Position Paper ● Scientific & Technical Department

Infant and Young Child Feeding in Emergencies

Technical Department

ACF - International

December 2015 - Version 2.0

Update from Previous 2008 IYCF-E Position Paper version 1.5

ACF **DECEMBER 2015**

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Contributors

This document is the result of a process undertaken by the ACF International Network and was prepared with the contributions of a number of ACF staff members. The position paper was compiled and edited by Angeline Grant with contributions from (in alphabetical order): Cécile Basquin, Cécile Bizouerne, Maureen Gallagher, Anne-Dominique Israël, Silke Pietzsch, Oscar Serrano and Yara Sfeir.

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ACF International

Infant and Young Child Feeding in Emergencies Position Paper

Summary of ACF Position on Infant and Young Child Feeding in Emergencies (IYCF-E)

- All children should be exclusively breastfed for the first six months of life, thereafter receiving safe, timely and nutritionally adequate complementary foods with continued breastfeeding up to two years. Breastfeeding should be initiated within one hour of birth.
- ACF aims to protect, promote and support breastfeeding and ensure the timely, safe and appropriate complementary feeding of infants and young children in emergencies. Supporting appropriate IYCF is a life-saving intervention in emergencies.
- IYCF is a crucial issue affecting the health and survival of infants and young children. IYCF practices should be systematically evaluated in all initial situation assessments in emergency contexts.
- Support should be provided to ensure national IYCF-E policies and technical guidelines are in place in disaster-prone/high-risk countries before the onset of emergencies. Basic orientation and specific technical training on appropriate IYCF-E should be integrated into on-going institutional capacity-building, both in terms of preparedness and after the onset of an emergency.
- ACF integrates components to promote optimal infant and young child feeding into its malnutrition treatment and prevention programmes.
- In emergency contexts, ACF implements specific technical IYCF-E activities related to breastfeeding and complementary feeding support, counselling and promotion, together with psychosocial and mental health support for infants, young children, mothers and caregivers.
- Integration and synergy amongst different sectors should be promoted to enhance the reach, effectiveness and impact of IYCF-E interventions
- ACF will not accept unsolicited donations of breastmilk substitutes (BMS) and will advocate against unsolicited donations of BMS or feeding equipment in emergencies contexts.
- ACF will not engage in the untargeted distribution of BMS or feeding equipment within food aid programmes, general distributions or otherwise. ACF will advocate against the untargeted distribution of BMS by other actors in emergency contexts.
- As a breastmilk substitute, infant formula should only be targeted to infants who require it and have no viable breastmilk options, as determined by a technical assessment. Infant formula provision should always be associated with a number of accompanying measures to minimise the risks of artificial feeding.
- If it is necessary to procure infant formula for specific targeted cases, as a last-resort option after all alternative solutions have been exhausted, Ready-to-Use Infant Formula (RUIF) is the preferred choice in emergency contexts. If implementing a provision of RUIF, IYCF-E programmes must adhere to strict guidelines governing the procurement, packaging, targeting, administration and management of RUIF.
- Mothers known to be HIV-infected should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding for the first 12 months of life.
- Replacement feeding or early cessation of breastfeeding for HIV-infected mothers should only be considered if specific conditions are met. These conditions were previously described as Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS) but are now explicitly defined in order to better guide health workers.

1. Introduction

The protection, promotion and support of good nutrition and child development in emergency and non-emergency contexts is at the heart of Action Against Hunger (ACF)'s mandate. ACF International drafted and adopted a first position paper on infant and young child feeding in emergencies (IYCF-E) in July 2008. This second position paper seeks to update the previous existing paper in light of recent developments in the field of IYCF-E. It presents a brief outline of infant and young child feeding (IYCF) in general and focuses on the specific issues relative to IYCF in emergencies. Emergency settings generate specific threats to appropriate IYCF, meaning that specific recommendations need to be promoted and applied in order to protect appropriate IYCF in emergency contexts. This position paper lays out ACF's position on the protection, promotion and support of appropriate IYCF, the protection of non-breastfed infants and the issue of breastfeeding and HIV, within emergency contexts.

2. Brief Overview of Infant and Young Child Feeding

It is estimated that undernutrition accounts for nearly half (45%) of all global deaths in children under five [1,2]. 12% of these, or more than 800,000 deaths annually, are attributable to sub-optimal breastfeeding. The essential role of breastfeeding and complementary feeding[1] as major factors in child survival, growth and development is backed by a weight of scientific evidence [3-7].

