COMPREHENSIVE NUTRIENT GAP ASSESSMENT (CONGA)

FINDINGS FOR CHILDREN 6–23 MONTHS IN BANGLADESH

April 2020
INTRODUCTION
Improving young children’s diets in South Asia contributes to the prevention of all forms of malnutrition, including micronutrient deficiencies, and is an important component of efforts to achieve the global nutrition targets of the World Health Assembly (WHA) and Sustainable Development Goals (SDGs).

After a child’s first six months, nutrient requirements exceed what breastmilk alone can provide. To meet growing nutrient needs and ensure proper growth and development, along with breastfeeding, infants should be introduced to nutrient-dense solid, semi-solid, or soft foods at six months of age (1, 2). Despite this, only 39% of infants and young children aged 6–23 months in Bangladesh consume a diet containing the minimum recommended number of food groups (3), increasing their risk of micronutrient deficiencies and growth faltering.

This brief summarizes the main food and micronutrient gaps identified from a Comprehensive Nutrient Gap Assessment (CONGA) conducted for Bangladesh, as part of a landscape analysis on complementary feeding in South Asia, and key policy and programmatic implications.

WHY IS CONGA NEEDED?
Identification of nutrient and dietary gaps during the complementary feeding period is essential to inform policies and programs designed to improve child health and nutrition. However, nationally representative data specific to young children are usually only available for select nutrients and infrequently collected. Alternative sources of evidence can help fill data gaps, even if they are of lower quality, particularly when

KEY MESSAGES

• Based on available evidence, zinc, vitamin A, calcium, iron, and iodine are micronutrients of concern among young children (6–23 months of age) in Bangladesh.

• More research is required on other nutrients, such as vitamin B₁₂, folate, and thiamine, which may also represent important gaps in young children’s diets in Bangladesh.

• The national food supply is lacking in many essential micronutrients.

• The best food sources of micronutrients of concern in Bangladesh are chicken liver (iron, vitamin A, zinc), beef liver (vitamin A, iron), beef (zinc, iron), dark green leafy vegetables (iron, vitamin A, calcium), dairy (vitamin A, calcium, zinc), eggs (zinc, vitamin A), dried beans (zinc, iron), small fish (calcium, vitamin A), chicken (zinc), and orange/yellow fruits and vegetables (vitamin A).

• More research is needed to understand the primary barriers to consuming these foods, such as limited availability, accessibility, affordability, or desirability.

• Bangladesh needs to improve coverage of adequately iodized salt.

• Biofortification, fortification, and supplementation can also help fill gaps for micronutrients of concern, particularly where food insecurity, social norms, palatability, and desirability make sufficient consumption from accessible diverse foods infeasible.
multiple sources point to the same nutrients of concern or dietary issues. Yet decision makers have little guidance on how to locate and interpret the evidence to identify the magnitude and significance of nutrient gaps in child diets, given the wide range of indicators used, diversity of data sources and population characteristics, and differences in severity of associated health outcomes.

A CONGA meets this need by collating the evidence and rating the burden of nutrient gaps and certainty of evidence. There are several other nutrients that may be limited in the diets of young children, including omega-3 fats (e.g., DHA) and specific essential amino acids (i.e., the quality of protein). The CONGA method can be extended in the future to these and other nutrients as more data becomes available.

**HOW DOES CONGA WORK?**

We reviewed and summarized findings from nationally representative and high-quality sub-national surveys, grey literature, and journal articles related to infant and young child feeding practices, micronutrient deficiencies, dietary intake, household consumption and expenditure, and the food supply. The evidence was reviewed to rate the burden of gap (none, low, moderate, or high) and certainty of available evidence (low, moderate, or high) for 11 micronutrients commonly lacking in young children’s diets. We then identified the most nutrient-dense, locally available food sources of key problem nutrients based on nutrient content and local availability, using local and United States Department of Agriculture (USDA) food composition tables and data on household food consumption and food prices in Bangladesh.

**WHAT DID CONGA FIND IN BANGLADESH?**

Based on available evidence, micronutrients of concern during the complementary feeding period in Bangladesh are zinc, vitamin A, calcium, iron, and iodine (Table 1). The annex provides detailed evidence and respective references considered for all ratings. There is likely considerable geographic variation in nutrient gaps subnationally, which is not assessed. Consequences of deficiencies in micronutrients of concern and justifications for their ratings are summarized in brief below.

