

# NUTRITION OF CHILDREN AND ADULTS

Table 11.1 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Model DHS 6 data

Background characteristic	Height-for-age <sup>1</sup>			Weight-for-height				Weight-for-age				Number of children
	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD <sup>2</sup>	Percent-age above +2 SD	Mean Z-score (SD)	
<b>Age in months</b>												
<6	7.6	13.7	-0.5	2.7	8.6	16.0	0.4	3.7	8.1	8.8	-0.2	184
6-8	7.4	21.2	-0.5	5.8	13.9	9.4	-0.2	4.9	17.7	2.9	-0.6	133
9-11	11.7	28.5	-1.1	5.2	18.8	9.1	-0.5	4.9	25.9	1.8	-1.0	118
12-17	14.3	34.0	-1.2	6.0	13.4	6.7	-0.3	9.5	18.6	2.6	-0.8	261
18-23	16.6	48.9	-1.5	4.2	16.9	8.6	-0.2	4.9	18.3	3.9	-0.9	184
24-35	22.4	44.7	-1.5	4.3	7.7	6.7	0.1	5.0	15.4	2.7	-0.8	467
36-47	17.2	43.4	-1.6	3.4	9.1	6.1	0.0	5.6	17.9	1.1	-0.9	597
48-59	13.4	29.4	-1.4	3.5	6.7	6.5	0.0	3.3	11.9	0.6	-0.9	550
<b>Sex</b>												
Male	16.8	35.6	-1.4	5.2	11.9	6.3	-0.2	6.6	18.0	2.2	-0.9	1,217
Female	14.2	36.2	-1.3	3.0	8.2	8.8	0.1	3.7	13.7	2.5	-0.7	1,277
<b>Birth interval in months<sup>3</sup></b>												
First birth <sup>4</sup>	14.3	32.7	-1.3	4.1	9.6	9.3	0.0	4.0	17.5	3.2	-0.8	423
<24	20.8	46.8	-1.6	3.8	10.7	10.1	-0.0	6.1	18.1	1.8	-1.0	229
24-47	16.2	36.9	-1.4	4.3	11.0	7.5	-0.0	5.0	15.7	2.5	-0.8	865
48+	13.2	32.5	-1.2	2.5	9.4	7.9	0.0	4.2	11.8	2.3	-0.7	497
<b>Size at birth<sup>3</sup></b>												
Very small	24.3	49.1	-1.7	2.9	16.3	5.6	-0.4	10.3	28.7	1.6	-1.3	93
Small	15.2	38.1	-1.4	3.8	10.6	8.8	-0.2	6.3	17.4	2.1	-0.9	238
Average or larger	15.2	35.2	-1.3	3.7	9.9	8.4	0.1	4.2	14.3	2.6	-0.7	1,645
Missing	(15.0)	(29.5)	1.2	(8.8)	(9.6)	(4.1)	0.4	(5.1)	(19.2)	(3.6)	0.9	36
<b>Mother's interview status</b>												
Interviewed	15.6	36.1	-1.3	3.8	10.3	8.3	-0.0	4.7	15.4	2.5	-0.8	2,013
Not interviewed but in household	15.3	30.7	-1.4	6.8	11.6	8.1	-0.1	6.3	14.3	3.9	-0.9	57
Not interviewed and not in the household <sup>5</sup>	15.0	35.8	-1.4	5.2	8.7	4.2	-0.1	6.9	18.1	1.3	-0.9	424
<b>Mother's nutritional status<sup>6</sup></b>												
Thin (BMI<18.5)	16.3	36.7	-1.6	2.5	14.0	6.1	-0.2	8.0	17.8	0.9	-1.1	132
Normal (BMI 18.5-24.9)	16.6	36.6	-1.3	3.2	9.7	7.9	0.0	4.5	15.5	2.8	-0.8	1,338
Overweight/ obese (BMI ≥ 25)	12.4	34.6	-1.3	4.7	9.3	10.5	0.1	3.9	12.3	2.1	-0.7	290
<b>Residence</b>												
Urban	10.3	30.0	-1.1	4.5	11.1	7.0	-0.1	4.4	13.0	1.9	-0.7	768
Rural	17.8	38.5	-1.4	3.9	9.6	7.9	0.0	5.5	17.1	2.5	-0.8	1,726
<b>Region</b>												
Region 1	14.0	33.7	-1.2	5.4	11.4	6.4	-0.2	6.3	17.5	2.8	-0.8	1,070
Region 2	18.5	40.8	-1.5	3.7	9.6	8.8	0.1	5.6	16.6	2.1	-0.8	544
Region 3	10.5	30.0	-1.1	2.9	9.9	7.5	0.1	2.8	11.3	3.2	-0.6	353
Region 4	18.6	39.3	-1.6	2.7	7.8	8.8	0.1	3.8	14.7	1.0	-0.9	527
<b>Mother's education</b>												
No education	18.3	37.9	-1.4	3.0	9.4	7.9	0.0	4.8	14.9	2.8	-0.8	1,425
Primary	10.8	32.6	-1.2	4.9	13.8	7.5	-0.2	6.0	17.3	1.5	-0.8	276
Secondary or higher	8.7	30.6	-1.1	6.3	11.1	10.3	-0.1	3.8	15.7	2.6	-0.7	369
<b>Wealth quintile</b>												
Lowest	18.7	40.8	-1.5	4.5	8.4	9.3	0.1	6.3	17.0	3.4	-0.8	565
Second	16.8	37.8	-1.4	3.9	11.0	7.1	-0.1	5.8	17.3	1.4	-0.9	594
Middle	16.7	36.9	-1.4	4.8	12.5	6.3	-0.0	6.0	18.3	3.2	-0.9	567
Fourth	12.4	31.6	-1.2	3.3	8.3	7.1	-0.1	3.0	13.5	1.4	-0.8	485
Highest	9.1	27.5	-1.0	3.3	9.3	8.8	0.1	3.2	9.6	2.2	-0.5	283
Total	15.5	35.9	-1.3	4.1	10.0	7.6	-0.0	5.1	15.8	2.3	-0.8	2,494

