for appropriate further support	
Check for warning signs of misuse of infant BMS (e.g. possibility of over concentration, over dilution, formula being shared, use of complementary foods for infants under 6 months)	

**c) Feed volumes and frequency**

Where an infant is to be artificially fed, health and nutrition workers should support the caregiver in the safe preparation and giving of feeds. This will include supporting caregivers to give the correct volume of BMS at the right frequency to the infant. Table 14 gives a guide on feed volumes and frequency for infants of different ages. Use instructions on the product's packaging to help make up the feeds accordingly.

**Table 14: Amount of prepared formula and infant needs per day**

*(Taken from IFE Core Group, Module 2 on Infant Feeding in Emergencies, Annex 5).*

Age of infant in months	Weight in kilos	Amount of formula per day	Number of feeds per day	Size of each feed in ml
0-1	3	450ml	8	60ml
1-2	4	600ml	7	90ml
2-3	5	750ml	6	120ml
3-4	5	750ml	6	120ml
4-5	6	900ml	6	150ml
5-6	6	900ml	6	150ml

Actual feeding patterns and volumes will depend on the individual and there is a wide range of normality:

On average, a newborn will take 60-90 ml of feed three to four hourly. By the end of month 1, an infant will feed around 120ml/feed four hourly. By 6 months, an infant will be feeding 180-240ml per feed, 4-5 feeds per 24 hour (often, by this stage, missing a night feed). The table above provides quantities for 6 feeds per day (7 or 8 feeds per day during the first two months).

As a guide, an infant of 1 month will feed 120-150ml per feed and will increase the volume by 30 ml per feed each month until reaching a max feed volume of 210-240ml by the 6<sup>th</sup> month. An infant should not feed more than 960ml of infant formula in 24 hours.

As a rough guide, an infant will require 75ml infant formula per 453g of body weight.

Source: Caring for Your Baby and Young Child, Birth to Age 5. American Academy of Paediatrics. 2009.

#### d) Safe preparation of a BMS

The following is also adapted from Module 2 on IFE, IFE Core Group (2007), Additional Materials, Section 9B.

**Table 15: 10 Steps for the safe preparation of a breast milk substitute feed**

Step	Description
<b>Wash hands.</b>	<ul style="list-style-type: none"> <li>Always wash your hands with soap and water before preparing feed.</li> </ul>
<b>Keep it clean.</b>	<ul style="list-style-type: none"> <li>Carefully clean the utensils, sterilise them if needed.</li> <li>Countertops and tables also should be very clean. Use a clean cloth to cover counters/ surfaces if necessary.</li> </ul>
<b>Check the date.</b>	<ul style="list-style-type: none"> <li>Check the expiration date on the formula can. Discard expired formula.</li> </ul>
<b>Boil.</b>	<ul style="list-style-type: none"> <li>Boil water to prepare the feed. Bring to a rolling boil. Pour in the correct amount of boiled water. The water should be no cooler than 70°C, so do not leave it for more than 30 minutes after boiling before using it.</li> <li>The safest way to prepare a feed is using water that has been boiled and cooled to no less than 70°C. If water was boiled in advance for making up feeds (e.g. at night), store it in a container used for this purpose for only up to 24 hours. The container should be clean and have a cover. Pour correct amount of cooled boiled water into calibrated cup/ bottle.</li> <li>Note: Where water quality is poor, boiling, chlorination and filtration are important means to make the water safe. To disinfect water: bring to a rolling boil and if available add 3-5 drops of chlorine to 1 litre of water; or physically remove pathogens with the appropriate filter.</li> </ul>
<b>Measure it.</b>	<ul style="list-style-type: none"> <li>Measure the required amount of formula powder, using the scoop from the exact tin or packet. (Do not use scoops from other brands of formula.)</li> <li>Level the powder off with a clean straight spoon handle or knife.</li> <li>Follow the mixing instructions on the label carefully. (Usually two scoops are needed for each 60 ml of water, but it may only be one.)</li> </ul>
<b>Mix it up.</b>	<ul style="list-style-type: none"> <li>Most commercial formula advise adding the dried powder to the measured water – but check the preparation details for the particular product you are using.</li> <li>Add the scoops of formula powder to the measured water. If a cup is used, mix the powder in thoroughly with a spoon. If a bottle is used, put the cap and cover on and shake to mix. The amount of formula, once mixed up according to instructions on the label, will be slightly more than the measured amount of water.</li> </ul>
<b>Test the temperature.</b>	<ul style="list-style-type: none"> <li>Immediately cool to feeding temperature by holding the feeding cup under cold running tap water, or by placing in a container of cold or iced water. So that you do not contaminate the feed, make sure that the level of the cooling water is below the top of the cup. Dry the outside of the cup with a clean or disposable cloth. Place a drop of warmed formula on your wrist; if it feels comfortable and just barely warm, it's safe to feed the baby.</li> <li>Feeds can be given at room temperature and do not need to be heated. If a feed is being warmed prior to the feed, place the bottle or cup in a bowl of hot water and test before feeding; re-warm for no more than 15 minutes.</li> </ul>

Step	Description
<b>Store it.</b>	<ul style="list-style-type: none"> <li>▪ Keep prepared formula refrigerated until feeding time (use within 24 hours).</li> <li>▪ Use a cleaned and sterilized container that is made from food grade material, and has a lid. The container should be no larger than 1 litre. If you use a larger container, the hot feed will take longer to cool down and harmful bacteria may grow in it.</li> <li>▪ Never put a warmed bottle back into the refrigerator.</li> <li>▪ Refrigerator should be no higher than 5°C.</li> <li>▪ If there is no refrigerator, then milk has to be freshly prepared before each feed.</li> </ul>
<b>Use it or lose it.</b>	<ul style="list-style-type: none"> <li>▪ Give the prepared formula to the baby within, at most, an hour of preparation (if not refrigerated).</li> <li>▪ Feeds prepared with water cooler than 70°C should be consumed immediately.</li> <li>▪ Give as much as s/he wants. It is important that an infant receives a minimum amount per day or he/she may become malnourished. See Table 14 to guide you on how much you can expect an infant to drink at a feed and over 24 hours.</li> <li>▪ Give any leftover milk to an older child or the caregiver can drink it herself, otherwise throw away.</li> </ul>
<b>Finish up.</b>	<ul style="list-style-type: none"> <li>▪ Store utensils in a special container with a lid or leave covered with a clean cloth on a clean surface, ready for the next feed in three or four hours.</li> <li>▪ If sterilising solution is used, leave bottles, teats and caps soaking until the next feed (minimum 1 hour).</li> </ul>

