

# Government Provision of Infant Formula in Egypt

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Egypt has a long history of providing subsidized food for its people. The policy has been criticized for its high cost to the government and for the way in which sustained provision of food by the government can be disempowering for the people (Ecker, Tan, and Al-Riffai 2014; Ecker et al. 2016); IFPRI 2013). This editorial will examine one distinct component of that program: the provision of subsidized infant formula. As shown in the historical review, the subsidy program was in turmoil in mid-2016, resulting in major changes in the program's management. The critical analysis that follows argues that for the long term, simply

improving the delivery of subsidized formula is not enough. It should be recognized that feeding infants with formula can displace breastfeeding, resulting in worse health outcomes for infants and mothers. The use of infant formula should not be encouraged. There are few conditions under which it is medically necessary. Instead of spending so much money on subsidizing formula, Egypt should provide better support for breastfeeding.

## Historical Review

For decades, subsidized infant formula has been made available in Egypt through the government's Egyptian Pharmaceutical Trading Company (Egyptian Pharmaceutical Trading Company 2016). Since no formula is manufactured in Egypt, the company has been importing formula and providing it to pharmacies and Primary Health Care Clinics throughout the country.

The prices paid by the government and by families for infant formula have been increasing. One report suggests that companies importing formula have created a monopoly to increase prices (Ahram Online 2016). There has also been serious concern about leakage of infant formula from the supply chain, largely due to corruption. Some subsidized formula ends up being used by infants who do not need subsidies. Some is diverted to illegitimate uses such as making cakes and biscuits in bake shops. These factors led to serious shortages in the supply of subsidized formula for the clinics and pharmacies. There have been allegations that some subsidized formula is being sold at the market price, thus making the shortage of subsidized formula especially intense.

As a result of concerns about the way formula distribution was being managed by the Egyptian Pharmaceutical Trading Company, the Minister of Health and Population ordered radical changes in the system in June of 2016. To reduce leakage, a Smart Card system was introduced to identify those who

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were eligible, and the criteria for eligibility were modified.

Over the summer, national policy relating to infant formula continued to change rapidly. The Ministry of Health and Population (MoHP) ordered that all formula would be distributed through the pharmacies of the Primary Health Care Units throughout the country. The new approach was described as follows:

*Starting on August 1, 2016, beneficiaries eligible for the fully subsidized infant powdered milk formula, the red can, must use their smart cards to get their allowances. According to MoHP, beneficiaries have to meet the following conditions: the mother is not capable of breastfeeding her infant, passed away, delivered more than one child, has a disease(s) that prevents her from breastfeeding, or takes medicines [that] can negatively affect the child through her milk.*

*In order to obtain the smart card, beneficiaries must apply at any of the Egyptian Postal Service's branches with the supporting documents and MoHP's approval. Beneficiaries will receive their monthly allowance using their smart cards at MoHP's Maternal and Child Centers that are equipped with card readers. MoHP stated that it has around 1005 centers in all governorates equipped with the card reading machines. (USDA Foreign Agricultural Service 2016)*

Steep price increases and shortages, together with inadequate information to the public about the changes, led to street protests in early September 2016. As a result, Egypt's Armed Forces took control of the infant formula program (Ahram Online 2016; Aswat Masriya 2016a, 2016b, El-Saleh 2016; Middle East Monitor 2016; Tablawy 2016). All these difficulties raise important issues about the management of the system of providing subsidized infant formula. However, the deeper long-term questions are about the wisdom of providing such subsidies at all.

### **Critical analysis**

In early September 2016 the Ministry of Health and Population changed the criteria under which families would be eligible for subsidized formula

several times. Some criteria were very clear, such as the birth of twins or triplets or the death of the mother (AlMasri Alyum 2016). Some criteria were not so clear. A family would be eligible if the woman stopped breastfeeding, but no clear distinction was made between being unable to breastfeed and choosing not to breastfeed. If any woman could get subsidized formula simply by choosing not to breastfeed her infant, there would be no need for additional detailed criteria and examination procedures. The criterion for eligibility could be reduced to "not breastfeeding". That would be equivalent to having no criteria at all, but would amount to offering subsidized formula on demand.