The crucial period from conception to a child's second birthday, known as the 1,000 days critical window of opportunity, provides a vital chance for good nutrition and healthy growth to have lasting benefits on an individual throughout his/her lifetime [7,8]. Optimal infant and young child feeding plays a decisive role in this crucial period. It is recommended that infants be **exclusively breastfed for the first six months of life** to achieve optimal growth, development and health [9]. Thereafter, to meet their evolving nutritional needs, infants should receive **safe and nutritionally adequate complementary foods** while **breastfeeding continues for up to two years of age** or beyond [9]. Exclusive breastfeeding from birth is the best choice for infants except in a few rare medical conditions [10], and virtually every mother can breastfeed. In addition, a growing body of evidence [11-13] underscores the global recommendation that breastfeeding be **initiated within the first hour of birth**.

Optimal IYCF is essential to the health and survival of infants and young children in all countries and settings (see **Table 1** below).

[1] Complementary feeding is the process of giving other foods and liquids in addition to breastmilk, or appropriate BMS in non-breatfed infants, when these alone are no longer sufficient to meet the nutritional needs of infants and young children. In breastfed infants, the objective of complementary feeding is to complement on-going breastfeeding, neither displacing nor replacing breastmilk. Complementary feeding typically covers the period from six months to two years.

Table 1: Benefits of optimal IYCF

- **Exclusive breastfeeding until six months and continued breastfeeding until two years is considered one of the top preventative child survival interventions for effectiveness in preventing under-five mortality [3, 7, 8].**
- Breastfeeding has a significant effect in reducing morbidity and mortality from diarrhoea [14, 15] and pneumonia [16, 17].
- Early initiation of breastfeeding reduces neonatal and post neonatal death [11-13].
- Breastfeeding lowers the risk of mortality even in high-income countries [18-21].
- Breast-fed children have a reduced risk of a number of different types of morbidity including necrotising enterocolitis, asthma and acute otitis media [22-30].
- Antibodies and leucocytes found in human milk actively protect infants against infection [31-33]; breastmilk contains immunoglobulins and specific compounds with immune-modulating capacities [34, 37]. Breastfeeding modulates vaccination responses in infants positively compared to formula-fed children [35-36] and contains agents that have a positive effect on the development of a child's gut microbia [38-45].
- Both breastfeeding and appropriate complementary feeding are essential for child growth and the prevention of growth faltering and undernutrition [46-49].
- Given that stunting and iron deficiency have been linked to poor early childhood development [50], optimal IYCF can improve child development outcomes by reducing stunting and iron deficiency.
- Breastfed infants may have a lower risk of a number of chronic conditions in later life [51-59], including heart disease and diabetes.
- Breastfeeding has a number of benefits for maternal health, including a reduced risk of type-2 diabetes and breast cancer [60-68].
- Breastfeeding has been associated with improved mother-infant bonding [69, 70]; production of prolactin and oxytocin during breastfeeding is associated with lower levels of maternal stress [71].
- Prevention of stunting can prevent future productivity losses [72]. Optimal IYCF can therefore have an impact on future economic development through its effect on reducing stunting rates.

3. Infant and Young Child Feeding in Emergencies (IYCF-E)

In emergency contexts disease and associated death rates amongst children under five years can be higher than for any other age group. Previous experience has shown that in emergency contexts, even in healthy populations, child mortality can increase from 2 to 70 times higher than the average [73]. The risk of dying is particularly high because of the combined impact of communicable disease and diarrhoea together with the possible increases in the rates of undernutrition and a lack of appropriate health care. Affected populations in emergency contexts, particularly rapid onset emergencies, may find themselves in difficult and unsanitary conditions with frequent over-crowding and population displacement. Water-borne disease may become a serious threat. Appropriate complementary feeding practices may be disrupted. Women and infants may be ill, malnourished and/or psychologically affected by their experiences. Women may have lost family members, may have suddenly become heads of households and may have to take care of vulnerable family members. These conditions

obviously affect the way in which mothers and caregivers are able to feed and care for their infants and young children.

In emergency contexts a number of unfounded myths and misconceptions persist about the inability of women to breastfeed in such circumstances. These include a view that women may be unable to breastfeed in emergencies due to stress or trauma, or that women may be unable to breastfeed due to a lack of food for themselves. These misconceptions can be conveyed by a number of different individuals and can result in the undermining of locally-established breastfeeding practices. In addition, there may also be a number of culturally-specific customs and beliefs that influence care practices, including feeding practices, which may or may not be affected by the emergency context.

The misconceptions around the inability of women to breastfeed in emergencies, along with a sometimes well-intentioned belief that infant formula is an essential commodity in a humanitarian response, often leads to large quantities of breastmilk substitutes[2] (BMS) and feeding equipment being donated and distributed in an untargeted manner in emergency contexts. This undermines and disrupts local breastfeeding practices.

Breastfed children have been shown to be healthier than non-breastfed children in all contexts**,** even in non-emergency situations [14-21]. In emergency contexts the risks associated with artificial feeding are multiplied and significantly endanger infant and young children's health. Artificial feeding in emergency contexts can lead to increased illness, malnutrition and mortality [74, 75].

