

# ERRATA

**El-Zanaty, Fatma and Ann Way. 2006. *Egypt Demographic and Health Survey 2005*. Cairo, Egypt: Ministry of Health and Population, National Population Council, El-Zanaty and Associates, and ORC Macro.**

**Page 158 to 160** – Beginning with the heading “Appropriate Infant and Child Feeding” on page 158, delete everything through the end of page 160 and replace with the following text, figure, and table.

## **Infant and Young Child Feeding (IYCF) Practices**

Appropriate Infant and Young Child Feeding (IYCF) practices include breastfeeding through the age of two years, the introduction of solid and semisolid foods at age 6 months, and a gradual increase in the amount of food given and the frequency of feeding as the child gets older. The average, healthy **breastfed child** should receive solid and semisolid foods 2-3 times per day at age 6-8 months and 3-4 times per day at age 9-23 months, with an additional snack 1-2 times per day. The minimum frequencies for feeding children in developing countries are based on the energy output of complementary foods. The energy needs of children are based on age-specific total daily energy requirements, plus 2 SD (to cover almost all children), minus the average energy intake from breast milk. Infants with low breast-milk intake need to be fed more frequently than those with high breast-milk intake. However, care should be taken that feeding frequencies do not exceed recommended input from complementary foods because excessive feeding can result in displacement of breast milk (PAHO/WHO, 2003).

Although the World Health Organization recommends that infants be breastfed up to the age of two years, some infants are not breastfed at all, or stopped breastfeeding before their second birthday. Guidelines have been developed for these children, who may not have been breastfed because their mother was HIV-positive, or because their mother had died, or for other reasons (WHO, 2005). It is recommended that the **nonbreastfed child** be given solid and semisolid foods 4-5 times per day at age 6-23 months, with an additional snack 1-2 times per day.

Appropriate nutrition includes feeding children a variety of foods to ensure that nutrient requirements are met. Studies have shown that plant-based complementary foods by themselves are not sufficient to meet the needs of some children for certain micronutrients (WHO/UNICEF, 1998). Therefore, it is advised that children eat meat, poultry, fish, or eggs daily, or as often as possible. Vegetarian diets may not meet children’s nutrient requirements unless supplements or fortified foods are also provided. Vitamin A-rich fruits and vegetables should be consumed daily, and the diets of children should include an adequate amount of fat. Fat is important in the diets of infants and young children because it provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density and palatability. Tea and coffee are not recommended for children because they contain compounds that inhibit iron absorption. Sugary drinks and excessive juice consumption should be avoided because other than energy they contribute little to the diet and decrease the child’s appetite for more nutritious foods (PAHO/WHO, 2003).

In summary,

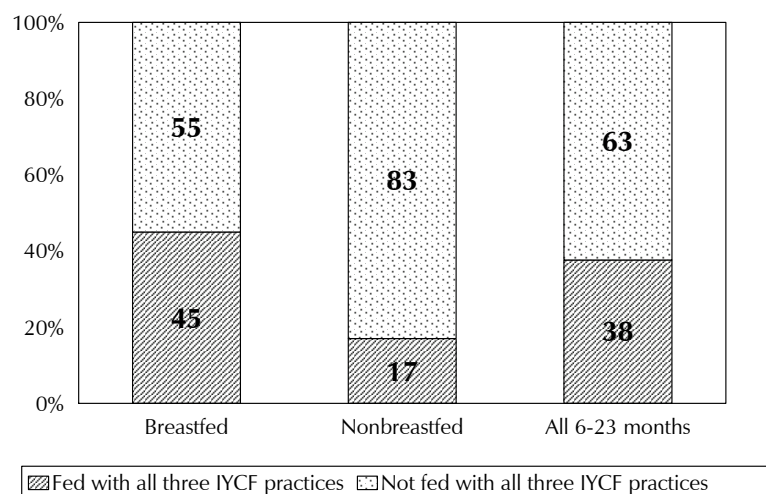
- Breastfed children age 6-23 months should receive animal-source foods and vitamin A-rich fruits and vegetables daily (PAHO/WHO, 2003). Because first foods almost always include a grain- or tuber-based staple, it is unlikely that young children who eat less than three food groups will

receive both an animal-source food and a vitamin A-rich fruit or vegetable.<sup>1</sup> Therefore, three food groups are considered the minimum number appropriate for breastfed children (Arimond and Ruel, 2004).