## Advice on cup feeding

Source: IFE Core Group, Module 2 on IFE, IFE Core Group, version 1.1, 2007 [www.enonline.net/ife](http://www.enonline.net/ife)

How to feed a baby with a cup

- Hold the baby sitting upright or semi-upright in your lap.
- Hold the small cup of milk to the baby's lips. Tip the cup so that the milk just reaches the lips. The cup should rest lightly on the baby's lower lip and the edges of the cup should touch the outer part of the baby's upper lip.
- The baby will become alert and open his or her mouth and eyes. A low-birthweight baby will start to take up the milk with the tongue. A full-term or older baby will suck or sip the milk, spilling some of it.
- Do not pour the milk into the baby's mouth. Continue to hold the cup to the baby's lips, allowing the baby to take it.
- When the baby has had enough, the baby will close his or her mouth and refuse to take any more. A baby who has not taken enough may take more the next time or you may increase the frequency of feeding.
- Measure the baby's intake over 24 hours rather than at each feeding.

Adapted from WHO/UNICEF, 1993, Breastfeeding Counselling: A Training Course, Participants Manual, p. 136 and UNICEF BFHI NEWS.

	<p>Fathers can cup feed, too.</p>
	<p>It is easy to transport milk in a jar for feedings away from home. Be sure to use a wide-mouthed jar, so it can be easily cleaned.</p>
<p>The use of bottles and teats should be actively discouraged in emergency contexts, due to the high risk of contamination and difficulty with cleaning.</p>	
	<p>Cup feeding is often used in hospitals for pre-term infants who are not ready to breastfeed. These infants are commonly able to swallow before they can suck. Those who are able to breastfeed may not have the strength to suckle long enough to obtain the optimum amount of milk and may complete feeding with a cup.</p>
	<p>Like a breastfed baby, a cup-fed baby of about five months will often take breaks from feeding, taking the feed in his or her own time.</p>
	<p>Gently tilt the cup so that the baby may sip the milk at his or her own speed. Never pour the milk or let it gush.</p>
	<p>Healthy, full-term babies can also be fed by cup when breastfeeding is not possible — such as when a mother is absent or has a condition, such as HIV infection, that might lead her to decide not to breastfeed. In these situations, a baby might be fed expressed mother’s milk or some other kind of milk.</p>
	
<p>Cup feeding requires no special equipment: any open cup found in most households will do; although smaller transparent cups are often easier to use. Avoid cups with covers or those specially designed with straws or closed spouts, as these can be difficult to clean and may lead to infections. The cups displayed on this page include a hospital medicine cup, a teacup, 2 mugs with handles and an Indian bondla — a vessel with an open spout traditionally used for infant feeding.</p>	

## ANNEX 10: MODIFYING ANIMAL MILK FOR TEMPORARY USE AS BMS WHEN INFANT FORMULA IS UNAVAILABLE

Source: IFE Core Group, Module 2 on IFE, IFE Core Group, version 1.1, 2007 [www.enonline.net/ife](http://www.enonline.net/ife)

Important note: Home-modified milk made with fresh animal milk, or powdered full cream milk, or ultra-heat treated (UHT) milk are only for temporary use. They are stop gap recipes and not recommended as first choice.

**Table 16: How to modify animal milks for temporary use as BMS**

Milk Group	Information	Use
Fresh liquid animal milk	<p><i>Whole cow's milk</i> is the commonest, however buffalo or camel or goat's milk may be available. It may be available in cartons or bottles or people may collect it in their own containers. Sometimes the fresh milk available in the market has already been diluted or some of the cream removed.</p> <p><i>Home prepared animal milk</i> made with fresh or powdered full cream milk, diluted with water, and with sugar and micronutrients supplements added. These formulas contain most required nutrients but the proportions differ from breastmilk. Proteins and fats are inferior and protective factors are lacking.</p> <p><i>Home prepared formulas</i> have been used where animal milks are widely available. However there is no information on their health effects, no information on types of micronutrient supplements being promoted with this option, and whether they are consistently given, nutritionally adequate, appropriate or locally available. There is also concern regarding safe preparation, storage and feeding, and incorrect modification (HIV and infant feeding, A guide for health care managers and supervisors, UNICEF/UNAIDS/WHO/UNFPA. 2003).</p>	<p>Can be used if boiled and modified as suggested below (see Home-prepared formula from liquid milks).</p> <p>Home-prepared formula should really be fortified with many micronutrients. However appropriate formulations may not be available in the field*. If micronutrients are not added, home preparations should be used only for a short time.</p> <p>Milk from sheep or buffalo is higher in fat, and therefore the modifications are different</p>
	<p><i>Skimmed fresh milk</i> has the fat (cream) removed and therefore the energy level is low. Most of the vitamins A and D are also removed because they are in the milk fat.</p>	Do not use.
	<p><i>Semi-skimmed milk</i>, which contains 2% fat, is sometimes available. (Whole fresh milk normally contains more fat than this – about 3.5-4%.)</p>	Do not use.