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.

<sup>2</sup> Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median

<sup>3</sup> Excludes children whose mothers were not interviewed

<sup>4</sup> First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

<sup>5</sup> Includes children whose mothers are deceased

<sup>6</sup> Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10.1.

<sup>7</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

**Table 11.2 Initial breastfeeding**

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth; and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Model DHS 6 data

Background characteristic	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>	Number of last-born children	Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	97.0	51.8	87.4	1,138	21.9	1,104
Female	97.5	51.3	88.6	1,181	24.3	1,151
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	96.8	47.0	86.3	1,477	23.6	1,430
Traditional birth attendant	98.3	60.7	91.6	776	21.9	763
Other	98.8	48.2	90.1	58	26.2	58
No one	*	*	*	4	*	4
Missing	*	*	*	3	*	0
<b>Place of delivery</b>						
Health facility	96.6	46.6	86.5	1,353	22.5	1,307
At home	98.5	58.7	90.6	957	24.0	943
Other	*	*	*	5	*	5
Missing	*	*	*	4	*	0
<b>Residence</b>						
Urban	95.6	43.1	81.9	796	25.4	761
Rural	98.1	56.0	91.3	1,523	21.9	1,494
<b>Region</b>						
Region 1	98.0	70.3	91.3	918	23.2	900
Region 2	97.1	47.3	89.4	467	24.6	453
Region 3	94.9	37.4	79.0	449	29.5	426
Region 4	98.0	33.3	88.8	485	15.8	475
<b>Mother's education</b>						
No education	98.3	54.7	91.5	1,446	22.5	1,421
Primary	96.5	52.5	85.9	362	23.1	349
Secondary or higher	95.0	42.0	79.9	511	24.9	485
<b>Wealth quintile</b>						
Lowest	97.5	53.1	90.7	524	20.1	511
Second	98.3	56.2	91.2	494	20.0	486
Middle	97.5	57.8	90.5	502	24.7	490
Fourth	97.1	51.1	86.2	444	29.4	431
Highest	95.3	34.6	78.4	354	21.6	337
<b>Total</b>	<b>97.2</b>	<b>51.6</b>	<b>88.1</b>	<b>2,319</b>	<b>23.1</b>	<b>2,255</b>

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth

<sup>2</sup> Children given something other than breast milk during the first three days of life

<sup>3</sup> Doctor, nurse/midwife, or auxiliary midwife

**Table 11.3 Breastfeeding status by age**

Percent distribution of youngest children under two years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under two years using a bottle with a nipple, according to age in months, Model DHS 6 data

