

Among children under 4 months of age, full breast feeding is more common in rural areas than in urban areas across countries in all regions (Table 3.9). In sub-Saharan Africa, the highest rate of full breastfeeding is in rural Rwanda, at 93 percent, and the lowest rate is in rural Burkina Faso, at 33 percent. In Burkina Faso, Ghana, and Niger, there are no differences between urban and rural areas, but in the other sub-Saharan countries, full breast feeding is more frequently practiced in the rural areas. In Near East/North Africa, the highest prevalence of full breastfeeding is rural areas of Morocco (77 percent), the lowest is in urban areas of Turkey (31 percent). In Asia, the highest rate of full breastfeeding is in rural Nepal, at 85 percent, the lowest in urban Pakistan, at 16 percent. In Latin America/Caribbean full breastfeeding is, in general, less common than in the other regions, but the highest rate is in rural Peru, at 75 percent, and the lowest in urban Haiti, at 16 percent. The higher rates of full breastfeeding in rural areas reflect a combination of the need for urban mothers to return to the workplace more often than rural mothers and therefore begin weaning earlier, the greater availability and marketing of infant foods and milk products, greater urban

purchasing power, and the increased tendency of urban women to emulate Western-style infant feeding practices. Table 3.17 presents a regional summary of current feeding practices for infants less than 4 months of age by urban-rural residence, and Figure 3.4 shows urban-rural differences for full breastfeeding for this age group by region.

Table 3.10 presents current status feeding practices among children 6 to 9 months, by urban-rural residence. By that age, children should be receiving complementary foods in addition to breast milk. Overall, urban-rural differences in the percentage of children 6 to 9 months of age receiving complementary foods are small in most countries. Figure 3.5 shows those differences by region. In Latin America/Caribbean, Near East/North Africa, and Asia, the percentages of children receiving breast milk and complementary foods are higher in rural than in urban areas, a pattern reflects the greater likelihood that urban infants are weaned somewhat earlier than rural infants, which is evidenced by the higher percentage of children in urban areas not breastfeeding, particularly in Near East/North Africa and Latin America/Caribbean (see Table 3.18).

Table 3.17 Regional summary of current status feeding practices for last-born children less than 4 months of age, by urban-rural residence

practices for last-born children less than 4 months of age, by urban-rural residence

Percentage of last-born children 0-5 months of age

residence, Demographic and Health Surveys, 1990-1996

Region	Fully breastfed			Predominantly breastfed			Milk-based liquids			Complementary foods			Not breastfed		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Sub-Saharan Africa	57.8	50.5	61.5	25.1	32.4	23.1	12.6	20.2	10.6	14.8	11.5	12.8	1.0	1.3	1.0
Near East/North Africa	50.2	38.6	57.5	34.2	39.2	30.9	17.7	25.7	12.0	5.8	6.5	5.2	5.0	6.3	4.4
Asia	54.7	42.5	61.6	24.5	27.7	20.5	20.9	27.2	17.5	7.2	6.4	7.9	5.6	7.2	17.2
Latin America/Caribbean	38.0	31.7	42.5	37.1	37.4	38.4	31.2	39.7	24.8	14.2	13.9	14.2	7.5	10.0	13.4

Table 3.18 Regional summary of current status feeding practices for last-born children 6-9 months of age, by urban-rural residence

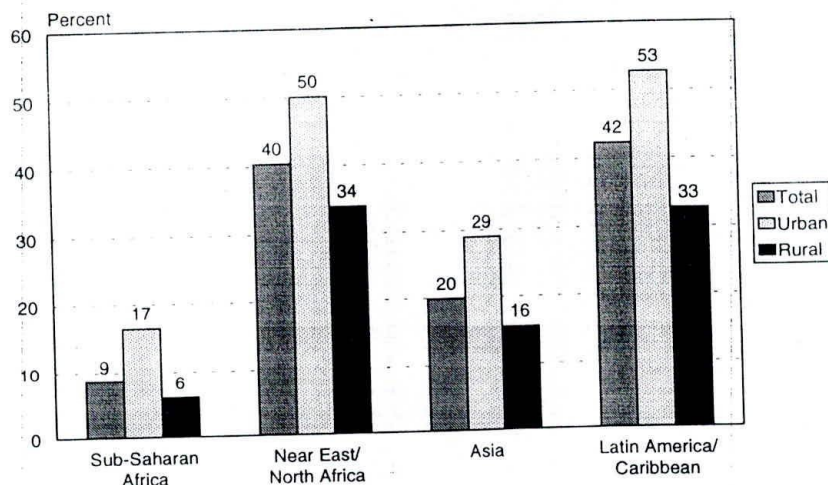
Percentage of last-born children 6-9 months of age in specific feeding categories, by urban-rural residence, Demographic and Health Surveys, 1990-1996