- Breastfed infants age 6-8 months should receive complementary foods 2-3 times per day, with 1-2 snacks; breastfed children age 9-23 months should be receive meals 3-4 times per day, with 1-2 snacks (PAHO/WHO, 2003). Table 13.5 shows the percentage of breastfed children who were fed at least the minimum number of times per day for their age (i.e., twice for infants age 6-8 months and three times for children age 9-23 months).
- Nonbreastfed children age 6-23 months should receive milk or milk products to ensure that their calcium needs are met. In addition, they need animal-source foods and vitamin A-rich fruits and vegetables. Four food groups are considered the minimum number appropriate for nonbreastfed young children.
- Nonbreastfed children age 12-23 months should be fed meals 4-5 times per day, with 1-2 snacks (WHO, 2005). Table 13.5 shows the percentage of nonbreastfed children age 6-23 who were fed at least the minimum number of times per day (i.e., four times).

According to the results presented in Table 13.5, 97 percent of (youngest) children age 6-23 months living with the mother received breast milk or breast milk substitutes during the 24-hour period before the survey, 78 percent had an adequately diverse diet—i.e. they had been fed foods from the appropriate number of food groups depending on their age and breastfeeding status—and 42 percent of the children were fed the minimum standard number of times appropriate for their age. Feeding practices for only 38 percent of children age 6-23 months met the minimum standard with respect to all three of these feeding practices (see Figure 13.2).

**Figure 13.2 Infant and Young Child Feeding (IYCF) Practices, Egypt 2005**



<sup>1</sup> Food groups used in the assessment of appropriate feeding practices included: milk other than breast milk, cheese, yogurt; foods made from grains, roots, and tubers; fruits and vegetables rich in vitamin A; other fruits and vegetables; eggs; meat, poultry, fish, and shellfish (and organ meats); legumes and nuts; and foods made with oil, fat, or butter.

Breastfed children were 50 percent more likely to be fed the minimum number of times but a lot less likely to receive foods from the minimum number of groups recommended than nonbreastfeeding children. Children in the age group of 12-17 years were most likely to comply with the recommended practice when looked at various age groups. Variations in feeding practices with the other characteristics shown in Table 13.5 are generally minor without any pattern.

Arimond, M., and M.T. Ruel. 2004. Dietary Diversity is Associated with Child Nutritional Status: Evidence from 11 Demographic and Health Surveys. *Journal of Nutrition* 134: 2579.

Pan-American Health Organization and World Health Organization (PAHO/WHO). 2003. *Guiding Principles for Complementary Feeding of the Breastfed Child*. Washington, D.C. and Geneva, Switzerland: PAHO/WHO.

World Health Organization (WHO). 2005. *Guiding Principles for Feeding Nonbreastfed Children 6 to 24 Months of Age*. Geneva, Switzerland: WHO.

World Health Organization and United Nations Children's Fund (WHO/UNICEF). 1998. *Complementary Feeding of Young Children in Developing Countries: A Review of Current Scientific Knowledge*. Geneva: World Health Organization, WHO/NUT98.1.