Age in months	Breastfeeding status						Total	Percent- age currently breast- feeding	Number of youngest child under two years living with their mother	Percent- age using a bottle with a nipple	Number of all children under two years
	Not breast- feeding	Exclu- sively breastfed	Breast- feeding and consuming plain water only	Breast- feeding and consuming non- milk liquids <sup>1</sup>	Breast- feeding and consuming other milk	Breast- feeding and consuming complementary foods					
0-1	3.2	42.4	34.7	12.2	2.4	5.0	100.0	96.8	159	14.0	167
2-3	2.0	31.6	32.7	17.3	8.9	7.6	100.0	98.0	236	25.9	237
4-5	5.4	23.6	24.1	11.6	6.9	28.4	100.0	94.6	195	24.6	202
6-8	7.2	8.8	17.2	4.4	3.1	59.4	100.0	92.8	310	22.5	314
9-11	8.6	4.0	6.9	4.1	1.5	74.9	100.0	91.4	258	19.5	271
12-17	18.6	1.3	2.7	0.8	0.1	76.6	100.0	81.4	582	13.0	603
18-23	47.0	0.5	0.9	0.5	0.0	51.1	100.0	53.0	365	7.5	421
0-3	2.5	36.0	33.5	15.2	6.3	6.5	100.0	97.5	395	21.0	404
0-5	3.4	31.9	30.4	14.0	6.5	13.8	100.0	96.6	590	22.2	606
6-9	6.6	8.1	14.6	4.7	3.3	62.8	100.0	93.4	395	21.7	405
12-15	14.8	1.6	3.4	1.0	0.1	79.0	100.0	85.2	401	13.0	415
12-23	29.5	1.0	2.0	0.7	0.1	66.7	100.0	70.5	947	10.8	1,024
20-23	52.4	0.7	0.3	0.9	0.0	45.8	100.0	47.6	208	7.7	245

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

<sup>1</sup> Non-milk liquids include juice, juice drinks, clear broth or other liquids

Table 11.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by background characteristics, Model DHS 6 data

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years <sup>1</sup>		
	Any breast-feeding	Exclusive breastfeeding	Predominant breast-feeding <sup>2</sup>
<b>Sex</b>			
Male	18.6	a	5.2
Female	19.5	a	4.9
<b>Residence</b>			
Urban	17.0	a	3.5
Rural	20.5	a	5.8
<b>Region</b>			
Region 1	19.8	1.2	5.5
Region 2	18.8	a	5.6
Region 3	16.1	a	2.9
Region 4	21.5	a	5.5
<b>Mother's education</b>			
No education	20.6	a	5.2
Primary	19.3	a	5.1
Secondary or higher	15.9	a	3.9
<b>Wealth quintile</b>			
Lowest	21.6	a	5.7
Second	20.3	a	5.8
Middle	18.7	(0.9)	5.2
Fourth	20.2	a	5.0
Highest	15.3	a	2.9
Total	19.2	a	5.0
Mean for all children	18.6	2.8	6.2

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding

<sup>2</sup> Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Model DHS 6 data

Age in months	Liquids			Solid or semi-solid foods										Number of children
	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Fortified baby foods	Food made from grains <sup>3</sup>	Fruits and vegetables rich in vitamin A <sup>4</sup>	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	
BREASTFEEDING CHILDREN														
0-1	2.9	0.9	15.3	0.4	4.6	1.6	0.4	1.2	0.4	0.4	0.4	0.4	5.2	154
2-3	9.7	4.0	20.8	2.9	1.2	1.8	1.4	0.0	0.4	1.4	1.2	1.4	7.7	231
4-5	7.7	3.7	20.5	13.4	13.1	3.7	0.8	1.3	1.0	2.1	2.1	0.5	30.0	185
6-8	11.5	11.0	19.1	28.7	31.1	13.9	3.7	7.7	5.7	9.0	4.0	1.7	63.9	288
9-11	5.2	7.6	28.0	22.4	53.3	25.4	7.9	10.9	11.8	17.5	7.9	5.7	81.9	236
12-17	4.7	8.0	24.5	16.3	72.5	39.2	15.6	22.4	17.0	32.7	10.8	5.5	94.0	474
18-23	1.4	7.6	22.1	13.3	74.0	51.3	11.2	23.2	17.0	40.3	11.2	2.7	96.4	194
6-23	5.9	8.6	23.5	20.0	58.9	32.3	10.5	16.7	13.2	25.2	8.7	4.1	84.8	1,192
Total	6.3	6.8	22.1	15.4	41.8	22.6	7.4	11.5	9.1	17.5	6.3	3.1	62.0	1,761
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	5
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	5
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	10
6-8	(9.5)	(18.3)	(25.2)	(31.3)	(60.8)	(24.9)	(4.2)	(7.9)	(22.1)	(20.5)	(22.6)	(14.8)	(79.5)	22
9-11	*	*	*	*	*	*	*	*	*	*	*	*	*	22
12-17	7.8	17.5	37.7	16.7	77.2	49.3	17.9	28.8	20.5	44.8	13.8	5.1	91.0	108
18-23	8.7	14.8	37.4	14.2	81.1	60.6	17.5	30.3	25.2	51.8	16.5	8.3	98.3	172
6-23	8.9	16.4	36.3	16.8	76.7	52.4	16.9	26.8	23.5	45.5	15.9	8.1	92.6	324
Total	9.9	16.8	34.1	16.1	72.4	49.6	16.2	25.5	22.1	42.8	14.9	7.6	87.8	345

