

3 Feeding Patterns

In developing countries, efforts to promote sound infant and young child nutrition are based on the World Health Assembly's recommendation that infants should be breastfed exclusively for the first 6 months of life and fed appropriate complementary foods from about the age of 6 months, with continued breastfeeding and frequent feeding with safe and adequate amounts of local foods. Breastfeeding with complementary foods should be continued from 6 months to two years (WHA, 1994). The World Health Organization defines "complementary foods" as any foods—whether manufactured or locally prepared—that are suitable as a complement to breast milk when it becomes insufficient to meet the nutritional needs of the infant. In other words, complementary foods are those that are required when breast milk alone no longer sustains the normal infant's nutrition requirements. Complementary foods are enriched and softened and, in most of the poorest countries, come from the local family diet.

In this chapter, infant feeding patterns are examined in the context of the WHO feeding recommendations. Current feeding practices are reported by age, median age at introduction of complementary foods, and type of foods eaten by children.

3.1 CURRENT STATUS FEEDING CATEGORIES

For the purposes of this report, children were classified into one of several feeding categories based on current feeding practices as reported by their mothers, according to age groupings that correspond to World Health Organization (WHO) infant feeding indicators (see Appendix A for complete WHO definitions of infant feeding categories). The groupings are shown in Tables 3.1 through 3.4, where children are classified according to whether they are exclusively breastfed (breast milk only, no other liquids), given breast milk plus plain water, fully breastfed (either exclusively breastfed or given breast milk plus plain water⁴), predominantly breastfed (given breast milk as predominant source of nourishment, plus other non-milk liquids), predominantly or fully breastfed, given milk-based liquids, given complementary foods (breast milk and solid

or semisolid foods), not breastfed, or (for both breastfed and non-breastfed children) given a bottle. Tables 3.1 through 3.4 show the percentage of children less than 4 months of age, 6 to 9 months, 12 to 15 months, and 20 to 23 months, respectively, in each of these feeding categories.

Rates of exclusive breastfeeding among children less than 4 months of age are shown in Figure 3.1. The range of exclusive breastfeeding is greatest in sub-Saharan Africa, from 1 percent in Niger to 90 percent in Rwanda. The average rate for the sub-Saharan region is 20 percent. In Asia, the range is also wide, from 12 percent in Kazakhstan to 82 percent in Nepal, with an average rate for the region of 44 percent. In Near East/North Africa, exclusive breastfeeding ranges from 14 percent in Turkey to 63 percent in Morocco, with the regional average similar to that of Asia at 41 percent. In Latin America/Caribbean, Haiti has the lowest rate of exclusive breastfeeding, at 3 percent, and Peru has the highest, at 61 percent. The average for the region is 30 percent.

Exclusive breastfeeding rates among the aggregate of children 0 to 4 months of age indicate that the practice is far from ideal, yet they actually mask the true picture of exclusive breastfeeding relative to the international recommendation. The true picture is that represented by the rates at individual months up to age 6 months (Appendix G). Exclusive breastfeeding is widely practiced in many countries in the first month of life, but declines with each additional month. By the time infants are 5 months of age, exclusive breastfeeding is prevalent in only a few countries, in the single digits in some countries, and virtually nonexistent in most countries.

Because exclusive breastfeeding among infants is rare in most countries, superceded usually by predominant breastfeeding, rates of predominant breastfeeding are presented in Figure 3.2. In all countries, more than half of infants under 4 months of age are predominantly or fully breastfed, except in the Dominican Republic, Colombia, and Haiti. Sub-Saharan Africa has the highest rates of predominant plus full breastfeeding.

Table 3.5 presents a summary of feeding practices among children under 4 months of age, by region.

⁴ Full breastfeeding is not included in the WHO list of infant feeding categories. Predominantly breastfed does not include full breastfeeding.

Table 3.5 Regional summary of current status feeding practices for last-born children less than 4 months of age

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

Region	Breastfeeding								Not breastfeeding	
	Exclusive breast-feeding ¹	Breast milk and plain water	Fully breastfed ²	Predom- inantly breastfed ³	Predom- inantly or fully breastfed ⁴	Received milk ⁵	Received comple- mentary foods ⁶	Used bottle	Total	Used bottle
Sub-Saharan Africa	20.1	37.8	57.8	16.7	74.5	9.7	14.8	9.1	1.0	0.3
Near East/North Africa	40.7	9.5	50.2	23.4	73.6	15.6	5.8	21.2	5.0	4.4
Asia	43.5	11.2	54.7	13.6	68.3	18.9	7.2	18.1	5.6	4.8
Latin America/Caribbean	30.3	7.7	38.0	15.1	53.1	23.1	14.2	41.6	7.5	6.7

¹ Breast milk only

² Exclusive breastfeeding or breast milk and plain water

³ Breast milk predominantly, with other non-milk liquids

⁴ Combines full and predominant breastfeeding

⁵ Receive breast milk plus other milks or formula

⁶ Breast milk plus solid or semisolid foods

Feeding practices for infants 6 to 9 months of age are shown in Table 3.2. Among infants that age, the most relevant feeding indicator is the proportion given complementary foods in addition to breast milk, as is recommended from the age of 6 months onward. The prevalence of this indicator is shown in Figure 3.3. In sub-Saharan Africa, fewer than half of all infants 6 to 9 months are given complementary foods in Mali, Ghana, and Burkina Faso. In Asia, the same is true of infants in India, Bangladesh, and Pakistan, where only a third of infants are fed with complementary foods. In Near East/North Africa, fewer than half the infants in Jordan, Turkey, and Morocco are fed complementary foods. In Latin America/Caribbean, only 23 percent and 12 percent of infants in the Dominican Republic and Brazil, respectively, are fed complementary foods.

A summary of feeding practices for children 6 to 9 months of age, by region, including the proportion receiving complementary foods, is presented in Table 3.6.

For children 12 to 15 months of age, the indicator of main interest is the proportion of children still breastfeeding, also known as the first-year breastfeeding continuation rate. The percentage of children 12 to 15 months of age in specific feeding categories is shown in Table 3.3, and the proportion of children this age still breastfeeding is shown in Figure 2.14 (page 28). In sub-Saharan Africa, breastfeeding through the first year is quite common in all

countries, with the exception of Namibia, which has a relatively low rate (for sub-Saharan Africa), at 68 percent. The sub-Saharan countries have the highest first-year continuation rates compared with countries in other regions. In Asia, Bangladesh and Nepal have the highest first-year rates, at 96 and 97 percent, respectively. Latin America/Caribbean, in general, has some of the lowest rates, including 29 percent in the Dominican Republic and 33 percent in Brazil. A regional summary of feeding practices for children 12 to 15 months of age, including the percentage of children still breastfeeding, is shown in Table 3.7.

Among children 20 to 23 months old, the proportion still breastfeeding provides the second-year breastfeeding continuation rate. The percentage of children 20 to 23 months of age in specific feeding categories is shown in Table 3.4, and the proportion of children this age still breastfeeding is shown in Figure 2.15 (page 28). Sub-Saharan Africa and Asia have the highest second-year continuation rates, specifically in Burkina Faso, Rwanda, Bangladesh, and Nepal, where 80 percent or more of children 20 to 23 months of age are still breastfeeding. Fewer than half the children this age in Latin America/Caribbean and Near East/North Africa are still breastfeeding, and in the Dominican Republic and Paraguay, only 7 and 8 percent, respectively, continue to breastfeed. The regional summary of feeding practices, including the second-year continuation rates, is shown in Table 3.8.