A diagnosis of diabetes was said to warrant the provision of subsidized formula, but the reason for that was not explained. It was stated that chronic illnesses "such as" diabetes would justify claims for subsidized formula, but the meaning of "such as" was not explained.

The criteria did not explain how "weakness in milk production" would be addressed. Apparently the plan was that doctors would examine women's breasts but many people felt this would violate women's dignity and had no sound scientific basis (El-Bar, Karim, 2016; Mahfouz 2016; Wirtschafter 2016). Both the media and the people seemed unaware of the existence of professional lactation counselors whose primary role is to help new mothers deal with difficulties in breastfeeding.

Poverty was not specified as a criterion of eligibility for subsidized formula.

Viewed over the long term, Egypt's entire food subsidy program should be questioned. While it was intended to increase food security, especially for the poor, it may have done the opposite, leading the poor to become overly dependent on unreliable food supplies from the government.

Here, however, the focus is on the infant formula program. The logistical issues raised in mid-2016 are important, but it is more important to reconsider the wisdom of providing subsidized infant formula over the long term.

From its beginning, Egypt's program for distributing subsidized infant formula has been based on the premise that if an infant cannot be breastfed by its mother, the second best alternative is feeding with formula. That is not correct, as explained by the World Health Organization:

*The vast majority of mothers can and should breastfeed, just as the vast majority of infants*

*can and should be breastfed. Only under exceptional circumstances can a mother's milk be considered unsuitable for her infant. For those few health situations where infants cannot, or should not, be breastfed, the choice of the best alternative – expressed breast milk from an infant's own mother, breast milk from a healthy wet-nurse or a human-milk bank, or a breast-milk substitute fed with a cup, which is a safer method than a feeding bottle and teat – depends on individual circumstances.*

*For infants who do not receive breast milk, feeding with a suitable breast-milk substitute – for example an infant formula prepared in accordance with applicable Codex Alimentarius standards, or a home-prepared formula with micronutrient supplements – should be demonstrated only by health workers, or other community workers if necessary, and only to the mothers and other family members who need to use it; and the information given should include adequate instructions for appropriate preparation and the health hazards of inappropriate preparation and use. Infants who are not breastfed, for whatever reason, should receive special attention from the health and social welfare system since they constitute a risk group. (World Health Organization 2003, para 18-19).*

In Muslim countries such as Egypt there are religious issues relating to the use of human milk obtained from a woman other than the biological mother, even though, as a baby, the Prophet Mohammed was fed by a wet nurse. Banked or shared human milk might be acceptable under some conditions.

There was a new fatwa in 2004 “stating that making use of such milk banks, in case of need, does not raise religious problems in Islam. using such milk does not institute milk-kinship which prohibits marriage in Islam (Ghaly 2010, 5).” Traditionally, milk-kinship has been understood by Muslims as meaning that infants breastfed by the same woman must be viewed as siblings, and therefore must never marry.

These issues should be explored further to identify conditions under which the use of banked or shared human milk might be compatible with Islam

(cf. al-Naqeeb, Azab, and Mohammed 2000; Khalil 2016; Thorley 2016).

Whether or not using milk from another woman is an option, it is important to recognize that subsidizing infant formula encourages its use, not only because the subsidy makes it less expensive, but also because that subsidy makes it appear that the government endorses the use of formula. Many studies have shown that all alternatives to breastfeeding lead to worse health outcomes for both the infant and the mother, with few exceptions (e.g., Bartick and Reinhold 2010; Chen and Rogan 2004; Rollins et al. 2016; The Lancet 2016; World Health Organization 2007; Zimmerman 2016).

There are situations in which breastfeeding by the mother is impossible or unwise. The World Health Organization has examined some of these situations (World Health Organization 2009). Some physicians have used this report as a guide for deciding who should be eligible to receive subsidized formula, but that document is now outdated. To illustrate, women who are diagnosed as HIV-positive are not always advised to avoid breastfeeding because of fear of transmitting the virus to their infants through the breastmilk. Antiretroviral drugs can be taken by breastfeeding women to essentially eliminate the risk of HIV transmission while preserving the health advantages of breastfeeding (Langa 2016; National Institutes of Health 2016; World Health Organization and UNICEF 2016).