Note: Breastfeeding status and food consumed refer to a 24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Other milk includes fresh, tinned and powdered cow or other animal milk

<sup>2</sup> Doesn't include plain water

<sup>3</sup> Includes fortified baby food

<sup>4</sup> Includes pumpkin, carrots, sweet potatoes that are yellow inside, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.6 Infant and young child feeding (IYCF) practices

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

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:				Number of non-breast-fed children 6-23 months	Among all children 6-23 months, percentage fed:				Number of all children 6-23 months
	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Both 4+ food groups and minimum meal frequency	Number of breast-fed children 6-23 months	Milk or milk products <sup>3</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>4</sup>	With 3 IYCF practices <sup>5</sup>		Breast milk, milk, or milk products <sup>6</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>7</sup>	With 3 IYCF practices	
<b>Age in months</b>														
6-8	5.0	56.5	4.1	288	(24.7)	(22.6)	(26.4)	(14.5)	22	94.6	6.3	54.3	4.9	310
9-11	10.8	33.2	3.6	236	*	*	*	*	22	93.4	11.6	33.3	4.4	258
12-17	18.6	41.5	12.3	474	15.5	29.9	18.3	1.5	108	84.3	20.7	37.2	10.3	582
18-23	22.6	48.2	12.1	194	16.2	35.5	29.6	9.5	172	60.6	28.7	39.5	10.9	365
<b>Sex</b>														
Male	12.2	45.1	7.1	586	18.4	33.4	24.4	7.3	163	82.2	16.8	40.6	7.1	749
Female	16.5	44.0	10.0	606	15.6	30.0	27.5	7.5	161	82.3	19.4	40.6	9.5	767
<b>Residence</b>														
Urban	19.9	55.6	13.8	358	32.6	42.1	36.6	14.2	153	79.8	26.5	49.9	13.9	511
Rural	12.0	39.8	6.3	833	3.1	22.5	16.4	1.3	171	83.5	13.8	35.8	5.5	1,005
<b>Region</b>														
Region 1	14.9	35.5	8.1	504	11.2	32.0	30.0	1.6	101	85.1	17.8	34.6	7.0	606
Region 2	11.9	54.9	8.4	229	5.6	18.5	16.8	2.2	68	78.4	13.4	46.2	7.0	298
Region 3	26.7	55.2	18.9	184	35.7	46.6	36.1	19.2	104	76.8	33.9	48.3	19.0	288
Region 4	7.3	45.4	2.7	274	5.8	18.6	9.3	1.8	51	85.3	9.1	39.7	2.6	325
<b>Mother's education</b>														
No education	12.9	41.9	7.4	782	10.5	22.9	18.9	3.7	182	83.1	14.8	37.6	6.7	964
Primary	17.7	47.4	11.4	178	(2.7)	(39.7)	(13.6)	(0.0)	40	82.2	21.7	41.2	9.3	218
Secondary or higher	16.9	51.3	10.3	232	34.1	44.3	43.3	16.8	103	79.8	25.3	48.8	12.3	335
<b>Wealth quintile</b>														
Lowest	10.5	34.6	4.8	297	1.8	10.4	6.2	0.3	57	84.3	10.5	30.1	4.1	354
Second	10.1	41.6	6.0	255	3.6	18.5	19.4	0.0	49	84.6	11.4	38.0	5.0	304
Middle	9.9	43.9	5.8	259	11.7	37.4	22.2	3.0	70	81.2	15.8	39.3	5.2	329
Fourth	23.2	49.2	12.7	240	9.6	27.0	18.2	1.9	58	82.4	23.9	43.2	10.6	298
Highest	23.7	64.3	19.3	140	42.5	50.8	49.5	22.7	91	77.4	34.3	58.5	20.6	231
Total	14.4	44.6	8.6	1,192	17.0	31.7	25.9	7.4	324	82.3	18.1	40.6	8.3	1,516

<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.