High infant morbidity and mortality related to artificial feeding in emergencies can be the result of a number of factors including: (i) the intrinsic contamination of infant formula, which is not sterile (ii) the lack of water (iii) the contamination of existing water sources (iv) the difficulty in sterilising bottles and teats (v) the incorrect preparation of formula (over or under dilution) (vi) the lack of supporting resources such as fuel, cleaning equipment, cooking pots, along with time constraints. Labels and instructions for infant formula may be incomprehensible because they are in a foreign language or because caregivers are illiterate. Infant formulas may be age-inappropriate. Even other milk products destined for older children or adults in emergencies may be consumed by infants and young children as a breastmilk substitute. Even in certain contexts, where BMS use was prevalent before the emergency, the change in circumstances may take away the conditions and the caregivers' ability to produce infant formula safely. An increasing number of emergencies are occurring in contexts of prior high BMS use and this can make the promotion, protection and support of appropriate IYCF-E even more challenging.

Even in emergency situations where safe water can be guaranteed, the use of infant formula has persistent risks. Formula feeding deprives infants of the disease-prevention and disease-fighting action of breastmilk and delays the development of the immune system, effectively immunocompromising infants [33]. Formula-fed babies are more susceptible to colonisation by pathogens [76, 77]. Use of infant formula can lead to malnutrition and increased susceptibility to illness [78, 79]. Even partial formula feeding dramatically increases the risk of illness [80]. In emergency situations a continuous of supply of infant formula is not always available or affordable.

[2] A breastmilk substitute is any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether or not suitable for that purpose. These include infant formula, other milk products, therapeutic milk, and bottle-fed complementary foods marketed for children up to 2 years of age and complementary foods, juices, teas marketed for infants under 6 months.

Breastmilk is the one safe and secure source of food for babies, instantly available, providing active protection against illness and keeping an infant warm and close to his/her mother, all for free. Breastfeeding also reduces the risk of post-partum haemorrhage. In short, **breastfeeding saves lives**.

In addition to protecting, promoting and supporting breastfeeding in emergencies, it is also fundamental within such contexts to ensure that the needs of non-breastfed infants are met. Depending on the situation, this may represent a small number of isolated cases or may represent a significantly larger caseload in contexts where a large proportion of infants were not breastfed pre-crisis[3]. ACF, along with other international stakeholders, is currently contributing to furthering the guidance in managing artificial infant feeding, in order to ensure stronger and more consistent action in this regard. Meanwhile, specific responses adapted to each context should continue to be discussed and formulated at both mission and HQ level.

It is important to bear in mind that in emergency contexts appropriate complementary feeding may also be eroded or disrupted. This can be due to a number of causes affecting the safety, quantity and quality of complementary foods but also the associated care practices that influence how, when and where caregivers feed older infants (over six months) and young children (12-24 months). Sub-optimal complementary feeding can also lead to a deterioration in the health and nutritional status of infants and young children, resulting in increased morbidity and mortality.

The Infant and Young Child Feeding in Emergencies (IFE) Core Group[4] Operational Guidance on IYCF-E v.2.1, 2007 [81] is the international standard on infant and young child feeding in emergencies. It provides concise, practical, but mainly non-technical guidance on how to ensure appropriate infant and young child feeding in emergencies. The Operational Guidance on IYCF-E was mandated by a World Health Assembly resolution in 2010 and embeds the 1981 International Code of Marketing of Breastmilk Substitutes [82]. IYCF-E standards were also integrated into SPHERE Minimum Standards in Humanitarian Response in 2011 [83].

4. ACF Position on IYCF-E

ACF adheres to the principles of the Operational Guidance on IYCF-E v 2.1, 2007, which forms the basis of this technical position paper. ACF also adheres to the International Code of Marketing of Breastmilk Substitutes, 1981 and SPHERE Minimum Standards in Humanitarian Response, 2011. In addition, ACF has produced detailed programmatic guidance on a holistic approach for pregnant and lactating women, and their children, in emergency settings [84]. ACF is a member of the IFE Core Group and is an active member of the Managing Acute Malnutrition in Infants Project (MAMI-2).

Protecting, promoting and supporting breastfeeding

- Breastfeeding plays an essential role in the nutritional status, health, growth, development and protection of infants and young children and promotes infant-mother bonding. Breastfeeding also has positive effects on maternal health. In all situations, **ACF aims to protect, promote and support the breastfeeding of infants and young children. ACF considers breastfeeding to be, in itself, a life-saving intervention.**

[3] As was recently witnessed in emergency contexts such as Syria and Ukraine.
[4] An inter-agency collaboration concerned with the development of training materials and related policy guidance on infant and young child feeding in emergencies.