Milk Group	Information	Use
Tinned liquid milks	<i>Evaporated milk</i> is sterilised, has some of the water removed and is sealed in tins. Sometimes the fat content is altered. Diluted with water, it has a similar composition to fresh milk.	The processing destroys vitamin C and folate. It can be used if extra vitamins are added. Dilute according to instructions and modify (see Home-prepared formula from liquid milks).
	<i>Condensed milk</i> has some of the water removed but a lot of sugar is added. This extra sugar makes bacteria grow more slowly when the tin is opened. Also, the fat level may be reduced. This balance of fat and sugar in condensed milk make it very different from evaporated milk.	Do not use.
Powdered milk	<i>Full cream powdered milk</i> is whole cow's milk that is dried to a powder. Much vitamin C and some B vitamins are lost, but the protein, fat, minerals and most of the vitamins A and D remain. It can be made up with water to the strength of whole fresh milk.	Can be used when reconstituted by adding the correct amount of water (following the instructions on the label) and then modified (see Home-prepared formula from liquid milks below).
	<i>Dried skimmed milk</i> has the fat and fat-soluble vitamins (e.g. vitamins A and D) removed. Most modified powdered milks, such as "creamers" used for "whitening" tea or coffee or various filled milks, have had the milk fat removed and replaced with vegetable fat. Sugar may also be added to ingredients to make it dissolve easily.	Do not use.
Infant formula	<i>Commercial infant formula</i> is made in accordance with the Codex Alimentarius standards** – this means minimum standards of nutrient composition must be met. There are many different brands of commercial infant formula. This is nutritionally the most complete breastmilk substitute and contains adequate micronutrients. However, both proteins and fats are inferior to those in human milk, it is less easily digested and protective factors are absent.	Commercial infant formula is expensive so can affect sustainability of supplies.
	<i>Generic Formula</i> . The nutritional composition is the same as branded commercial formula. The only difference is in the way in which it is marketed and distributed. It is also labelled more simply.***	Instructions on the tin must be followed

\* Micronutrients needed to fortify home-prepared formula - 150ml: manganese 7.5µg, iron 1.5mg, copper 100µg, zinc 205µg, iodine 5.6µg, vit A 300IU, vit D 50 IU, vit E 1 IU, vit C 10mg, vit B1 50 µg, vit B2 80µg, niacin 300µg, vit B6 40µg, folic acid 5µg, pantothenic acid 400µg, vit B12 0.2µg, vit K 5µg, Biotin 2µg.

\*\* For information on Codex Alimentarius requirements, see [www.codexalimentarius.net](http://www.codexalimentarius.net) and for information on the safe use of infant formula see Guidelines for the Safe Preparation, Storage and Handling of Powdered Infant Formula: [http://www.who.int/entity/foodsafety/publications/micro/pif\\_guidelines.pdf](http://www.who.int/entity/foodsafety/publications/micro/pif_guidelines.pdf)

\*\*\* For information on sources of generic formula contact ENN at [office@ennonline.net](mailto:office@ennonline.net)



## HOME-PREPARED FORMULA FROM LIQUID MILKS

### **Box 1: Recipe for home-prepared formula using fresh milk (or milk reconstituted to be equivalent to fresh milk)**

To make 150 ml of prepared formula using fresh (or reconstituted) cow's, goat's or camel's milk, mix:

- 100ml boiled milk
- 50 ml boiled water
- 10g (2 leveled teaspoons) sugar

To make 120 ml of prepared formula using fresh sheep or buffalo milk, mix:

- 60 ml milk
- 60 ml water
- 6 g (1 rounded teaspoon) sugar

Milk and water can be measured, mixed and then boiled together. Or the milk can be boiled separately and boiled water added according to convenience.

Then add the sugar and micronutrients (see above - Table 16). Stir well and pour into feeding cup.

## ANNEX 11: CONSIDERATIONS ON SELECTING A BMS FOR PROCUREMENT

Possible BMS for infants under 6 months are either infant formula or home-prepared modified animal milk (modified by diluting with water and sugar and adding micronutrient supplements). In practice, there are significant challenges associated with the modifying of animal milk and in accessing the appropriate micronutrient fortificants in refugee contexts. Therefore, the recommended BMS in refugee contexts for infants <6 months is infant formula. Where infant formula is not immediately available, it may be necessary to modify animal milk for temporary use as a BMS. A guide to this is given in Annex 10.

This annex gives guidance on criteria for the selection of an appropriate infant formula, guidance on the choice between powdered infant formula (PIF) and ready-to-use infant formula (RUIF), and on whether to use international or local suppliers.

### a) Criteria for an appropriate infant formula

An appropriate infant formula must be Codex compliant and must meet the requirements of the International Code (see Annex 1 for guidance source). Specific criteria are listed in Table 17.

**Table 17: Criteria for an appropriate infant formula**

Criteria	Check
Manufactured and packaged in accordance with the Codex Alimentarius standards, CODEX STAN 72-1981: <a href="http://www.codexalimentarius.org/standards/list-of-standards/en/?no_cache=1">http://www.codexalimentarius.org/standards/list-of-standards/en/?no_cache=1</a>	
Suitable for infants under 6 months ('Follow on' milks and milks advertised as being suitable for infants over 6 months are not suitable)	
Labels should be in an appropriate language for the refugee population	
Labels should adhere to the specific labelling requirements of the International Code:	
<ul style="list-style-type: none"> <li>▪ Labels should state the superiority of breastfeeding</li> <li>▪ Labels should indicate that the products should be used only on health worker advice</li> <li>▪ Labels should warn about health hazards of using infant formula</li> <li>▪ There should be no pictures of infants or other pictures idealizing the use of infant formula</li> </ul>	
Generic (unbranded) infant formula is first choice, however, when this is not possible, a commercial infant formula is acceptable	
Have a shelf-life of at least 6 months on receipt of supply	

## **b) Powdered Infant Formula (PIF) or Ready-to-Use Infant Formula (RUIF)**

**Powdered infant formula** (PIF) requires mixing with water to provide a suitable drink for infants. It is the most common version of infant formula. Powdered infant formula is not sterile and therefore it needs to be reconstituted with water that has been boiled and is still hot (and cooled to around 70 degrees Celsius). It is essential to use the measure within the container to reconstitute.

Important considerations of using PIF are:

- PIF is less expensive than RUIF.
- PIF is less bulky than RUIF, hence easier transport and storage.
- PIF is more likely to be locally available.
- PIF requires mixing at home.
- PIF requires water boiling facilities for cleaning and preparation.
- PIF is likely to be a more familiar product.