Region	Fully breastfed			Predominantly breastfed			Milk-based liquids			Complementary foods			Not breastfed		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Sub-Saharan Africa	17.2	11.0	19.9	39.2	48.9	36.9	18.7	24.9	16.9	68.1	69.9	66.0	2.2	5.7	1.2
Near East/North Africa	13.4	9.0	15.6	41.9	43.1	42.2	25.7	30.5	22.6	45.7	44.0	46.8	23.7	30.6	19.1
Asia	18.9	11.9	23.3	45.5	47.4	42.1	35.5	39.2	32.1	50.5	44.4	49.6	12.3	15.0	5.9
Latin America/Caribbean	6.4	4.4	8.3	56.0	53.3	59.8	32.6	35.1	31.4	55.9	52.4	59.6	25.9	33.8	17.2

Among children 12 to 15 months of age, there are substantial differences between urban and rural areas in first-year breastfeeding continuation rates, with rural areas breastfeeding significantly longer, as shown in Table 3.11. Table 3.11 shows the percentage of children not breastfeeding, the inverse of the first-year continuation rates.) In sub-Saharan Africa, urban Namibia, at 51 percent, has the highest rate of non-breastfeeding at 12 to 15 months (i.e., the lowest first-year continuation rate), followed by urban Cameroon at 32 percent. In Near East/North Africa, Morocco has the highest urban non-breastfeeding rate (64 percent); in Asia, the Philippines (56 percent); and in Latin America/Caribbean, the Dominican Republic (86 percent). Figure 3.6 shows the overall urban-rural differences in non-breastfeeding rates at 12 to 15 months of age by region. In Latin America/Caribbean and Near East/North Africa, rural children are breastfed about 30 percent more often than urban children, in sub-Saharan Africa about two-thirds more often, and in Asia about twice as often. Table 3.19 presents a regional summary of current status feeding practices for children 12 to 15 months of age, by urban-rural residence.

Table 3.12 presents current status feeding practices for children 20 to 23 months of age, by urban-rural residence. The proportion of children not breastfeeding at this age is important because it represents the inverse of the second-year breastfeeding continuation rate. As with children 12 to 15 months of age, urban children 20 to 23 months are more likely to not be breastfeeding than their rural counterparts, reflecting the fact that they are weaned earlier. The lowest second-year continuation rates are found in urban areas of the Dominican Republic, Paraguay, Turkey, and Morocco; the highest second-year continuation rates are in the rural areas of Bangladesh, Nepal, Rwanda, and Burkina Faso. It is evident from Figure 3.7, depicting overall urban-rural differences in the second-year breastfeeding rate by region, that the longest breastfeeding occurs in Asia, followed by sub-Saharan Africa. This pattern was seen with the median breastfeeding duration data (see section 2.4). Latin America/Caribbean and Near East/North Africa have similar second-year continuation rates overall and in rural areas; in urban areas the second-year continuation rates are higher in urban Latin America/Caribbean than in urban Near East/North Africa. Table 3.20 is a regional summary of current status feeding categories for children 20 to 23 months of age, by urban-rural residence.

**Figure 3.6 Percentage of children 12 to 15 months of age not breastfeeding, by urban-rural residence and region**



Note: Based on last-born children only

Source: DHS Surveys 1990-1996



Current status feeding practices for children less than 4 months of age by mother's education are shown in Table 3.13. Full breastfeeding is most common among children of mothers with no education across all regions. In Asia, however, there is no overall difference in prevalence of full breastfeeding between children of mothers with no education and those with mothers having primary school education. In general, full breastfeeding declines with increasing level of education. The largest differences are in sub-Saharan Africa and Asia, where children of women with primary education are more than 20 percent more likely to be fully breastfed than children of women with higher education. Children of more educated women receive more water- and milk-based liquids. A regional summary of current status feeding practices for children less than 4 months of age, by mother's education is presented in Table 3.21. Figure 3.8 shows the regional prevalence rates for full breastfeeding by mother's education.

Current status feeding practices for children 6 to 9 months of age by mother's education are shown in Table 3.14. As noted, the indicator of interest at this age is the percentage of children receiving complementary foods. In Latin America/Caribbean, the proportion of infants breastfeeding and receiving complementary foods declines with increasing level of education (see Figure 3.9), whereas the opposite is true in Near East/North Africa and sub-Saharan Africa. This may reflect the tendency among more educated women in Latin America/Caribbean to wean infants earlier, thus lowering the overall prevalence of breastfeeding in this group. In Asia, the percentage of infants receiving complementary foods is lowest among uneducated mothers, followed by those with secondary education or primary, and highest among the group with primary education. A regional summary of current status feeding practices for

infants 6 to 9 months of age by mother's education is presented in Table 3.22.