<sup>2</sup> For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months

<sup>3</sup> Includes two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt

<sup>4</sup> For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day

<sup>5</sup> Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding Practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group

<sup>6</sup> Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt

<sup>7</sup> Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4

**Table 11.7 Prevalence of anemia in children**

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Model DHS 6 data

Background characteristic	Anemia status by hemoglobin level				Number of children
	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (< 7.0 g/dl)	
<b>Age in months</b>					
6-8	88.0	33.5	50.3	4.2	151
9-11	83.0	18.8	57.9	6.3	135
12-17	84.1	22.8	55.5	5.8	300
18-23	83.5	33.1	42.0	8.5	198
24-35	78.9	23.9	48.2	6.8	521
36-47	77.6	25.0	47.5	5.0	661
48-59	74.9	28.0	43.7	3.2	604
<b>Sex</b>					
Male	80.6	26.2	48.3	6.0	1,279
Female	78.1	25.8	47.6	4.6	1,290
<b>Mother's interview status</b>					
Interviewed	79.8	26.4	47.9	5.5	2,035
Not interviewed but in household	79.2	27.7	49.8	1.7	63
Not interviewed and not in the household <sup>1</sup>	77.2	24.2	47.9	5.0	472
<b>Residence</b>					
Urban	72.2	29.9	37.1	5.3	821
Rural	82.7	24.2	53.1	5.4	1,748
<b>Region</b>					
Region 1	84.0	24.3	54.1	5.7	1,057
Region 2	75.2	27.8	43.2	4.2	556
Region 3	71.0	33.0	34.3	3.7	416
Region 4	80.8	22.3	51.5	7.1	540
<b>Mother's education<sup>2</sup></b>					
No education	81.5	24.4	50.7	6.3	1,452
Primary	81.3	28.3	48.6	4.5	259
Secondary or higher	72.7	32.9	37.3	2.5	386
<b>Wealth quintile</b>					
Lowest	81.1	23.6	52.1	5.4	589
Second	80.8	22.5	51.9	6.4	594
Middle	84.3	27.9	51.3	5.1	558
Fourth	78.1	27.5	45.5	5.1	511
Highest	66.5	31.6	31.2	3.7	318
<b>Total</b>	<b>79.3</b>	<b>26.0</b>	<b>48.0</b>	<b>5.3</b>	<b>2,569</b>

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Hemoglobin in grams per deciliter (g/dl).

<sup>1</sup> Includes children whose mothers are deceased

<sup>2</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Model DHS 6 data

Background characteristic	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodized salt	
	Percentage who consumed foods rich in vitamin A in last 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in last 24 hours <sup>2</sup>	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months <sup>3</sup>	Number of children	Percentage living in households with iodized salt <sup>4</sup>	Number of children
<b>Age in months</b>									
6-8	18.8	12.9	310	69.3	43.8	27.7	314	81.5	279
9-11	32.3	22.4	258	83.4	41.6	33.8	271	77.4	245
12-17	54.3	38.2	582	84.2	43.3	48.2	603	82.2	544
18-23	64.2	47.9	365	88.0	43.5	64.9	421	81.7	384
24-35	na	na	na	82.8	40.1	65.8	976	81.2	892
36-47	na	na	na	82.6	32.8	62.0	1,076	79.2	961
48-59	na	na	na	79.3	31.2	62.1	961	85.7	875
<b>Sex</b>									
Male	43.2	30.4	749	81.2	37.3	56.4	2,298	82.1	2,066
Female	48.0	34.9	767	82.4	37.9	58.3	2,324	81.1	2,115
<b>Breastfeeding status</b>									
Breastfeeding	40.4	28.5	1,192	82.0	43.7	45.2	1,356	80.0	1,223
Not breastfeeding	66.4	49.1	316	82.5	35.5	63.0	3,207	82.5	2,905
Missing	*	*	8	39.7	13.7	27.8	59	73.6	53
<b>Mother's age at birth</b>									
15-19	38.8	26.6	175	82.8	45.8	52.2	326	81.6	293
20-29	44.4	32.0	738	80.1	38.5	55.5	2,198	81.9	2,020
30-39	47.9	35.5	488	83.6	36.1	59.2	1,656	80.6	1,457
40-49	54.9	34.3	115	82.6	32.8	63.0	441	84.0	410
<b>Residence</b>									
Urban	46.9	38.5	511	85.0	47.0	61.0	1,521	89.9	1,336
Rural	45.0	29.7	1,005	80.2	33.0	55.5	3,101	77.8	2,844
<b>Region</b>									
Region 1	46.8	34.6	606	76.1	28.6	54.1	1,716	73.6	1,584
Region 2	39.0	28.3	298	85.2	33.5	59.2	1,041	82.8	999
Region 3	55.1	44.4	288	80.0	46.2	55.9	830	90.0	689
Region 4	41.3	22.7	325	89.3	49.7	61.8	1,036	88.0	909
<b>Mother's education</b>									
No education	46.1	30.1	964	80.3	33.2	56.7	3,139	79.7	2,849
Primary	44.8	35.3	218	82.4	39.5	57.0	630	82.6	570
Secondary or higher	45.1	38.5	335	87.1	52.5	59.9	853	88.0	762
<b>Wealth quintile</b>									
Lowest	43.3	25.5	354	83.8	32.8	58.7	1,096	79.2	995
Second	38.7	25.3	304	78.7	35.2	55.6	990	76.0	885
Middle	50.9	36.9	329	77.5	33.2	51.0	947	79.2	891
Fourth	49.3	38.0	298	85.1	41.2	60.1	916	83.0	833
Highest	46.2	40.5	231	84.8	50.5	62.6	673	96.2	576
Total	45.7	32.7	1,516	81.8	37.6	57.3	4,622	81.6	4,180

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil.