**Ready to use infant formula (RUIF)** is infant formula that is already reconstituted and is ready to drink. It is provided in cartons or cans of various volumes. UNHCR operations should consider RUIF as a short term measure in extreme situations where there is very poor water and sanitation conditions, limited facilities to boil water, and where there are infants <6 months who are not breastfed. Important considerations of using RUIF are:

- RUIF is significantly more expensive than powdered infant formula.
- RUIF is not a guarantee of safety. Hygienic preparation of feeding equipment will be needed. Open containers are a rich medium for bacterial growth. Depending on the volume of carton available, there may be significant wastage of contents.
- RUIF is a very bulky commodity. There are significant transport and storage requirements and costs for RUIF as well as considerations for waste management.
- RUIF may be an unfamiliar product in a community. Strong education on use will be needed.
- RUIF supplies may need international procurement that will take time (and money).
- If RUIF is considered a necessary item in extreme emergencies, there might be a need to stockpile or pre-position so that it can be released in an emergency without delay.

## **c) Use of local or international suppliers**

Compared to international supply, local sourcing may be cheaper, quicker to access and more likely to be labelled in the user language. A disadvantage is that local supplies will be branded. A limitation is where markets do not have adequate supplies or supply pipeline has been disrupted. This is summarised in Table 18.

**Table 18: Summary of indications to use local or international suppliers**

Source	Indications	UNCHR role
Generic supply (international or locally accessed via another agency)	First choice option	Assess the feasibility of generic formula supply
Local (in country) suppliers of branded infant formula	Local supply of BMS is available for purchase or directly from supplier BMS is Codex and Code compliant Local BMS is labelled in the user language Local supply is adequate and sustainable (i.e. market can meet increased demand)	Support assessment of adequacy of local supply
International suppliers of branded infant formula	Local supply of BMS is not available Local supply of BMS is not available in appropriate language Local supplies not adequate to meet need International supplier available Resources are available for international procurement	Support assessment of need for international supply Seek UNHCR HQ or regional technical approval Submit supplies request to UNHCR Budapest

## **ANNEX 12: CALCULATING HOW MUCH BMS IS NEEDED FOR THE COMMUNITY**

Estimating supply needs depends on a lot of contextual factors. These include:

- The number of infants <6 months in the target population. The scale of operation will influence calculations, i.e. estimating for 1 or 2 infants is different to estimating for hundreds of infants.
- The number of infants who are *not breastfed*.
- The number of infants who are *mixed fed*.
- The expected success rate in transitioning mixed fed infants to exclusive breastfeeding. This will be affected by a number of factors including the available capacity to provide skilled support and the willingness of mothers to transition to breastfeeding only.
- The duration and evolution of the programme, e.g. a plan for no new admissions after 6 months depends on all newborns being established on exclusive breastfeeding, which in turn is influenced by availability of skilled support, and willingness of mothers.

Information in Annex 9, c) can be used to inform individual level supply needs. To calculate supply at a community level, here are some useful figures:

### **Powdered infant formula (PIF)**

The average requirement of powdered infant formula per infant 0 - <6 months fully fed on PIF is 3.5 kg per month or 21kg per six months.

To allow for transition to complementary feeding, a 'buffer' supply for infants who reach 6 months should be considered, e.g. an additional 1.8kg or 2 week supply.

Powdered infant formula is usually presented in tins of 350-450g.

As an example, using a 400g tin of PIF, the infant formula supply required per infant is around 13 tins per week or 53 tins per month.

### **Ready to use infant formula (RUIF)**

The average requirement for liquid infant formula for infants aged 0 - <6 months fully fed on RUIF is 725ml per day (ranging from 450-900ml for 0 up to 6 months of age).

The average requirement for ready to use infant formula per infant is 5 litres per week.

Liquid infant formula may be presented as single feed cartons (e.g. 200ml) or 24 hour volumes (e.g. 1 litre). There is likely to be considerable wastage where there is no refrigerated storage and when only large cartons are available; this should be factored into supply calculations.

There are significant transport and storage implications (capacity and cost) for ready to use infant formula. This needs to be factored into planning and one of the reasons why it is a short term temporary option.

As an example, using a 200ml carton of RUIF, the infant formula supply required is around 26 cartons per week.

### **Some considerations for programme planning**

Confirm age criterion for inclusion: infants 0 - <6 months of age.

Decide on the duration of the programme, taking into consideration that all infants admitted must be followed until minimum 6 months of age.

Determine how local can you source supplies, how sustainable these supplies are and what the lead time for supplies is.

Take into account supply needs for infants that reach 6 months and must transition onto complementary feeding without infant formula supply; a small buffer supply may be needed.

Collect data on the estimated number of total population that will be covered by the artificial feeding programme:

- Collect data on the estimated number of 0 - <6 months old infants in the targeted population. Information sources include demographic data from surveys or recent assessments, clinic presentations of cases, screening at registration sites. *Note that clinic data especially may bias towards artificially fed infants (who tend to be sicker) and should inform caseload but not be considered representative of the total 0 - <6 month population.*
- Collect data on the estimated proportion of non-breastfed infants. This may require estimates from pre-emergency data, from rapid assessments and/or from clinic data (note limitations above).
- Collect data on the estimated number of mixed fed infants. This may require estimates from pre-emergency data, from rapid assessments and/or from clinic data (note limitations above).
- Estimate the number of separated infants and/or infants who have lost their mother (this is particular relevant in acute catastrophic events). Note that not all of these infants will require artificial feeding (e.g. wet nursing may be available and is the safer option).
- Collect data on birth rate and maternal mortality pre-emergency. Maternal mortality does not necessarily indicate the need for artificial feeding (e.g. wet nursing may be available and is the safer option).

**Figure 2: Sample calculator for estimated number of beneficiaries of an artificial feeding programme**

Category of infant	No. Infants
Total target population x % of 0 - <6 months	Number of infants 0 - <6 months in the target population
Number infants 0 - <6 months in target population x % artificially fed pre-emergency	Number of children 0 - <6 months in need of BMS at the start of the programme (group A)
Number of separated or orphaned infants 0 - <6 months for whom breastfeeding is not available	Number of children 0 - <6 months in need of BMS at the start of the programme (group B)
Number of infants in target population x % mixed fed infants	Number of children in need of artificial feeding support for 2 months*, until relactation can be completed (group C)
Number of expected new births per month x % maternal mortality x % where breastfeeding is not an option	Number of new orphans per month (group D)
Number of new births whose mothers do not establish breastfeeding	Number of new artificially fed cases per month (group E)**
Total target group at beginning of programme	A+B+C
Total target group during the programme	A+B+C+D (monthly)+E(variable)

\* The duration of support for mixed fed infants will depend on the skilled support and capacity available to support this transition and the willingness of mothers to do so.