At 12 to 15 months, mother's level of education affects first-year breastfeeding continuation rates, as shown in Table 3.15 and Figure 3.10. There is a strong positive relationship between the proportion of children not breastfed at this age and mother's level of education, particularly in Latin America/Caribbean, where the first-year breastfeeding rates are lowest among the most educated women. Clearly, with increasing education women discontinue breastfeeding earlier. This pattern is due to a variety of factors including the return to the workplace, increasing demands on women's time, and exposure to Western infant feeding practices. Regionally (Figure 3.10), Latin America/Caribbean countries have the widest variation in the proportion not breastfeeding according to mother's education, and Near East/North Africa countries the least. A regional summary of current status feeding practices for children 12 to 15 months of age by mother's education is shown in Table 3.23.

At 20 to 23 months of age (see Table 3.16), the relationship between mother's education and the proportion of children not breastfeeding is similar to the pattern seen at 12 to 15 months. As expected at this age, many more children are not breastfed across all countries and levels of education, i.e., the second-year breastfeeding continuation rates are lower than the first year's. As Figure 3.11 shows, the second-year continuation rates are highest in the Asian countries, again reflecting the tradition of long breastfeeding duration in this region, and lowest in Near East/North Africa. A regional summary of current status feeding practices for children 20 to 23 months of age by mother's level of education is shown in Table 3.24.

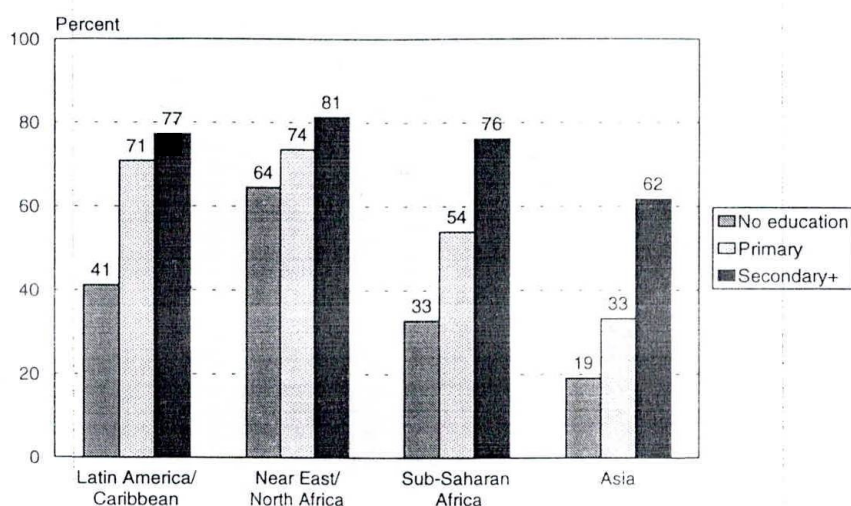
Table 3.21 Regional summary of current status feeding practices for last-born children less than 4 months of age, by mother's education

Percentage of last-born children less than 4 months of age in specific feeding categories, by mother's education, Demographic and Health Surveys, 1990-1996

Region	Fully breastfed			Predominantly breastfed			Milk-based liquids			Complementary foods			Not breastfed		
	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher
Sub-Saharan Africa	62.9	57.0	38.6	20.1	25.2	34.6	9.8	12.0	30.0	13.1	16.0	13.9	0.5	1.1	1.5
Near East/North Africa	55.8	42.7	42.2	33.8	40.8	40.7	14.7	18.9	19.8	5.1	6.9	5.2	2.3	5.7	5.3
Asia	62.9	63.0	40.0	21.0	19.0	35.6	15.2	16.1	31.1	10.0	8.9	6.7	1.8	3.3	7.4
Latin America/Caribbean	65.8	54.2	49.3	17.5	26.6	29.1	12.1	14.9	19.3	8.5	13.3	13.5	0.7	2.2	2.4



**Figure 3.11 Percentage of children 20 to 23 months of age not breastfeeding, by mother's level of education and region**



Note: Based on last-born children only

Source: DHS Surveys 1990-1996

**Table 3.24 Regional summary of current status feeding practices for last-born children 20-23 months of age, by mother's education**

Percentage of last-born children 20-23 months of age in specific feeding categories, by mother's education, Demographic and Health Surveys, 1990-1996