- To enhance preparedness, support should be provided to ensure that clear **national policies and technical guidelines on IYCF-E are in place in disaster-prone/high-risk countries** before the onset of emergencies. **Basic orientation** for all relevant staff on appropriate IYCF-E should be integrated into institutional on-going capacity building plans. Additional **technical training** (for example on the diagnosis of lactation failure, tailored counselling to identify lactation failure causes and relactation support) should be provided for health, nutrition and psychosocial programme staff involved in implementing IYCF-E support activities in emergency contexts, based on existing technical guidelines [85, 86]. Orientation and training activities should be conducted both in terms of preparedness and also after the onset of an emergency.

- IYCF is a crucial issue affecting the health and survival of infants and young children. **IYCF practices should be systematically evaluated in all initial situation assessments in emergency contexts.** If necessary, more systematic, sector-specific assessments, using recommended methodologies, can also be conducted and IYCF-E data can be integrated into nutrition, health, protection and early childhood development monitoring and/or surveillance systems. Particularly (but not exclusively) in crisis situations, it is important to be aware of the infant feeding and related care practices in the concerned populations and the changes that these may have undergone since the crisis event. This information is essential in determining the needs and requirements for interventions to protect the nutritional status and survival of infants and young children. In addition, consideration should be given to developing and standardising assessment methodologies for determining the prevalence of acute malnutrition in infants under six months. In the great majority of emergency contexts, nutrition information relating to this age group is often missing.

- Poor infant and young child feeding practices are a key causal factor in the development of malnutrition and morbidity [87]. Therefore, **malnutrition treatment and prevention programmes should include components to promote optimal infant and young child feeding**. Behaviour change approaches should be primarily targeted towards mothers and caregivers but are also enhanced by including and training key decision-makers within the family structure (fathers, mothers-in-law) or influential members of society (midwives, doctors, traditional practitioners, religious authorities, even hairdressers) on appropriate IYCF. Rigorous IYCF programming also has a critical role to play in the effective management of acute malnutrition in infants [88].

- Depending on the needs determined during the assessments and in coordination with the other field actors and affected populations, there may be a need to **implement specific technical activities related to breastfeeding and complementary feeding support, counselling and promotion.** This may include, but not be limited to: breastfeeding counselling trainings and activities, establishment of Baby Friendly Spaces or breastfeeding corners/tents within health or community structures, community awareness campaigns and advocacy towards health care providers. Such programming may be implemented in emergency situations even when undernutrition is not at a high level. Specific activities relating to breastfeeding and complementary feeding support, counselling and promotion may be integrated into ACF's larger programming targeting pregnant and lactating women (covering psychosocial, health, nutrition, care practices, FSL and WASH support). Actors

should also take into account the specific nutritional requirements of pregnant and lactating women and ensure that their nutritional needs are met during an emergency.

- Emergency situations can create severe stress, trauma or psychological difficulties for populations, which may particularly affect pregnant and lactating women, caregivers, infants and young children. This may result in mothers and caregivers experiencing difficulties in caring for their infants and young children appropriately. Therefore activities to protect, promote and support appropriate IYCF-E should also **integrate focused psychosocial support and/or specific mental health support**, or referral to such services. ACF strives to promote and establish a solid integration of the psychosocial component into IYCF-E programming. This implies implementing programmes and activities that take into account the emotions of the mother/caregiver, the emotions of the child, the mother-child relationship and the effects that these may have on care practices. The majority of ACF's IYCF-E facilities/baby-friendly spaces are run by psychosocial workers and have a strong focus on the six care practices in emergency contexts[5]. In addition, IYCF-E programmes should be designed with a strong consideration for cultural systems and beliefs, to take into account the effect that these might have on feeding practices but also on other issues relating to IYCF-E (such as privacy considerations when breastfeeding).

- **Integration and synergy amongst sectors** (nutrition, psychosocial support and care practices, health, food security and livelihoods and WASH) **should be fostered to enhance the effectiveness of interventions** aimed at protecting, promoting and supporting appropriate IYCF-E and preventing malnutrition and morbidity amongst infants and young children. In some contexts the scope of protection, early childhood development, health or psychosocial programmes may be wider than those of dedicated IYCF-E programmes. In such cases enhanced cross-sector integration can increase the reach and cohesion of IYCF-E activities and ensure improved impact of interventions for the affected population.

- In addition, all sectors should consider how time and economic constraints in an emergency setting can affect the ability of mothers and caregivers to care for their children and provide appropriate infant and young child feeding. Mothers and caregivers may be forced to spend long periods of time away from their babies, sometimes queuing for different types of relief assistance from different actors. Mothers and caregivers may also struggle to provide appropriate complementary foods for their children in emergency contexts. Activities to protect, promote and support appropriate IYCF-E should be sensitive to such constraints and strategies to mitigate them should be considered when designing interventions, in a cross-sectoral and collaborative fashion.

Protecting, promoting and supporting appropriate, safe and timely complementary feeding

- Appropriate, timely and safe complementary feeding has an essential role to play in the nutritional status, health, growth and development of older infants and young children. In all situations, **ACF aims to protect, promote and support the appropriate, timely and safe complementary feeding of older infants and young children**.