\*\* Group E is an important consideration in contexts where breastfeeding is not commonly practised and where infant formula is widely accepted and used in the population. The short-term reality may mean that mothers continue to opt for artificial feeding in such contexts.

## **ANNEX 13: SOME CONSIDERATIONS AROUND STORAGE AND MONITORING OF BMS DISTRIBUTIONS**

### **a) Safe storage of BMS**

Always store BMS securely. Keep storage facilities locked and ensure that there is a secure system for handling keys. BMS can be stored at the point of distribution (e.g. at health clinic, along with medicines), or in a separate, secure unit. In situations where BMS is in high demand and in short supply, there may be added risk of leakage. In these cases, consider storing BMS at unit supported by extra security, e.g. at a military facility (See Case Study 8).

Storage facilities must be hygienic and free of pests and contamination from chemicals and other residues. Ideally, storage temperatures should not rise to very high levels. First-in-First-Out (FIFO) methodology should be used, i.e. stock bought first should be used first to avoid exceeding expiry dates. Clear records should be kept to control misuse and leakage. Storage should also be locked at all times.

Establish a system for stock management and disposal of waste (e.g. empty tins or packets) or expired supplies. Tins may be put to use in households. Possible mechanisms for dealing with unwanted waste:

- Collect from households, e.g. during routine visits
- Brought to a central place
- Returned at each distribution

From there they can be incinerated or buried.

### **b) Monitoring distribution of BMS**

Examples of monitoring steps include:

- *Monitor prescriptions:* Who are they being given to? And on what basis? (Ensure that proper criteria are being followed.)
- *Monitor receipt of BMS:* Is the validity of the prescription and the identity of the mother and infant checked before handing over BMS? Is there proof of receipt? See Case Study 8.
- *Monitor distribution:* Who receives BMS? How much have they been given? When? By Whom? (Check this information against prescriptions and against stocks to ensure there is no leakage.)
- *Monitor spill over:* Monitor markets to see if infant formula chosen for distribution appears, monitor whether prices of infant formula change on local markets, and check waste disposal.



In some situations where BMS is in demand, extra controls may be needed to prevent leakage and protect the security of staff. See Case Study 8 for an example of this. Marking or altering the package to reduce the likelihood of resale can also be used to reduce the sale of BMS on the market.



## ANNEX 14: SUPPORTING FEEDING OF THE NON-BREASTFED CHILD AGE 6-24 MONTHS

Source: Guiding Principles for Feeding Non-Breastfed Children 6-24 Months of Age. WHO, 2005.

According to current UN recommendations, infants should be exclusively breastfed for the first six months of life, and thereafter should receive appropriate complementary feeding with continued breastfeeding up to two years or beyond. However, there are a number of infants who will not enjoy the benefits of breastfeeding in the early months of life or for whom breastfeeding will stop before the recommended duration of two years or beyond. A group that calls for particular attention is the infants of mothers who are known to be HIV-positive. In order to reduce the risk of transmission when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected women is recommended<sup>1</sup>. Another group includes those infants whose mothers have died, or who for some reason do not breastfeed. However, these are only two examples – other infants and young children 6-24 months may also not be breastfed for various reasons.

### a) Amount of food needed

**Guideline:** Ensure that energy needs are met. These needs are approximately 600 kcal per day at 6-8 months of age, 700 kcal per day at 9-11 months of age, and 900 kcal per day at 12-23 months of age.

### b) Food consistency

**Guideline:** Gradually increase food consistency and variety as the infant gets older, adapting to the infant's requirements and abilities. Infants can eat pureed, mashed and semi-solid foods beginning at six months. By 8 months most infants can also eat "finger foods" (snacks that can be eaten by children alone). By 12 months, most children can eat the same types of foods as consumed by the rest of the family (keeping in mind the need for nutrient-dense foods, as explained in 'd' below). Avoid foods in a form that may cause choking (i.e., items that have a shape and/or consistency that may cause them to become lodged in the trachea, such as nuts, grapes, raw carrots). Such foods should be mashed, pureed or juiced before being fed to young children.

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<sup>1</sup> WHO HIV and Infant Feeding Technical Consultation, Consensus Statement, 2006 states that: "exclusive breastfeeding is recommended for HIV-infected women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time".

### **c) Meal frequency and energy density**

**Guideline:** For the average healthy infant, meals should be provided 4-5 times per day, with additional nutritious snacks (such as pieces of fruit or bread or chapatti with nut paste) offered 1-2 times per day, as desired. The appropriate number of feedings depends on the energy density of the local foods and the usual amounts consumed at each feeding. If energy density or amount of food per meal is low, more frequent meals may be required.