Region	Fully breastfed			Predominantly breastfed			Milk-based liquids			Complementary foods			Not breastfed		
	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher	No education	Primary	Secondary or higher
Sub-Saharan Africa	4.2	1.2	0.3	22.4	23.1	14.5	8.6	7.6	10.0	59.8	43.2	20.1	32.7	53.9	76.1
Near East/North Africa	2.4	0.7	0.2	18.1	15.0	12.3	13.0	14.1	7.4	29.2	22.6	17.0	64.4	73.5	81.3
Asia	4.3	1.3	0.1	48.4	43.4	32.8	27.9	28.4	25.4	69.5	57.3	36.9	19.1	33.2	61.7
Latin America/Caribbean	1.2	0.4	0.2	50.1	25.8	21.7	14.7	12.6	16.7	55.7	25.4	20.2	41.1	70.7	77.2

## Sex Differentials

Feeding practices were examined by sex of child as well as by socioeconomic characteristics (see Tables 3.25 through 3.28). In this section as in the previous, full breastfeeding is presented in the tables rather than exclusive breastfeeding because of the small number of cases of exclusive breastfeeding in most countries. The results indicate that feeding practices do not vary substantially by sex, at any age, in any of the countries studied. Among infants under 4 months, however, in all regions there was a slightly greater proportion of female infants fully breastfed overall (Figure 3.12), probably indicative of an earlier introduction of complementary foods to

males overall. Among infants 6 to 9 months, only in Asia was there a slightly greater overall tendency for females to be given complementary foods (Figure 3.13), a difference not observed in the other regions. At 12 to 15 months, no differences by sex in the first-year breastfeeding continuation rates were observed (Figure 3.14). At 20 to 23 months, the lack of overall sex differences in second-year continuation rates is similarly seen (Figure 3.15), although in Near East/North Africa countries females were 8 percentage points more likely than males not to be breastfed, that is, boys were breastfed more often in the second year than girls. The regional summary of feeding practices by sex of child is shown in Table 3.29.



Table 3.29 Regional summary of current status feeding practices for last-born children 20-23 months of age, by sex

Percentage of last-born children 20-23 months of age in specific feeding categories, by sex of child and region, Demographic and Health Surveys, 1990-1996

Region	Fully breastfed			Predominantly breastfed			Milk-based liquids			Complementary foods			Not breastfed		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Sub-Saharan Africa	3.1	3.1	3.1	21.6	22.6	20.6	9.1	9.3	8.9	47.9	47.7	48.3	47.2	47.1	47.4
Near East/North Africa	1.6	1.3	1.8	15.3	19.4	10.9	9.8	10.3	9.3	21.0	24.1	17.5	74.9	71.4	78.7
Asia	2.6	2.4	2.8	41.1	38.3	36.9	26.9	23.9	23.2	53.9	49.5	51.5	38.3	38.5	38.1
Latin America/Caribbean	0.6	0.5	0.7	25.0	24.8	25.1	12.9	12.6	13.1	25.3	25.1	25.6	71.7	71.6	71.7

### 3 MEDIAN AGE AT INTRODUCTION OF COMPLEMENTARY FOODS

Table 3.30 and Figure 3.16 show the median age of introduction of complementary foods among last-born children less than 3 years old currently breastfeeding. Median age ranges vary widely across countries and regions. In sub-Saharan Africa, the median age of introduction varies from a low of 2.1 months in Malawi to a high of 9.8 months in Ghana, with an overall median of 5.6 months for the region. In general, children in West African countries are introduced to foods later in life than children in East and Central African countries. In Asia, the median age ranges from a low of 2.8 months in Indonesia to a high of 13.2 months in Pakistan, with the exception of Bangladesh, where no median could be determined.<sup>5</sup> For the region, excluding Bangladesh, the overall median is 7.5 months. In Latin America/Caribbean, the median ranges from 0 months in the Dominican Republic, to 6.7 months in Guatemala, with an overall median for the region of 3.9 months (excluding Brazil). In the Near East/North Africa, median age at introduction of complementary foods was calculated at 7.3 months. Additional tables showing the median age at introduction of complementary foods by other selected differentials are included in Appendix H.

It is important to remember that the median age represents the age at which 50 percent of children are introduced to complementary foods. The remaining 50 percent are introduced to foods either at an earlier age or a later age. Thus, in many countries, although the median age may be around the recommended time (i.e. 6 months), many children are being given foods much too early or too late. Both of these situations may be detrimental to the infant's health: Too early introduction is associated with increased risk of diarrhea. Late introduction may have adverse effects on growth and development.

<sup>5</sup> The Bangladesh median could not be calculated because less than 50 percent of breastfeeding children received complementary foods at the age covered by the survey.

The wide range of ages for introduction of foods across countries is illustrated in Figure 3.16. If those ages earlier than 4 months are considered "too early" and those later than 8 months are "too late," it is clear that children in 9 of 18 sub-Saharan countries, in 2 of 4 Near East/North African countries, in 3 of 7 Asian countries, and in 2 of 8 in Latin America/Caribbean countries, are being introduced to foods at inappropriate ages. Timely introduction of appropriately prepared, nutritionally adequate complementary foods should be a focus of programs or improve the health and nutrition status of young children in many developing countries.