[5] The six care practices in emergency contexts are: care for women, breastfeeding and feeding practices, psychosocial care, hygiene practices, meal preparation, home health practices

- In emergency contexts special attention should be given to the **availability and access of commodities suitable as complementary foods for older infants and young children**. These may include locally-available foods, micronutrient-fortified blended foods, Ready-to-Use Supplementary Foods (RUSFs) or Lipid-based Nutrient Supplements (LNS), depending on the nutrition situation in the given context. Special consideration should be given to young children whose particular nutritional requirements may not be met by the household food basket or may not be covered by general food rations. Provision of nutrient-dense foods, whether fortified or non-fortified, should be considered, taking into account possible micronutrient deficiencies prevalent in the affected population. Special consideration should also be given to the challenges faced by mothers and caregivers in emergency contexts to prepare (cook, mash or otherwise transform) suitable age-appropriate complementary foods with the right consistency. Such constraints should be factored in to programme design, for instance through the distribution of cooking utensils, fuel and consideration of milling costs.

- In addition to addressing the access and availability of appropriate complementary foods, particular attention should be given to **promoting and influencing appropriate feeding practices, in terms of how, when and where older infants and young children are fed, according to existing guidelines** [89, 90]. This should take into account culturally-specific customs and beliefs that may have an effect on the establishment of optimal complementary feeding and care practices. How food is given can influence a child's intake and it is recommended to practice responsive feeding[6]. Activities relating to complementary feeding in an IYCF-E programme may include group sensitisation/education, development of local recipes with adequate dietary diversity with food available and affordable since the emergency, cooking demonstrations, support to the provision and/or preparation of appropriate complementary foods or provision of fresh food vouchers to mothers/caregivers for the preparation of complementary foods.

Protecting non-breastfed infants and minimising the risks of artificial feeding[7]

- ACF supports internationally-approved guidelines [9] stating that all children should be exclusively breastfed until six months, with continued breastfeeding until two years. ACF does not sanction the use of breastmilk substitutes (BMS), except in very specific circumstances (as detailed in following paragraphs). In emergency contexts, donations of BMS, milk products, bottles and teats are not required and undermine local breastfeeding practices. The increased risks associated with their use significantly endanger infant and young children's health and lives. **ACF will not accept unsolicited donations of BMS and will advocate against unsolicited donations of BMS or feeding equipment in emergency contexts**. ACF will report any violations of the Operational Guidance on IYCF-E or the International Code of Marketing of Breastmilk Substitutes to national/local authorities, the World Health Organization (WHO) and the national Nutrition Cluster (if activated) at the country level, or to the International Code Documentation Centre, IFE Core Group and International Baby Food Action Network (IBFAN) at the international level. ACF will

[6] Specifically: a) feeding infants directly and assisting older children when they feed themselves, being sensitive to their hunger and satiety cues; b) feeding slowly and patiently, and encouraging children to eat, without forcing them; c) if children refuse many foods, experimenting with different food combinations, tastes, textures and methods of encouragement; d) minimizing distractions during meals if the child loses interest easily; e) talking to children during feeding, with eye-to-eye contact, as feeding times are a period of learning and love.

[7] The IFE Core Group Operational Guidance on IYCF-E, v.2.1, 2007 is scheduled to be reviewed and updated in 2016 by the IFE Core Group led by ENN and UNICEF. This review will particularly focus on how non-breastfed infants are managed in emergencies, drawing on recent humanitarian experiences from Syria, Yemen and Ukraine. Subsequent to the release of the updated Operational Guidance on IYCF-E, this position paper, and particularly this section, will be updated accordingly.

collaborate with national/local authorities, WHO and the national Nutrition Cluster (if activated) to call for the protection and support of appropriate IYCF-E and to ensure common messaging for donors, the media and the general public on the fact that donations of BMS are not needed in emergencies and may put infant and young children's health and lives at risk. Support for the prevention of unsolicited donations of BMS and feeding equipment will also be sought from other sectors/clusters (logistics, food security, health, child protection, reproductive health).

- **ACF will not engage in the distribution of BMS, milk products or feeding equipment (bottles, teats) within food aid programmes, general food distributions or otherwise.** ACF will advocate against the untargeted and unmonitored distribution of BMS in emergency contexts by other actors, activating appropriate infant and young child feeding networks when necessary. ACF will play a significant role in advocating for the protection, promotion and support of appropriate IYCF-E in emergency contexts to the wider humanitarian community, donors, government and national/local organisations.