The WHO document of 2009 focuses on cases in which breastfeeding might be impossible or unwise for medical reasons. That is not the same as discussing when governments should provide subsidized formula.

The World Health Organization and many other global and national agencies recommend initiation of breastfeeding within the first hour after birth with direct skin-to-skin contact, exclusive breastfeeding for the first six months, and continued breastfeeding along with other foods for up to two years and beyond. These conditions for optimal infant feeding frequently are not met.

Surprisingly, “Both medical assistance at delivery and delivery at a health facility are associated with lower proportions of children for whom breastfeeding was initiated within the first day of birth . . . (El-Zanaty and Way 2009, 165).” If medical assistance and delivery at a health facility

do not lead to better feeding practices, the quality of care must be questioned.

Regarding exclusive breastfeeding for the first months of life, it is important to consider the trend over time. The EDHS survey for 2000 said, “About one-third of children are exclusively breastfed throughout the first 4-6 months of life (El-Zanaty and Way 2001, xxv).” The 2008 survey said 28.8 percent were exclusively breastfed at 4-5 months (El-Zanaty and Way 2009, 168). The survey for 2014 found that “among children age 4-5 months, only 13 percent are exclusively breastfed (EDHS 2014, 26-27).”

When compared with internationally recommended infant feeding practices, Egypt has been moving steadily in the wrong direction. It seems clear that the decline in exclusive breastfeeding has been due to the combination of inadequate support for breastfeeding and the subsidization of infant formula by the government.

On September 6, 2016 the Egyptian Medical Syndicate called on the Ministry of Health and Population and the Ministry of Finance to ensure that the budget for subsidizing infant formula is not less than 900 million Egyptian pounds (about 50 million U.S. dollars), and it insisted there should be no reduction in the subsidization of infant formula (Al Ghad 2016). It is not clear why Egypt’s physicians would take this position. There is no compelling medical reason for the large-scale sustained subsidy of infant formula by any government. It puts at risk the health of both infants and their mothers. This support for formula might be explained by the fact that, in Egypt, “Artificial baby food companies spend millions of pounds on buying the goodwill of physicians by way of gifts, participation in conferences, etc. (IBFAN 2011).” The companies follow this practice in many countries.

The International Code of Marketing of Breast-milk Substitutes, adopted by the World Health Assembly in 1981, together with the subsequent clarifying resolutions from the World Health Assembly, was primarily intended to limit the promotion of infant formula by manufacturers and sellers (World Health Organization 1981). However, in 1994 the World Health Assembly adopted resolution WHA47.5 in which it unambiguously urged national governments “to ensure that there are no donations of free or subsidized supplies of breast-milk substitutes and other products covered by the

International Code of Marketing of Breast-milk Substitutes in any part of the health care system” (World Health Assembly. 1994, 2). It is now clear that many governments subsidize the use of infant formula, even when there is no good medical reason for using it (IBFAN 2011; Kent 2006; Kent and Castillo 2016).

In Egypt, subsidizing infant formula harms infants’ health, leads to corruption and political turmoil, places an excessive burden on the country’s foreign exchange resources, and generally causes more problems than it solves. It should be phased out for both health and economic reasons.

The resources now being devoted to a poorly functioning system for subsidizing formula could instead be used to provide better protection, support, and promotion for breastfeeding. In designing that support, government policy should stay attuned to current global recommendations (UNICEF 2016).

In 1990 Egypt signed and ratified the major human rights treaty relating to children, the Convention on the Rights of Child (Joint Statement 2016; OHCHR 1990, 2016). Article 24(1)(e) says that countries that ratify the Convention “shall take appropriate measures...

*To ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents...*

In signing and ratifying the Convention on the Rights of the Child, the government of Egypt made a legal commitment to educate parents about the advantages of breastfeeding. This means the government should ensure that families are well informed about the differences between breastfeeding and feeding with formula, especially their impacts on the health of both the infant and the mother.

Egypt’s government should act decisively to protect the well-being of Egypt’s infants. It would be unwise to end the formula subsidy program suddenly, but it could be carefully phased out. It should be replaced with good support for breastfeeding, including good information about formula and other foods for infants and young children. When the health and economic benefits of



breastfeeding are well understood, these changes would be welcomed by Egypt's families.

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