<sup>2</sup> Includes meat (including organ meat), fish, poultry and eggs

<sup>3</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

<sup>4</sup> Excludes children in households in which salt was not tested.



**Table 11.9 Presence of iodized salt in household**

Among all households, the percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percentage with iodized salt, according to background characteristics, Model DHS 6 data

Background characteristic	Among all households, the percentage			Among households with tested salt:	
	With salt tested	With no salt in the household	Number of households	Percentage with iodized salt	Number of households
<b>Residence</b>					
Urban	84.6	15.4	2,555	89.9	2,162
Rural	91.4	8.6	3,735	77.4	3,415
<b>Region</b>					
Region 1	91.1	8.9	2,106	74.5	1,920
Region 2	94.0	6.0	1,331	82.1	1,251
Region 3	81.0	19.0	1,501	89.9	1,216
Region 4	88.0	12.0	1,352	86.9	1,190
<b>Wealth quintile</b>					
Lowest	90.6	9.4	1,359	76.1	1,231
Second	89.5	10.5	1,252	78.2	1,121
Middle	91.2	8.8	1,214	80.2	1,107
Fourth	87.4	12.6	1,216	82.6	1,063
Highest	84.6	15.4	1,249	95.4	1,057
Total	88.7	11.3	6,290	82.2	5,578

**Table 11.10.1 Nutritional status of women**

Among women age 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, Model DHS 6 data

Background characteristic	Height		Mean Body Mass Index (BMI)	Body Mass Index <sup>1</sup>							Number of women
	Percent-age below 145 cm	Number of women		18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	≥25.0 (Total over-weight or obese)	25.0-29.9 (Over-weight)	≥30.0 (Obese)	
Age											
15-19	2.3	862	21.2	78.3	14.0	9.0	4.9	7.8	5.6	2.2	784
20-29	1.2	1,369	22.6	75.6	6.3	4.0	2.3	18.1	13.7	4.4	1,164
30-39	1.5	1,090	23.4	68.8	7.1	5.1	2.0	24.1	15.4	8.7	968
40-49	1.2	652	24.0	59.6	7.5	4.7	2.8	33.0	21.6	11.4	633
Residence											
Urban	0.9	1,768	23.9	65.1	6.0	3.8	2.1	28.9	18.0	10.9	1,625
Rural	2.0	2,205	21.8	76.9	10.5	7.0	3.5	12.6	10.2	2.5	1,925
Region											
Region 1	1.3	1,411	21.9	76.9	9.8	6.5	3.3	13.2	10.1	3.1	1,228
Region 2	2.3	768	22.7	70.9	9.0	6.6	2.4	20.1	14.8	5.3	687
Region 3	1.0	1,076	24.1	64.9	5.9	3.9	2.0	29.3	17.2	12.0	995
Region 4	1.9	717	22.4	72.0	9.1	5.1	3.9	19.0	14.3	4.7	639
Education											
No education	1.8	2,098	22.6	72.5	8.5	5.9	2.6	19.0	13.7	5.2	1,847
Primary	2.1	546	22.7	71.3	8.4	5.6	2.8	20.3	13.1	7.2	482
Secondary or higher	1.0	1,329	23.0	70.0	8.3	4.9	3.4	21.7	14.1	7.7	1,220
Wealth quintile											
Lowest	2.4	685	21.5	78.3	11.4	6.5	4.9	10.3	8.4	1.9	586
Second	1.5	725	21.8	76.3	10.5	8.4	2.1	13.2	10.8	2.3	629
Middle	1.7	804	22.3	76.1	9.3	5.3	4.0	14.7	10.3	4.4	719
Fourth	0.8	867	23.1	68.9	6.5	4.5	2.0	24.7	17.6	7.1	794
Highest	1.5	891	24.5	61.4	5.9	4.0	1.8	32.7	19.2	13.5	821
Total	1.5	3,973	22.8	71.5	8.4	5.5	2.9	20.1	13.8	6.3	3,549

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.10.2 Nutritional status of men