- Particularly challenging, in crisis situations, is ensuring the nutritional status and survival of infants and young children who are not breastfed. These children need urgent identification and targeted skilled feeding support as infant health and nutrition status can swiftly deteriorate. Artificial feeding should only be provided when safer breast-milk options, including relactation, wet nursing and use of donated breast-milk, have been fully explored with the infants' caregivers and deemed not possible. **Infant formula should be strictly targeted to infants who require it and have no viable breastmilk options, as determined by an assessment from a qualified health, nutrition or psychosocial worker trained in breastfeeding and infant feeding issues**, according to established targeting criteria[8]. Definitive targeting criteria should be agreed upon by all humanitarian actors via the national Nutrition Cluster (if activated) and/or relevant national/local authorities. Provision of infant formula should be done in a responsible manner, treating each case on an individual basis, providing support and follow-up to caretakers and infants and discussing alternatives on a regular basis. Use of infant formula may be temporary (e.g. for use until full relactation is established) or for full artificial feeding of an infant for whom there is no access to breastmilk.

- If it is necessary to procure infant formula for specific targeted cases, as a last resort option after all alternative solutions have been exhausted, either powdered infant formula (PIF) or ready-to-use infant formula (RUIF) can be procured depending on the context [84, 91]. RUIF is a pre-mixed liquid infant formula, ready to be consumed directly from the container or from a cup and does not require water, bottles or teats. It has the added advantage of not needing any preparation, warming up or refrigeration before opening. **RUIF is therefore the preferred choice in emergency contexts.** However it is important to remember that **though RUIF has less risk of contamination than PIF, a certain contamination risk is still present**. RUIF is also more costly and more difficult to transport, store and dispose of than PIF. RUIF often requires procurement from outside the emergency-affected country, which may result in procurement delays. Whichever BMS is chosen to be provided, either

[8] Example criteria for temporary or longer-term use of infant formula include: absent or dead mother, mothers with insufficient breastmilk, mothers who cannot breastfeed due to maternal medication or disease, re-lactating mother until lactation is re-established, mother who chose not to breastfeed before the emergency, HIV-positive mother who chose not to breastfeed before the emergency and mother survivor of sexual violence not wishing to breastfeed.

RUIF or PIF, it must be procured and adhere to the requirements set out in the Codex Alimentarius and International Code of Marketing of Breastmilk Substitutes[9].

- **Appropriate, targeted, provision of RUIF or PIF to assessed infants who require it should always be associated with a number of accompanying measures to minimise the risk of artificial feeding**. Practical training on safe preparation and administration, explanation of the risks and commitments to caregivers, one-on-one demonstrations, education on specific care given to a non-breastfed child, follow-up home visits and regular infant health and growth monitoring should be provided to caregivers of targeted infants receiving RUIF or PIF. Specific and adapted advice may need to be developed for cases where there is no mother present, or there is a large proportion of male caregivers, and discussions should be on-going on alternative solutions such as wet-nursing. Attention should be paid to the psychosocial impact of discontinued breastfeeding on children whose mothers have died or are unable to breastfeed, following the emergency. In these cases adequate provisions to facilitate new bonding or support mothers with breastfeeding difficulties should be set up. Provisions should also be made for additional community sensitisation and staff training on appropriate IYCF-E and programme implementation modalities. To minimise the risks of artificial feeding "Safer BMS Kits" [92] should be distributed and adapted to the type of BMS provided (either PIF or RUIF). Once started, provision of infant formula must continue for as long as the targeted infant requires it, meaning that IYCF-E programmes that include an infant formula provision component must plan to last for at least 6 months, but preferably 12 months if adequate complementary food is unavailable. As the spill-over risks of infant formula provision programmes to non-targeted children are high, interventions to support non-breastfed infants should always be closely monitored for any potentially negative effects and should always include a component to protect breastfed infants.

- When implementing an IYCF-E programme with an infant formula provision component it is essential to **establish robust programme mechanisms for estimating the number of children with no possibility to breastfeed, for targeting and managing infant formula allocation and also for handling stocks and waste [84, 93, 94, 95].** Precise attention should be paid to the growth trends of the infant receiving the infant formula, particularly weight monitoring [94], and solid mechanisms should be put in place for referral to acute malnutrition treatment should the infant's nutrition status deteriorate. Strong follow-up mechanisms for defaulters should also be established, as the ability to trace these extremely vulnerable children is vital. The **spill-over risks of infant formula provision need to be carefully analysed and the effects on breastfeeding need to be mitigated by establishing monetary or resource support for breastfeeding mothers** that is equivalent or greater to the provision of infant formula and the "Safer BMS" Kit. The space where infant formula is provided should be separated from the space dedicated to breastfeeding support and counselling. Infant formula storage should not be in view of beneficiaries and provision of infant formula should not be advertised. Finally, transitioning out from an emergency IYCF-E programme with an infant formula provision component requires a solid, long-term exit strategy with ties to both facility and community-based structures [95].