### **d) Nutrient content of foods**

**Guideline:** Feed a variety of foods to ensure that nutrient needs are met.

- Meat, poultry, fish or eggs should be eaten daily, or as often as possible, because they are rich sources of many key nutrients such as iron and zinc. Milk products are rich sources of calcium and several other nutrients. Diets that do not contain animal source foods (meat, poultry, fish or eggs, plus milk products) cannot meet all nutrient needs at this age unless fortified products or nutrient supplements are used.
- If adequate amounts of other animal source foods are consumed regularly, the amount of milk needed is ~200-400 mL/d; otherwise, the amount of milk needed is ~300-500 mL/d. Acceptable milk sources include full-cream animal milk (cow, goat, buffalo, sheep, camel), Ultra High Temperature (UHT) milk, reconstituted evaporated (but not condensed) milk, fermented milk or yogurt, breastmilk and expressed breastmilk (heat-treated if HIV-positive).
- If milk and other animal source foods are not eaten in adequate amounts, both grains and legumes should be consumed daily, if possible within the same meal, to ensure adequate protein quality.
- Dairy products are the richest sources of calcium. If dairy products are not consumed in adequate amounts, other foods that contain relatively large amounts of calcium, such as small fish that include the bones (dried or fresh, with the bones crushed or otherwise processed so that they are safe to eat) and lime-treated maize tortillas, can fill the gap. Other foods such as soybeans, cabbage, carrots, squash, papaya, green leafy vegetables, guava and pumpkin are useful additional sources of calcium.
- The daily diet should include Vitamin A rich foods (e.g. dark coloured fruits and vegetables; red palm oil; vitamin A fortified oil or foods); vitamin C rich foods (e.g. many fruits, vegetables and potatoes) consumed with meals to enhance iron absorption; and foods rich in the B vitamins including riboflavin (e.g. liver, egg, dairy products, green leafy vegetables, soybeans), vitamin B6 (e.g. meat, poultry, fish, banana, green leafy vegetables, potato and other tubers, peanuts) and folate (e.g. legumes, green leafy vegetables, orange juice).
- Provide diets with adequate fat content. If animal source foods are not consumed regularly, 10-20 g of added fats or oils are needed unless a fat-rich food is given (such

as foods or pastes made from groundnuts, other nuts and seeds). If animal source foods are consumed, up to 5 g of additional fats or oils may be needed.

- Avoid giving drinks with low nutrient value, such as tea, coffee and sugary soft drinks. Limit the amount of juice offered, to avoid displacing more nutrient-rich foods.

### **e) Use of vitamin-mineral supplements or fortified products**

**Guideline:** As needed, use fortified complementary foods or vitamin-mineral supplements (preferably mixed with or fed with food) that contain iron (8-10 mg/d at 6-12 months, 5-7 mg/d at 12-24 months). If adequate amounts of animal source foods are not consumed, these fortified foods or supplements should also contain other micronutrients, particularly zinc, calcium and vitamin B12. In countries where vitamin A deficiency is prevalent or where the under-five mortality rate is over 50 per 1000, it is recommended that children 6-24 months old receive a high-dose vitamin A supplement (100,000 IU once for infants 6-12 months old and 200,000 IU bi-annually for young children 12-23 months old).

### **f) Fluid needs**

**Guideline:** Non-breastfed infants need at least 400-600 mL/d of extra fluids (in addition to the 200-700 mL/d of water that is estimated to come from milk and other foods) in a temperate climate, and 800-1200 mL/d in a hot climate. Plain, clean (boiled, if necessary) water should be offered several times per day to ensure that the infant's thirst is satisfied.

### **g) Safe preparation and storage of foods**

**Guideline:** Practice good hygiene and proper food handling by a) washing caregivers' and children's hands with soap before food preparation and eating, b) storing foods safely and serving foods immediately after preparation, c) using clean utensils to prepare and serve food, d) using clean cups and bowls when feeding children, and e) avoiding the use of feeding bottles, which are difficult to keep clean (for additional details, see WHO Complementary Feeding: Family foods for breastfed children, 2000 and Five Keys to Safer Food).

### **h) Responsive feeding**

**Guideline:** Practice responsive feeding, applying the principles of psycho-social care. Specifically: a) feed infants directly and assist older children when they feed themselves, being sensitive to their hunger and satiety cues; b) feed slowly and patiently, and encourage children to eat, but do not force them; c) if children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement; d) minimize

distractions during meals if the child loses interest easily; e) remember that feeding times are periods of learning and love - talk to children during feeding, with eye to eye contact.

### **i) Feeding during and after illness**

**Guideline:** Increase fluid intake during illness and encourage the child to eat soft, varied, appetizing, favorite foods. After illness, give food more often than usual and encourage the child to eat more.

### **j) Suitable and unsuitable sources of milk for infants over 6 months**

#### **Box 2: Suitable and unsuitable sources of milk other than breastmilk for infants over 6 months**

*In addition to a nutrient dense complementary diet (including foods from animal sources and foods rich in micronutrient), if the infant is not breastfed, suitable milks include:*

- Full cream animal milk, including goat, buffalo, cow, sheep, camel milk, Ultra High Temperature (UHT) milk
- Evaporated milk (reconstituted)
- Fermented milk or yoghurt (hygienically prepared)
- Infant formula can be used but is not necessary

*Milks that are unsuitable as sources of nutrients for infants > 6 months:*

- Condensed milk
- Skimmed and semi-skimmed milk (semi-skimmed milks may be acceptable after 12 months)
- Coffee creamer
- Unfortified soy milk (unless it is a soy-based infant formula)

Current WHO recommendations state that, if adequate amounts of other animal source foods are eaten regularly, the amount of milk needed for non-breastfed infants over 6 months old ranges from 200-400ml per day. Otherwise, the amount of milk needed ranges from 300-500ml per day. Non-breastfed infants over six months old also need additional fluids to drink.

## ANNEX 15: FAQs ON HIV AND INFANT FEEDING

### What is the approach of the WHO (2010) guidance on infant feeding in HIV?

The current WHO guidance on HIV and infant feeding (2010) reflects a public health approach to infant feeding. This directive approach is similar to other health interventions.

This document updates previous WHO guidance on HIV and infant feeding (last revised in 2006) on the basis of new evidence. The new 2010 guidelines recognize the important impact of antiretroviral (ARV) interventions during the breastfeeding period, to reduce postnatal transmission of HIV from the mother to the infant, and recommend that national authorities in each country decide which infant feeding practice should be promoted and supported by their Maternal and Child Health Services. This differs from the previous recommendations in which health workers were expected to individually counsel all HIV-infected mothers about the various feeding options, and it was then for mothers alone to decide between them.

The WHO (2010) guidance recommends that national or sub-national health authorities should promote and support a single infant feeding practice as standard. This is a directive approach to feeding, where the national authority has considered what is the feeding option that is likely to give the best child survival outcomes in a given context. In practice, this means that national or sub-national authorities now decide on the best option for HIV infected mothers: to breastfeed and receive ARVs or to avoid breastfeeding and provide replacement feeding. Where national authorities promote breastfeeding and ARVs, mothers known to be HIV-infected are recommended to exclusively breastfeed their infants for the first six months of life, introducing appropriate complementary foods thereafter and continue to breastfeed for the first 12 months of life.