Among men age 15-49, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, Model DHS 6 data

Background characteristic	Body Mass Index							Number of men
	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	≥25.0 (Total over-weight or obese)	25.0-29.9 (Over-weight)	
<b>Age</b>								
15-19	20.1	68.8	29.0	21.0	8.0	2.3	1.6	718
20-29	21.5	89.7	6.3	5.3	0.9	4.0	3.9	965
30-39	22.0	83.7	5.8	5.0	0.8	10.5	8.7	843
40-49	22.2	77.9	8.2	6.5	1.7	13.9	9.2	596
<b>Residence</b>								
Urban	21.6	79.5	12.5	10.0	2.5	8.0	5.8	1,517
Rural	21.3	82.4	11.0	8.2	2.9	6.5	5.5	1,604
<b>Region</b>								
Region 1	21.2	78.5	14.0	10.8	3.2	7.5	6.1	1,008
Region 2	21.8	81.3	8.9	6.6	2.3	9.7	7.3	574
Region 3	21.7	82.0	11.4	9.8	1.6	6.7	4.7	954
Region 4	21.1	83.4	11.2	7.2	3.9	5.4	4.9	586
<b>Education</b>								
No education	21.5	80.9	10.3	7.7	2.6	8.8	7.6	1,175
Primary	21.1	79.4	16.1	12.3	3.8	4.5	3.5	381
Secondary or higher	21.4	81.5	11.8	9.3	2.5	6.8	4.8	1,565
<b>Wealth quintile</b>								
Lowest	21.0	81.8	12.9	9.6	3.4	5.3	5.2	522
Second	21.2	81.6	11.9	9.7	2.3	6.5	5.8	551
Middle	21.4	80.3	12.2	8.3	4.0	7.5	5.9	555
Fourth	21.5	78.7	14.0	11.0	3.0	7.3	5.0	629
Highest	21.8	82.3	9.0	7.5	1.5	8.8	6.2	864
Total 15-49	21.4	81.0	11.7	9.1	2.7	7.3	5.7	3,121
50-59	22.1	70.3	12.7	10.0	2.7	17.0	13.1	304
Total 15-59	21.5	80.1	11.8	9.1	2.7	8.1	6.3	3,425

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).

Table 11.11.1 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Model DHS 6 data

		Anemia status by hemoglobin level				
Background characteristic		Any	Mild	Moderate	Severe	Number of women
	Not pregnant	<12.0 g/dl	0.0-11.9 g/dl	7.0-9.9 g/dl	< 7.0 g/dl	
	Pregnant	<11.0 g/dl	10.0-10.9 g/dl	7.0-9.9 g/dl	< 7.0 g/dl	
<b>Age</b>						
15-19		47.1	35.8	11.0	0.4	846
20-29		40.4	31.4	8.6	0.4	1,361
30-39		42.2	34.2	7.5	0.5	1,076
40-49		40.2	32.2	7.0	1.0	640
<b>Number of children ever born</b>						
0		40.5	32.0	8.1	0.3	986
1		40.5	30.0	10.5	0.1	575
2-3		43.5	34.3	8.8	0.4	942
4-5		40.0	32.6	6.6	0.8	764
6+		47.6	37.1	9.5	0.9	656
<b>Maternity status</b>						
Pregnant		55.7	24.0	30.5	1.2	332
Breastfeeding		46.3	38.5	7.4	0.4	933
Neither		39.2	32.6	6.2	0.5	2,658
<b>Using IUD</b>						
Yes		*	*	*	*	7
No		42.3	33.2	8.5	0.5	3,916
<b>Smoking status</b>						
Smokes cigarettes/tobacco		44.7	31.2	13.5	0.0	308
Does not smoke		42.0	33.4	8.1	0.5	3,612
Missing		*	*	*	*	3
<b>Residence</b>						
Urban		34.9	27.7	6.7	0.6	1,740
Rural		48.2	37.7	10.0	0.4	2,183
<b>Region</b>						
Region 1		50.6	38.7	11.6	0.4	1,391
Region 2		47.4	38.5	8.5	0.3	757
Region 3		27.6	23.0	4.3	0.3	1,063
Region 4		42.5	32.2	9.0	1.3	712
<b>Education</b>						
No education		45.7	35.4	9.7	0.6	2,076
Primary		47.0	37.5	9.1	0.4	542
Secondary or higher		35.0	28.0	6.5	0.4	1,305
<b>Wealth quintile</b>						
Lowest		51.9	41.0	10.2	0.7	683
Second		48.7	37.7	10.7	0.4	720
Middle		45.8	35.2	10.1	0.6	786
Fourth		40.5	31.7	8.4	0.4	859
Highest		28.1	23.3	4.4	0.4	874
Total		42.3	33.2	8.6	0.5	3,923