[9] The requirements are that: BMS should be purchased, not donated; manufactured and packaged according to Codex Alimentarius standards; have a shelf life of 6 months on receipt of supply but preferably longer; labelled in local language, preferably with a generic (unbranded) label that: states the superiority of breastfeeding, indicates that the product should be used only on health worker advice, and warn about health hazards; there should be no pictures of infants or other pictures idealising the use of infant formula. If the labels do not comply with the above criteria, the formula will have to be appropriately relabelled before use. BMS should be age-appropriate for the group of targeted beneficiaries and follow-on milks are not necessary.

- Emergencies may occur in contexts of prior high BMS use [96]. In these contexts IYCF-E programming can be challenging and **national/local authorities and/or the national Nutrition Cluster (if activated) have a key role to play in ensuring that appropriate IYCF-E is adequately promoted, protected and supported.** Nutrition actors, in collaboration with national/local authorities, should consider releasing a **joint statement to call for the protection and support of appropriate IYCF-E** [97] and should carefully monitor for unsolicited and untargeted distributions of BMS. Media organisation should be brought on board to increase interest in the issue and ensure that no inappropriate messages are being disseminated. National/local authorities and/or humanitarian actors may take the decision to provide infant formula for children affected by the emergency with no possibility to breastfeed. This means the **national Nutrition Cluster (if activated) and/or national/local authorities also have a key role to play in ensuring that the procurement, management, targeting and administration of infant formula (RUIF or PIF) is appropriately coordinated [94, 95].** Other humanitarian coordination mechanisms (Logistics Cluster, Food Security Cluster, Health Cluster, Child Protection Cluster, Reproductive Health Sub-Cluster) may also have a part to play in this coordination. In situations of prior high BMS use, **promotion, protection and support of appropriate IYCF-E needs intense, culturally-appropriate behaviour-change approaches, along with capacity-building tailored to the context, to increase the number of babies that are exclusively breastfed** and to increase the prevalence of appropriate IYCF-E practices.

Breastfeeding, HIV and other considerations

- The prevention of mother-to-child transmission through breastfeeding must be balanced with the nutritional requirements of the child, as well as the morbidity and mortality risks inherent to artificial feeding. National or sub-national authorities should advise mothers known to be HIV-infected on the recommended infant feeding practices that support the greatest likelihood of HIV-free survival for their children. To achieve this, prioritizing the prevention of HIV transmission needs to be balanced against protecting infants from other (non-HIV) causes of child morbidity and mortality. Prioritising the prevention of HIV also needs to be balanced with meeting the nutritional requirements of the infant. Such national or sub-national recommendations should also ensure no harm to the health of the mother. Mothers should themselves receive appropriate and sustainable medical care (lifelong ART or ARV prophylaxis).

- The risk of transmission of HIV from mother to child through breastfeeding, based on prevailing evidence, is of 15% when no preventative action is taken and of 2-3% when both mother and baby receive a single dose of nevirapine and practice exclusive breastfeeding for six months [98, 99]. In the majority of settings[10], it is therefore recommended that **mothers known to be HIV-infected** (and whose infants are HIV uninfected or of unknown HIV status) **should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate and safe complementary foods thereafter, and continue breastfeeding for the first 12 months of life** [100]. Breastfeeding should then only stop once a nutritionally adequate (both in quantity and quality) and safe diet without breastmilk can be provided.

[10] Settings where national authorities have decided that the maternal and child health services will principally promote and support breastfeeding and antiretroviral interventions as the strategy that will most likely give infants born to mothers known to be HIV-infected the greatest chance of HIV-free survival. 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.

Mixed feeding, including water, increases the risk of transmission as well as the risk of morbidity and mortality [101]. Mothers known to be HIV-infected who decide to stop breastfeeding at any time should do so gradually within one month. Mothers or infants who have been receiving ARV prophylaxis should continue prophylaxis for one week after breastfeeding has fully stopped. As per recent guidance, stopping breastfeeding abruptly is not advisable [100]. In circumstances where ARVs may not be available, such as acute emergencies, breastfeeding of HIV-exposed infants is also recommended to increase survival [100].

- **Replacement feeding or early cessation of breastfeeding should only be considered if specific conditions are met** [100]. These conditions were previously described as Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS). However there is now a move towards explicitly defining the conditions to safely establish replacement feeding or early cessation of breastfeeding, using common language, in order to better guide health workers in what to assess and what to communicate to mothers/caregivers[11].

- In emergency contexts, HIV-positive mothers should be counselled on the different possible infant and young child feeding options for that particular situation. As per the above recommendations, exclusive breastfeeding for the first six months and continued breastfeeding thereafter are strongly recommended, even when ARVs are not available. HIV-positive mothers who were breastfeeding before the emergency must be counselled and supported to continue breastfeeding. If the provision of ART or ARV drugs has been disrupted by the emergency, action must be taken to advocate for the re-establishment of services/supply as soon as possible.