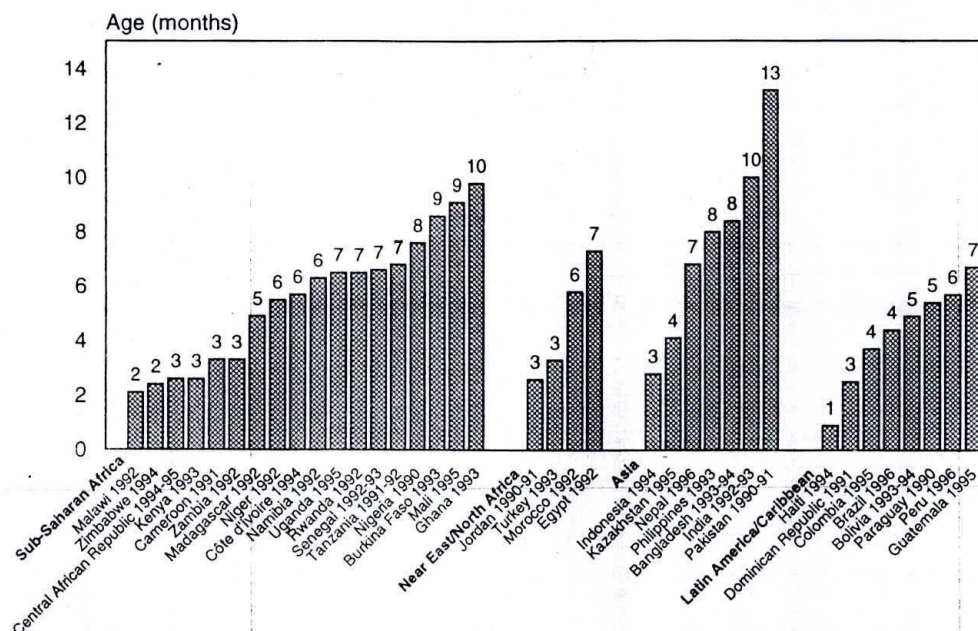
#### Socioeconomic Differentials

Differences in the median age at introduction of complementary foods are shown by urban-rural residence in Table 3.30, and by mother's level of education in Table 3.31. The differentials are of interest in understanding the influence of socioeconomic status on feeding practices, as proxied by area of residence and mother's educational attainment. In sub-Saharan Africa, only slight differences in the age of introduction of complementary foods exist between urban and rural areas. In Asia, differences of a half month or more (in both directions) exist between urban and rural areas in 4 of the 5 countries where medians could be determined, with the exception of Indonesia, where there was little urban-rural difference. In Pakistan and the Philippines, median age could not be determined for urban areas, but it is probably higher than in rural areas, as indicated by the total figures. In Egypt, complementary foods are introduced to children in rural areas almost a month later than to children in urban areas. In the other Near East/North Africa countries, medians could not be determined for children still breastfeeding.<sup>6</sup>

<sup>6</sup> The medians could not be calculated because less than 50 percent of breastfeeding children received complementary foods at the age covered by the surveys.



**Figure 3.16 Median age at introduction of complementary foods, children less than 3 years old currently breastfeeding**



Note: Based on last-born children only

Source: DHS Surveys 1990-1996

For mother's level of education, in most countries where medians could be determined, complementary foods were introduced earlier with increasing level of education. The differences are clearest in sub-Saharan Africa because medians could be calculated for most countries, although among children of mothers with the highest educational level, cell sizes are small. In the other regions, the tendency toward earlier introduction of foods with higher level of education is discernible, but generalizations are problematic because of the lack of median data or small cell sizes. The earlier introduction of foods with higher maternal education may reflect the tendency for more educated women to return to the work force soon after birth, greater exposure among educated women to information regarding appropriate timing of complementary foods, greater economic ability to purchase complementary foods, better access to markets, or a combination of these factors.