Table 13.5. Infant and young child feeding (IYCF) practices in Egypt

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Egypt 2005

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:				Among all children 6-23 months, percentage fed:					
	3+ food groups <sup>1</sup>	Minimum times or more <sup>2</sup>	Both 3+ food groups and minimum times or more	Number of children (weighted)	Milk or milk products <sup>3</sup>	4+ food groups	4+ times or more	With 3 IYCF practices <sup>4</sup>	Number of children (weighted)	Breast milk or milk products	3+ or 4+ food groups <sup>5</sup>	Minimum times or more <sup>6</sup>	With all 3 IYCF practices	Number of children (weighted)
<b>Age</b>														
6-8	42.8	49.4	34.7	625	93.5	44.9	16.8	16.5	61	99.4	43.0	46.5	33.0	686
9-11	72.2	32.4	30.7	569	92.1	58.4	18.3	10.0	70	99.1	70.7	30.9	28.4	639
12-17	87.4	52.4	50.5	1,069	91.5	86.3	18.2	16.4	236	98.5	87.2	46.2	44.4	1,305
18-23	94.9	67.2	65.3	486	86.3	89.2	22.4	17.9	687	92.0	91.5	41.0	37.5	1,174
<b>Sex</b>														
Male	76.0	50.2	45.4	1,434	89.7	84.7	22.6	18.3	518	97.3	78.3	42.9	38.2	1,952
Female	74.8	50.1	45.5	1,315	86.8	83.1	19.3	15.6	537	96.2	77.2	41.2	36.8	1,852
<b>Residence</b>														
Urban	75.9	51.5	46.0	908	92.0	85.1	22.5	19.5	482	97.2	79.1	41.4	36.8	1,390
Rural	75.2	49.5	45.2	1,841	85.1	82.9	19.5	14.8	573	96.5	77.1	42.4	38.0	2,414
<b>Region</b>														
Urban governorates	74.8	50.8	44.4	342	93.9	87.2	22.2	19.4	207	97.7	79.5	40.0	35.0	549
Urban LE	80.2	46.4	41.4	186	92.2	84.9	15.7	14.9	134	96.7	82.2	33.6	30.3	320
Rural LE	77.8	42.2	38.6	854	89.8	87.8	15.9	12.1	321	97.2	82.0	35.0	31.3	1,176
Urban UE	73.8	54.5	49.2	358	88.3	82.0	30.0	24.3	131	96.9	76.0	47.9	42.5	489
Rural UE	71.2	56.1	51.1	972	78.8	76.5	23.9	17.9	247	95.7	72.3	49.5	44.3	1,219
Frontier governorates	84.3	50.9	50.2	37	94.3	83.8	26.7	26.7	14	98.5	84.2	44.4	43.8	50
<b>Mother's education</b>														
No education	74.0	51.8	48.1	868	83.7	76.1	21.4	17.6	236	96.5	74.4	45.3	41.6	1,103
Primary	71.7	43.8	41.2	328	86.5	79.0	22.8	15.7	119	96.4	73.6	38.2	34.4	447
Secondary	76.8	49.0	44.2	1,272	89.3	87.5	19.2	15.9	568	96.7	80.1	39.8	35.5	1,839
More than secondary	78.3	58.1	47.6	282	93.4	86.7	25.5	21.2	132	97.9	81.0	47.7	39.2	414
<b>Wealth quintile</b>														
Lowest	68.8	48.1	43.7	606	74.0	76.1	22.0	15.9	134	95.3	70.1	43.3	38.7	740
Second	76.9	51.1	46.3	618	87.5	83.7	20.4	17.9	169	97.3	78.4	44.5	40.2	787
Middle	77.7	48.7	45.2	607	87.3	80.7	22.7	16.5	255	96.2	78.6	41.0	36.7	862
Fourth	76.1	52.1	48.1	516	92.6	87.4	18.0	16.0	267	97.5	79.9	40.5	37.2	783
Highest	79.0	51.6	43.6	402	93.0	88.1	22.0	18.4	230	97.5	82.3	40.9	34.5	632
Total	75.5	50.2	45.4	2,749	88.2	83.9	20.9	16.9	1,055	96.7	77.8	42.1	37.5	3,804

<sup>1</sup> Food groups: a) infant formula, milk other than breast milk, cheese or yogurt or other milk products; b) foods made from grains, roots, and tubers, including porridge and, fortified baby food from grains; c) vitamin A-rich fruits and vegetables (and red palm oil); d) other fruits and vegetables; e) eggs; f) meat, poultry, fish, and shellfish (and organ meats); g) legumes and nuts; h) foods made with oil, fat, butter.

<sup>2</sup> At least twice a day for breastfed infants age 6-8 months and at least three times a day for breastfed children age 9-23 months

<sup>3</sup> Includes commercial infant formula, fresh, tinned and powdered animal milk, and cheese, yogurt and other milk products

<sup>4</sup> Nonbreastfed children age 6-23 months are considered to be fed with three IYCF practices if they receive other milk or milk products and are fed at least the minimum number of food groups, at least the minimum number of times per day.

<sup>5</sup> 3+ food groups for breastfed children and 4+ food groups for nonbreastfed children

<sup>6</sup> Fed solid or semisolid food at least twice a day for infants age 6-8 months, 3+ times a day for other breastfed children, and 4+ times a day for nonbreastfed children