Note: Prevalence is adjusted for smoking status if known using formulas in CDC, 1998. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table 11.11.2 Prevalence of anemia in men**

Percentage of men age 15-49 with anemia, by background characteristics, Model DHS 6 data

Background characteristic	Any anemia <13.0 g/dl	Number of men
<b>Age</b>		
15-19	39.2	708
20-29	24.9	946
30-39	27.0	818
40-49	28.9	584
<b>Smoking status</b>		
Smokes cigarettes/tobacco	33.8	776
Does not smoke	28.1	2,280
<b>Residence</b>		
Urban	22.8	1,471
Rural	35.8	1,586
<b>Region</b>		
Region 1	38.1	1,005
Region 2	33.7	558
Region 3	16.9	917
Region 4	30.7	576
<b>Education</b>		
No education	35.8	1,145
Primary	31.9	370
Secondary or higher	24.3	1,542
<b>Wealth quintile</b>		
Lowest	41.5	516
Second	34.5	538
Middle	33.7	554
Fourth	24.8	616
Highest	19.7	832
Total 15-49	29.6	3,056
50-59	40.9	299
Total 15-59	30.6	3,356

Note: Prevalence is adjusted for smoking status, if known, using formulas in CDC, 1998.

**Table 11.12 Micronutrient intake among mothers**

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and the percentage who took deworming medication during the pregnancy of the last child; and among women age 15-49 with a child born in the past five years and who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Model DHS 6 data

Among women with a child born in the past five years:

Background characteristic	Percent-age who received vitamin A dose post-partum <sup>1</sup>	Number of days women took iron tablets or syrup during pregnancy of last birth						Percent-age of women who took deworming medication during pregnancy of last birth	Number of women	Among women with a child born in the last five years, who live in households that were tested for iodized salt	
		None	<60	60-89	90+	Don't know/missing	Total			Percent-age living in households with iodized salt <sup>2</sup>	Number of women
<b>Age</b>											
15-19	77.5	5.6	26.1	9.7	35.4	23.1	100.0	70.8	431	82.9	382
20-29	79.0	4.6	28.4	9.9	32.0	25.1	100.0	75.3	1,930	83.2	1,775
30-39	78.4	5.4	27.6	7.9	31.6	27.5	100.0	73.5	1,403	81.2	1,247
40-49	78.9	5.5	27.7	10.5	33.1	23.2	100.0	72.3	412	84.4	380
<b>Residence</b>											
Urban	80.2	3.6	21.9	8.6	41.6	24.4	100.0	77.0	1,468	90.5	1,297
Rural	77.8	5.9	31.1	9.7	27.3	26.1	100.0	72.2	2,709	78.5	2,487
<b>Region</b>											
Region 1	75.4	8.3	30.8	8.0	28.0	24.9	100.0	71.4	1,542	75.2	1,423
Region 2	83.8	2.8	31.3	12.2	23.6	30.1	100.0	82.4	896	83.1	854
Region 3	84.3	5.6	22.7	6.8	41.0	23.9	100.0	80.3	816	90.6	686
Region 4	74.0	1.4	24.2	10.7	40.3	23.4	100.0	64.3	922	88.2	821
<b>Education</b>											
No education	76.6	5.3	29.0	9.7	29.0	27.0	100.0	71.3	2,714	80.1	2,464
Primary	80.0	5.3	29.3	9.8	32.6	23.0	100.0	74.9	583	82.9	524
Secondary or higher	84.1	4.2	23.4	7.5	42.4	22.5	100.0	81.3	880	90.1	796
<b>Wealth quintile</b>											
Lowest	74.6	4.5	30.1	11.9	27.7	25.8	100.0	68.2	917	78.5	835
Second	75.9	7.0	33.2	8.5	25.2	26.0	100.0	74.1	888	77.4	797
Middle	80.1	6.0	31.7	8.7	28.9	24.7	100.0	73.8	864	81.3	809
Fourth	80.9	3.8	22.3	9.5	38.5	25.9	100.0	73.6	832	83.6	763
Highest	83.1	3.6	19.7	7.2	44.5	24.9	100.0	81.9	675	96.2	581
<b>Total</b>	<b>78.6</b>	<b>5.1</b>	<b>27.9</b>	<b>9.3</b>	<b>32.3</b>	<b>25.5</b>	<b>100.0</b>	<b>73.9</b>	<b>4,177</b>	<b>82.6</b>	<b>3,784</b>

<sup>1</sup> In the first two months after delivery of last birth

<sup>2</sup> Excludes women in households where salt was not tested.