- Before an emergency, some HIV-positive mothers, or caretakers of children born to HIV-positive mothers, may have chosen not to breastfeed and use replacement feeding. With the onset of an emergency, the provision of replacement feeding may be disrupted and the utensils, fuel and other items necessary for the safe and adequate preparation of replacement feeding may be lost. In such circumstances, HIV-positive mothers, and caretakers of children born to HIV-positive mothers, who have chosen not to breastfeed, should be provided with appropriate, targeted RUIF or PIF. As detailed in previous paragraphs, a number of accompanying measures to minimise the risks of artificial feeding in emergencies should also be associated, such as support and education on the storage, handling, preparation and administration of RUIF or PIF in deteriorated living conditions. “Safer BMS kits” [92], adapted to the type of BMS administered, should be provided along with specific counselling on the risks of mixed feeding and HIV transmission.

- Management of infant feeding in emergency contexts with high HIV prevalence will depend on whether the operational health service is able to offer voluntary testing facilities for HIV, and appropriate referral. If testing is not available, targeting for individual treatment services and infant feeding options will not be possible and messages around breastfeeding should be pitched at a population level. If available, Prevention/Elimination of Mother-to-Child Transmission (E/PMCT) activities or linkages to such services should be routinely included

[11] a) safe water and sanitation are assured at the household level and in the community and b) the mother, or other caregiver can reliably provide sufficient infant formula milk to support normal growth and development of the infant and c) the mother or caregiver can prepare it cleanly and frequently enough so that it is safe and carries a low risk of diarrhea and malnutrition and d) the mother or caregiver can, in the first six months, exclusively give infant formula milk and e) the family is supportive of this practice and f) the mother or caregiver can access health care that offers comprehensive child health services.

as part of the minimum package of nutrition interventions implemented. In addition, particular attention should be given to the way in which IYCF-E support staff deal with HIV positive mothers to avoid any HIV-related stigma.

- In addition to HIV, there are implications for appropriate IYCF-E in the context of other diseases such as cholera, both at the cholera treatment centre/unit level (CTC/CTU) and at the community level. In terms of cholera response, ACF adheres to existing policy [102] and guidelines [103]. Exclusive breastfeeding should be supported and protected as it is the best way to safeguard an infant from cholera. At the CTC/CTU level capacity-building should be provided to staff on appropriate IYCF-E. Breastfed babies with cholera should continue to breastfeed as soon as they are able to suckle and breastfeeding mothers with cholera should be supported to re-initiate breastfeeding as soon as they are stable[12] [104]. Particular care should be taken to protect the cholera-free breast-fed baby from cross-contamination. Caretakers of breastfed infants whose mothers are too sick to breastfeed should be immediately referred for IYCF-E counselling and support, including appropriate, targeted provision of RUIF or PIF, if necessary. Breastfeeding mothers who have temporarily stopped breastfeeding as a result of cholera should be provided with appropriate IYCF-E support to re-establish breastfeeding. At the community level enhanced mobilisation is required in order to ensure and protect breastfeeding and safe complementary feeding in the context of cholera [105].

- Recent guidance has been developed relating to Ebola virus disease (EVD) and infant feeding [106]. ACF has actively contributed to the technical debate and guideline formulation on the topic of infant feeding and EVD, which continues to evolve and be updated, in light of new developments in the field. In addition to contributing to global guidance, ACF has also produced internal technical guidance relating to EVD [107] and guidance on programming in the context of EVD [108].

5. ACF Resources and Contacts

ACF International Resources

- ACF Holistic Approach for Pregnant, Lactating Women and their Children in Emergencies (Baby Friendly Spaces), 2014
- ACF Manuel Espaces Mères-Bébés – Approche holistique des femmes enceintes, allaitantes et leurs très jeunes enfants dans les situations d'urgence, 2015
- ACF Breastfeeding Assessment Methodology
- ACF Breastfeeding Mini Module
- ACF Care Practices Mini Module
- ACF Emergency Nutrition – A Handbook for Developing an Emergency Nutrition Intervention Strategy, 2011
- ACF Essential Nutrition & Health – The Key to Understand Nutrition & Health and ACF position, 2012
- ACF Mental Health and Care Practices Policy, 2010
- ACF Manual of Integration of Care Practices and Mental Health in Nutrition Programs, 2012

[12] A woman with cholera can still safely breastfeed her baby as long as she is conscious and not showing signs of shock. Dehydration can reduce a woman's breastmilk – but this is very quickly corrected once she is hydrated

- ACF Conceptual Models of Child Malnutrition: the ACF Approach in Mental Health and Care Practices, 2012
- ACF HIV Policy Paper, 2008
- ACF HIV and Nutrition Training Kit
- ENN, CIHD and ACF, MAMI Project. Technical Review: Current evidence, policies, practices & programme outcomes, 2010

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Infant Feeding in Emergencies Core Group/Emergency Nutrition Network (ENN): Marie McGrath, marie@ennonline.net / ife@ennonline.net

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5. Newborn Survival Series. *Lancet* 2005

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