### Sex Differentials

Differences in the median age of introduction of complementary foods by child's sex are shown in Table 3.32. Regional averages for sex differences are shown in Figure 3.17, which additionally illustrates the overall differences in median age at introduction of complementary foods among regions. In Latin America/Caribbean and sub-Saharan Africa, there were few differences in age of introduction by sex, although in both regions foods were introduced to girls slightly earlier than to

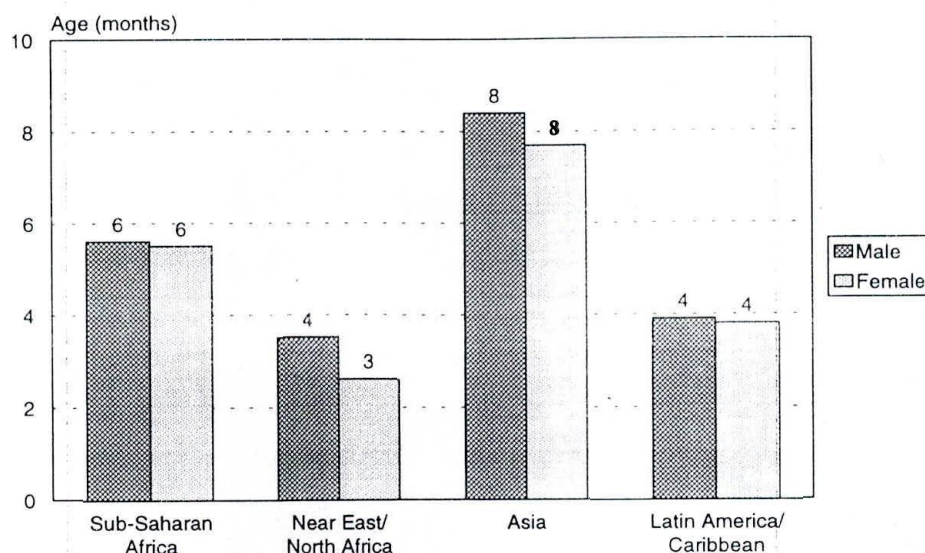
boys. In the Asian countries, sex differences were more pronounced, with girls being started on complementary foods almost a month earlier than boys on average (7.7 vs. 8.4 months). In the Near East/North Africa, median age data were available only for Egypt, where boys were given complementary foods almost a month earlier than girls (6.9 vs. 7.7 months). Sex differences in the age of introduction of foods may reflect cultural/religious biases and may partially explain differences in nutritional status, morbidity, and mortality rates, although many other factors also influence these outcomes.

### 3.3 TYPES OF FOODS EATEN BY CHILDREN

In addition to breast- and bottle-feeding patterns and general feeding practices within different age groups of children, it is important to know what kinds of foods children are eating, and how often they are fed. Beginning with the third phase of the Demographic and Health Surveys program (DHS-III) only, mothers were asked what types of food were given to their children in the 7 days before the interview, and the number of days in the week the children were given those foods. Table 3.33 presents the results of the weekly recalls for all children over the age of 6 months. Because the results are from surveys conducted only during DHS-III, the data are limited to a relatively small number of countries from sub-Saharan Africa, Asia, and Latin America/Caribbean.



**Figure 3.17 Median age at introduction of complementary foods, by sex and region**



Note: Based on last-born children only

Source: DHS Surveys 1990-1996

Water-based liquids (e.g., juice, tea, broth) are given to children in most countries about 2 to 3 times per week. In sub-Saharan Africa, about a third of children are given water-based liquids in the four countries studied. In Asia, a third of children are given water-based liquids, on average, but the range is from 10 percent in Indonesia to 53 percent in Kazakhstan. In Latin America/Caribbean, the range is from 16 percent in Colombia to 45 percent in Peru.

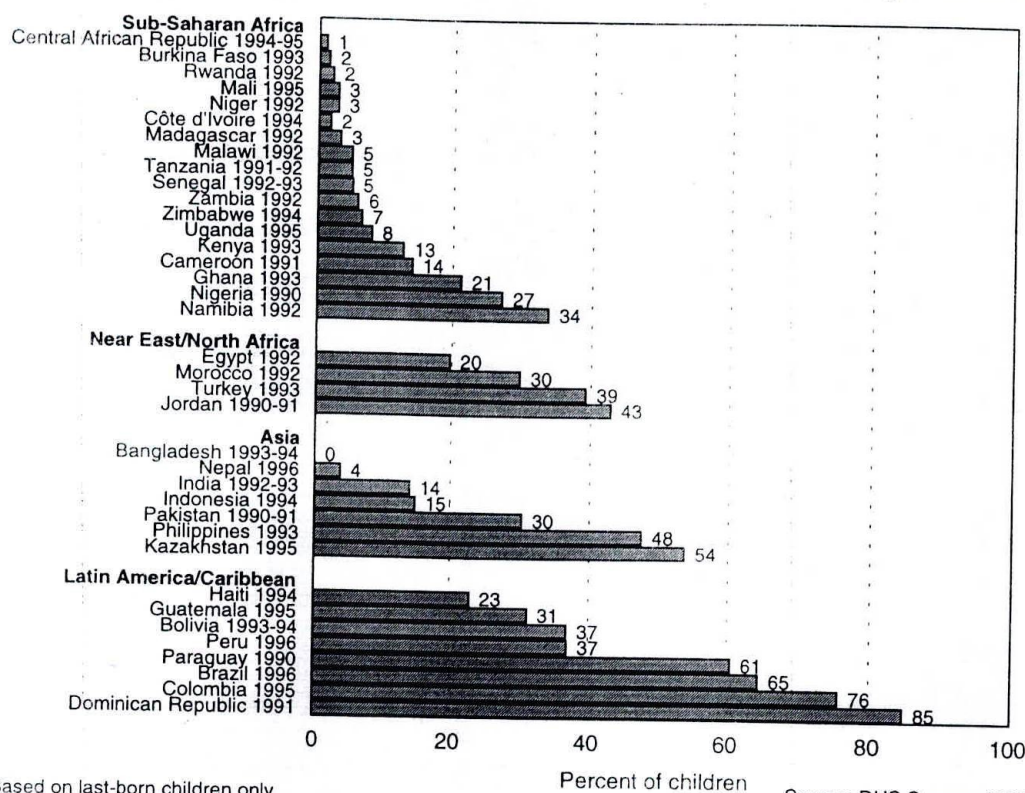
Milk-based liquids (i.e., milks other than breast milk) are also given to children; this type of feeding varies from 3 percent of children in Indonesia to 33 percent of children in Zimbabwe. As with water-based liquids, the weekly frequency of giving milk-based liquids is about 2 to 3 times per week.