The WHO (2010) guidance further recommends that when antiretroviral drugs are not (immediately) available, breastfeeding may still provide infants born to HIV-infected mothers with a greater chance of HIV-free survival. Even when ARVs are not available, mothers should be counselled to exclusively breastfeed in the first six months of life and continue breastfeeding thereafter unless environmental and social circumstances are safe for, and supportive of, replacement feeding. **In circumstances where ARVs are unlikely to be available, such as acute emergencies, breastfeeding of HIV-exposed infants is also recommended to increase survival.**

According to WHO guidance (2010), the authority should provide information about other practice options. However, the authority is only obliged to provide the support for

the practice that has been designated the chosen one for their setting. This means that if breastfeeding plus ARVs is the standard option, the national authority should provide information about replacement feeding but is not obliged to provide supplies and support, should a mother/caregiver choose this option.

It is possible and necessary to direct feeding choice at a national or sub-national level due to the evidence base that has developed since the 2007 WHO Guidelines.

### ***How should UNHCR and partners decide on a policy for infant feeding in the context of HIV?***

UNHCR country operations should critically appraise existing policy guidance noting that:

- If the feeding recommendation of an authority or national protocol is breastfeeding plus ARVs, then this should be implemented in the refugee context; it is the option most likely to favour child survival in UNHCR operational contexts.
- If the existing recommendation is for replacement feeding, this is likely to pose risk to child survival in typical UNHCR operational contexts. UNHCR should advocate and support reappraisal of this recommendation.
- If there are no existing recommendations regarding HIV and infant feeding, then UNHCR should support the designation of a feeding option recommendation for the particular context.

### ***Why do the 2010 guidelines now recommend breastfeeding to 12 months before considering cessation?***

Where national authorities promote breastfeeding and ARVs, mothers known to be HIV-infected are now recommended to exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter and continue breastfeeding until the infant is at least 12 months of age. Continued breastfeeding by HIV-infected mothers until the infant is 12 months of age capitalizes on the maximum benefit of breastfeeding to improve the infant's chances of survival while reducing the risk of HIV transmission.

These recommendations are possible because of high quality evidence of ARV effectiveness. ARVs have made a huge difference to reducing risk of HIV transmission through breastfeeding. ARVs give protection against HIV transmission even if breastfeeding is not exclusive.

The WHO (2010) recommendations are made considering that in high-prevalence countries, the risks of not breastfeeding pose a greater risk to child survival than HIV transmission.

***What is the risk of HIV transmission through exclusive breastfeeding?***

The risk of HIV transmission in breastmilk is low (about 0.79% per month of exclusive breastfeeding) and is reduced further when mothers receive anti-retroviral treatment (ARVs). The risks of replacement feeding are especially high in low resource settings and in emergency contexts. Replacement feeding removes a source of protection (breastfeeding) and introduces a source of infection.

***What difference does exclusive breastfeeding make to HIV-free child survival?***

In the absence of ARVs, exclusive breastfeeding reduces HIV transmission to about half.

If the mother or infant is taking ARVs, exclusive breastfeeding doesn't add significantly greater protection against HIV transmission but is a very effective protection against other infectious causes of death. Breastfeeding also provides top quality, sustainable, economic and probiotic nutrition.

Even after 6 months of age, especially in emergencies and low resource settings, there are serious risks of diarrhoea, pneumonia, malnutrition and the likelihood of associated mortality in non-breastfed infants.

***Why is exclusive breastfeeding for the first 6 months of life important in the context of HIV?***

The method of infant feeding is clearly associated with the risk of transmission through breastmilk. Exclusive breastfeeding for the first six months is associated with a 3-4 fold lower risk of HIV transmission as compared to mixed feeding (mixed feeding means the infant receives both breastmilk and any other food or liquid including water, non-human milk and formula before 6 months of age). One study found that only about 4% of exclusively breastfed infants became infected with HIV between 6 weeks and 6 months, even in the absence of ARVs (WHO 2007).

It is believed that mixed feeding in the first six months of life carries a greater risk of transmission because the other liquids and foods given to the baby alongside the breastmilk can damage the already delicate and permeable gut wall of the small infant



and allow the virus to be transmitted more easily. Mixed feeding also introduces a source of infection (e.g. contaminated feeds) to a vulnerable infant.

### ***What factors affect HIV transmission via breastfeeding?***

Several factors affect the risk of transmission, including feeding practice (see exclusive breastfeeding), the “viral load” or amount of virus in the mother’s body (highest right after infection and when AIDS develops; a very sick mother is eight times more likely to transmit HIV to her infant than a healthy mother), the duration of breastfeeding (the longer the period, the greater the risk, as transmission is cumulative), and the condition of the breasts (whether there are sores around the nipples).

### ***Why is it recommended to support mixed feeding after 6 months (complementary feeding period)?***

It is important to consider that the gut maturity of an infant under six months is different to an infant older than 6 months. An older infant is better able to ‘deal’ with exposure to food and what it contains, that may include contaminants. This is not to say that there is not risk – the complementary feeding period is a higher risk period for all infants - but the balance of risk in the context of HIV is in favour of continued breastfeeding.

An important consideration in infants over six months in all contexts, especially HIV, is to ensure good hygiene in preparation and storage of complementary foods, and personal hygiene (e.g. washing hands of caregivers and infants before eating) to reduce exposure to infectious agents. It is also important to consider that there is a linear relationship between taking ARVs and the infant being protected from HIV infection through breastfeeding (their effect does not decrease with time). So this ARV protection continues through the complementary feeding period when the mother/infant is on ARV treatment.