At least half of the children in most countries were given eggs, fish, and poultry about 2 to 3 times per week on average. Nepal was the exception with only a third of children receiving these foods, and less than 2 times per week on average. Half or more of the children in sub-Saharan Africa and Latin America/Caribbean received red meat about 2.5 times per week. Fewer than half of all children in Asia received red meat, with Nepal at 27 percent again having the lowest prevalence.

Feeding of grains (reflecting cereals made from grain or grain flours) was reported unevenly, with 40 percent or more in the Central African Republic, Uganda, Bolivia, and Guatemala, but less than 20 percent in the remaining countries where the foods were reported. However, the frequency of feeding grains was 3 to 4 times per week. Tubers and plantains (again, probably reflecting cereals made from these foods) were given to a third or more of children in all the countries where those foods were reported. Tubers and grains were given from about 2.5 to 4 times per week. Other complementary foods were also given to children, ranging from 10 percent in Zimbabwe to 67 percent in the Central African Republic. Other complementary foods may include fruits, vegetables, snacks and sweets, garnishes, food mixes, or other processed foods. When foods of any kind were considered, more than 90 percent of children in most countries were given some type of food. In Mali, Brazil, and Colombia, only 77, 65, and 71 percent of children, respectively, were reportedly given any foods in the last week. Interestingly, in Latin American/Caribbean countries, the frequency of feeding any type of food was about 4 times per week, which is higher than the average number of times foods were given in either sub-Saharan Africa (2.9 times per week, on average) or Asia (3.3 times per week, on average).



**Figure 3.18 Percentage of children 0 to 11 months of age bottle-fed**



Note: Based on last-born children only

Percent of children

Source: DHS Surveys 1990-1996

### 3.4 BOTTLE-FEEDING

Bottle-feeding is not recommended for the vast majority of infants in developing countries because of the potentially adverse effects of contamination from water, utensils, and hands during preparation and storage of formula and other bottle-feeds, and the potential for overdilution of instant formula with water, rendering the bottle-feed nutritionally inadequate. Figure 3.18 presents the percentage of last-born infants 0 to 11 months of age currently receiving a bottle. By region, bottle-feeding is least prevalent in sub-Saharan Africa and most common in Latin America/Caribbean. In sub-Saharan Africa, the use of bottles is less than 10 percent in most countries; the highest rate of use is in Namibia, where one-third of infants receive a bottle. In Latin America/Caribbean, on the other hand, bottle-feeding ranges from 23 percent in Haiti to 85 percent in the Dominican Republic. In Near East/North Africa countries, the prevalence is intermediate, with a range of 20 to 43 percent. The range of bottle-feeding rates is quite wide in Asia, probably a result of the varied mix of countries in that regional grouping. Overall, as countries move higher on the economic development ladder, bottle-feeding rates increase, and become closer to the rates found in developed countries.

### Summary

The data from 37 countries indicate that there is substantial divergence from the WHO recommendations for infant feeding. Exclusive breastfeeding of infants younger than 4 months is rare in all but a few countries. In contrast, most young infants are predominantly breastfed, i.e., given breast milk with some other liquids. Equally troubling is the fact that in a third of the countries studied fewer than half of children 6 to 9 months of age are receiving complementary foods, as is recommended. At the same time, the median age at introduction of complementary foods among children under age three years is as young as 1, 2, or 3 months in 13 of the 37 countries. Thus, liquids and solids other than breast milk are being given to children at very early ages, increasing the risk of diarrhea. From the age of 6 months onward, when breast milk alone is nutritionally insufficient and complementary foods are needed, many children over 6 months are not fed any solid foods, or are not fed them on a daily basis.

There is still an urgent need to promote adequate and safe feeding of young children. Breastfeeding patterns in the countries studied are far from optimal, with few young infants



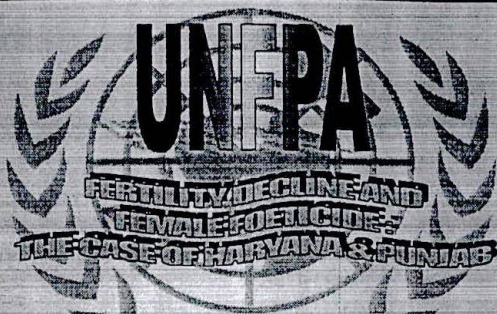
## Definitions Used in the WHO Global Data Bank on Breastfeeding

Category of infant feeding	Requires that the infant receive	Allows the infant to receive	Does not allow the infant to receive
<b>Exclusive breastfeeding</b>	Breast milk (including milk expressed or from wet nurse)	Drops, syrups (vitamins, minerals, medicines)	Anything else
<b>Predominant breastfeeding</b>	Breast milk (including milk expressed or from wet nurse) as the predominant source of nourishment	Liquids (water, and water-based drinks, fruit juice), oral rehydration therapy, ritual fluids, and drops or syrups (vitamins, minerals, medicines)	Anything else (in particular, nonhuman milk, food-based fluids)
<b>Complementary feeding</b>	Breast milk and solid or semisolid foods	Any food or liquid including nonhuman milk	
<b>Breastfeeding</b>	Breast milk	Any food or liquid including nonhuman milk	
<b>Bottle-feeding</b>	Any liquid or semisolid food from a bottle with nipple/teat	Any food or liquid including nonhuman milk. Also allows breast milk by bottle	

Source: WHO, 1996

WHO Global Data Bank on Breastfeeding ~~and~~ Breastfeeding: The best start in life, WHO/NUT/96.1 Gefner WHO





A Study Commissioned by

UNFPA

## OBJECTIVES OF STUDY

- To assess incidence of induced abortions in these two states.
- To assess contribution of sex linked abortions in total induced abortions.
- To understand impact of induced abortions and sex linked abortions on Total Fertility Rate.

## METHODOLOGY

- Indirect estimates.
- Large scale data sets used i.e. NFHS I and II and SRS.
- Proximate variable model used for Decomposition of total fertility.
- Index of sex discrimination at birth calculated on the basis of deficit in number of girls at birth, expected ratio being 100/106.

Table 1: Total Induced Abortions  
Per 100 Live Births  
(1992-1998)

	Haryana			Punjab		
	Rural	Urban	Total	Rural	Urban	Total
1992	14.7	30.9	17.9	19.9	44.9	26.2
1998	9.0	33.2	14.3	27.4	63.3	36.5

Table 2: Ratio of Sex-selective Abortions to  
Total Induced Abortions (in Percentage)  
(1992-1998)

	Haryana			Punjab		
	Rural	Urban	Total	Rural	Urban	Total
1992	86.1	19.2	69.9	57.7	35.1	45.5
1998	78.2	67.6	81.8	30.2	29.8	31.9

Table 3: Impact of SSA on TFR

TFR	Haryana			Punjab		
	Rural	Urban	Total	Rural	Urban	Total
1992	4.32	3.14	3.99	3.09	2.40	2.92
1998	3.13	2.25	2.88	2.42	1.79	2.21
TFR in Case No. Sex selective abortions						
1992	4.71	3.26	4.32	3.31	2.69	3.14
1998	3.17	2.78	3.17	2.50	2.03	2.40
Percentage Increase in TFR, had there been no sex selective abortions						
1992	9.1	3.8	8.2	7.2	8.5	7.5
1998	6.7	22.7	10.0	6.8	12.4	8.5



## POLICY IMPLICATIONS



### 1 Advocacy on issues related to:

- Value of girl child
- Dowry as social evil
- Consequence of declining sex ratio on family formation patterns
- Commercialization of sex

## POLICY IMPLICATIONS



### 2 Legal frame work:

- Expand scope of PNDA act to include other methods of pre-selection of sex.
- Ensure effective implementation of MTP and PNDA Act.

### 3 Improve service delivery for safe abortion

## POLICY IMPLICATIONS....



Contd

### 4 Research:

- Demographic Impact
- Data Collection Methodologies on Abortions
- Changing Patterns in Method Mix and Its Impact on TFR
- In-depth studies on socio-cultural determinants of SSA