### ***What are the risks of replacement feeding in emergencies and resource poor settings?***

In emergency settings, the risks of diarrhoea and malnutrition are high and therefore the related likelihood of mortality is high. Safe replacement feeding is very difficult, especially within the first days after an emergency occurs. There is minimal opportunity to sterilise feeding equipment, access clean boiled water, and provide a safe environment for preparation of feeds. Furthermore, if the infant becomes unwell, the local health services or temporarily established emergency health services are less likely to be able to treat the child effectively: health facilities may have been affected by the emergency itself e.g.

military conflict or flooding, or may not be able to cope with large numbers of other sick/injured persons requiring care. As a result, the child who develops diarrhoea or malnutrition because of not breastfeeding will be at high risk of death.

In such situations, the overall balance of risks for HIV-free survival of infant/child is very likely to be in favour of breastfeeding, either by the mother or by a wet nurse, even if their HIV status is unknown. None of these considerations detract from the seriousness of potential HIV transmission through breastfeeding. However, the probability of death from diarrhoea or malnutrition is likely to be higher.

### ***What has happened to the AFASS conditions?***

The recommendation that replacement feeding should not be used unless it is AFASS (acceptable, feasible, affordable, sustainable and safe) remains, but the acronym is replaced by more common, everyday language and terms.

### ***Does breastfeeding negatively affect mothers who are HIV positive?***

Breastfeeding does not cause health problems for HIV infected mothers. Evidence has found that mothers do not lose more lean muscle and that breastfeeding does not increase disease progression. The critical thing is to identify mothers with low CD4 counts and provide her with ARVs. The most important predictor of maternal mortality is her CD4 count. The wellbeing and survival of a child is dependent on the health and wellbeing of his/her mother.

### ***What is the cost of breastfeeding and ARVs versus infant formula?***

An important consideration of families, health authorities and UNHCR is cost of treatment and feeding options. Cost calculation based on providing ARVs to 10,000 mothers and infants and breastfeeding for 12 months, is \$100/woman/year. The cost of formula feeding (supply, distribution and storage) is \$200/mother/year. This does not include the cost to the health system and human resource implications of managing sick children.

### ***What are the risks of HIV transmission via a wet nurse of unknown HIV status?***

An infant being wet nursed by a woman of unknown HIV status is at low risk of HIV transmission since:

- In most settings, the large majority of women are HIV uninfected. This is especially true in low prevalence settings and if the woman does not engage with high risk behaviours e.g. intravenous drug use.
- Where the overall duration of breastfeeding is likely to be short, weeks or a few months, the proportional risk of HIV infection is likely to be low – the risk of transmission is about 0.79% per month of breastfeeding in the absence of all antiretroviral drugs.
- HIV-infected women who have higher risks of transmission are those with high viral load and low CD4 count. These women are likely to have been unwell and to have already presented with symptoms, and perhaps they are not even well enough to breastfeed.
- In most high prevalence settings (and ideally in low prevalence settings as well), pregnant women will have had an HIV test. A mother who is volunteering to wet nurse an infant in an emergency setting may know her status from some years back.
- There has been one report of a previously HIV uninfected mother/wet nurse appearing to be infected with HIV by an infant who was already HIV-infected; it is extremely rare.

### ***How can I manage the risks of HIV transmission through wet nursing when there is no HIV testing?***

- Provide clear information to health workers that breastfeeding is very important for the health and survival of infants and young children in the emergency setting. Clarify that when the HIV status of a wet nurse is unknown, the overall risk of transmission through breastfeeding is small.
- Confirm to health workers that where wet nurses do not know their HIV status that they should breastfeed their infants in the same way as wet nurses who know they are not infected with HIV.
- In settings with high HIV prevalence, consider providing HIV testing in the later phase of the emergency response. It will not be feasible or a priority to do this immediately after the emergency event when a woman starts to wet nurse, but it may be possible to offer within a few weeks.
- If there is a major concern that the wet nurse has been involved with high risk behaviour or if the wet nurse is unwell, then prioritise HIV testing. In high prevalence settings, consider developing a simple screening tool about HIV risk behaviour and symptoms. Questions could be asked to women volunteering to wet nurse.
- If a wet nurse is confirmed to be HIV infected and there are no other immediate options for safe infant feeding, then provide oral nevirapine (daily oral dose) to the

infant for 4 weeks beyond the total period of breastfeeding and then test the HIV status of the child. The wet nurse should also receive antiretroviral drugs.

***What should happen if an HIV infected mother has been replacement feeding her infant, but this is now a high risk feeding option in an emergency?***

It may be more appropriate for the mother to start breastfeeding if the conditions for providing safe clean replacement feeds are not present, and especially if she is already on antiretroviral drugs.

**For more information go to:**

WHO FAQs on infant feeding and HIV:

[http://www.who.int/maternal\\_child\\_adolescent/topics/child/nutrition/hivif\\_qa/en/index.html](http://www.who.int/maternal_child_adolescent/topics/child/nutrition/hivif_qa/en/index.html)

Contact WHO for additional questions: [mncah@who.int](mailto:mncah@who.int)



**ANNEX 16: SAMPLE BRIEF ON THE SITUATION REGARDING HIV AND INFANT FEEDING**

Country:	
Operation:	
UNHCR focal point for more information:	

***The aim of UNHCR support to infant feeding in the context of HIV is to achieve HIV-free child survival.***

Below are the feeding and treatment options that UNHCR considers gives a child the best chance of being HIV free and staying alive in this context. These recommendations are based on a balance of risks – the risks of HIV transmission versus the risk of death from any cause, including diarrhoea and infectious disease.

Existing national/sub-national recommendations on infant feeding in the context of HIV exist. These recommend that [ ] is the standard option for infant feeding.

In this operation, the national/subnational recommendations [apply as follows/have been amended as follows]:

**OR**

National/sub-national recommendations on infant feeding in the context of HIV do not exist.

Thus, in this operation and based on the WHO (2010) guidance, the following recommendations are made by UNHCR:

<p><b>In this operation, it is recommended that where HIV status of mothers is negative or unknown, then [feeding recommendation] is recommended.</b></p>	<p><b>Where a mother is known to be HIV positive, then it is recommended that [insert feeding option and ARV treatment].</b></p>
<p><b>Where an infant has been established on replacement feeding, then they should be referred to [CLINIC contact] for support.</b></p>	<p><b>Provide recommendation if HIV testing is not available and if available post-emergency/planned, when it is likely to be available.</b></p>