**Table 1. Nutrient gaps and evidence ratings for children 6–23 months in Bangladesh**

<table>
<thead>
<tr>
<th>Micronutrient</th>
<th>Zinc</th>
<th>Vitamin A</th>
<th>Calcium</th>
<th>Iodine</th>
<th>Iron</th>
<th>Vitamin B12</th>
<th>Folate</th>
<th>Vitamin B6</th>
<th>Vitamin B1</th>
<th>Vitamin C</th>
<th>Niacin</th>
<th>Vitamin B12</th>
</tr>
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<tbody>
<tr>
<td>Gap burden</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Mod</td>
<td>Mod</td>
<td>Mod</td>
<td>Mod</td>
<td>Mod</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
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<tr>
<td>Evidence certainty</td>
<td>High</td>
<td>High</td>
<td>Mod</td>
<td>Mod</td>
<td>High</td>
<td>Low</td>
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</tbody>
</table>

1 Micronutrients investigated via CONGA include iron, vitamin A, zinc, calcium, iodine, Vitamin B1, (thiamine), niacin, vitamin B12, vitamin B12, folate, and vitamin C.
2 Iron, zinc, iodine, vitamin A, calcium, folate, vitamin C, vitamin B12, thiamine, niacin, and vitamin B12.
3 Micronutrients of concern are those with at least a moderate burden gap and moderate certainty of evidence. There may also be other important nutrient gaps, but evidence is limited.
4 Ca, Calcium: Mod, Moderate; Vit, Vitamin.
Zinc
Zinc deficiency in children is associated with poor health, increased risk of diarrhea, and impaired cognitive and motor development (4, 5). Data indicate low intake of zinc-rich foods during the complementary feeding periods and inadequate intake of zinc in young children and in women of reproductive age. National survey estimates indicate a high prevalence of zinc deficiency in children under five.

Vitamin A
Vitamin A deficiency has severe consequences, even with mild deficiency, including night blindness, increased susceptibility to infections, and death (6). Data indicate low intake of vitamin A-rich foods during the complementary feeding period and inadequate intake of vitamin A in young children and women of reproductive age. There is also low availability of vitamin A in the national food supply. Recent national estimates of vitamin A deficiency indicate a problem of severe public health significance for young children in Bangladesh.

Calcium
Calcium deficiency increases risk of rickets, but the broader health implications of deficiency in young children are poorly understood (7). Dairy intake during the complementary feeding period is low, and modeling data indicates calcium needs for young children may be difficult to meet using locally available foods and feeding practices. There is also low availability of calcium in the national food supply. However, no biochemical data were available to indicate the level of deficiency.

Iron
Iron deficiency is a primary cause of anemia and can result in cognitive impairment, decreased work productivity, and death (8). Data indicate low intake of iron-rich foods during the complementary feeding period and low iron intake in young children and women. There is also low availability of iron in the national food supply. Modeling studies identified iron as a nutrient difficult for young children to consume in adequate quantities using locally available foods and feeding practices. National estimates of iron deficiency indicate a moderate problem.

Iodine
Iodine deficiency has severe consequences, including growth and cognitive impairment, goiter,5 and death (9). Data indicate that adequate iodization of household salt is low, and national and subnational estimates reveal high prevalence of iodine deficiency in school-aged children and women of reproductive age.

Other micronutrients
The burdens of vitamin B₁₂, folate, and thiamine gaps were rated moderate based on low certainty evidence. The burdens of vitamin C, niacin, and vitamin B₆ gaps were rated low based on low certainty evidence. More data is needed to generate higher quality evidence on the burden of these nutrient gaps in Bangladesh, particularly for vitamin B₁₂, folate, and thiamine.

5 Abnormal enlargement of the thyroid gland, typically caused by iodine deficiency.
WHAT CAN BE DONE TO ADDRESS THESE GAPS?

Recommended actions to address each nutrient gap in Bangladesh are summarized in Table 2. Strategic actions to improve child diets will require engagement and intervention across relevant systems (food, social protection, health, and WASH) to address both supply- and demand-side barriers. The best complementary food sources of micronutrients of concern are chicken liver (iron, vitamin A, zinc), beef liver (vitamin A, iron), beef (zinc, iron), dark green leafy vegetables (iron, vitamin A, calcium), dairy (vitamin A, calcium, zinc), eggs (zinc, vitamin A), dried beans (zinc, iron), small fish (calcium, vitamin A), chicken (zinc), and orange/yellow fruits and vegetables (vitamin A) (Table 2). More research is needed to understand the primary barriers to consuming these foods, like limited availability, accessibility, affordability, or desirability. Biofortified and fortified foods (including fortified complementary foods), point-of-use fortification products like micronutrient powders and lipid-based nutrient supplements can also help fill nutrient gaps. Continued breastfeeding prevalence in Bangladesh is high at both one and two years of age at 96% and 87%, respectively (3). Efforts to maintain continued breastfeeding should be prioritized to help meet vitamin A, calcium, and iodine needs. Improving the quality of pregnant and lactating women’s diets can also improve their children’s nutrition through improved birth outcomes, nutrient transfers at birth, and more nutrient-dense breast milk (10). While coverage of iodized salt is high, quality of salt iodization needs improvement. Behavioral aspects influencing feeding practices also need to be addressed.

Table 2. Recommended actions to address complementary feeding gaps in Bangladesh

<table>
<thead>
<tr>
<th>Nutrient gap</th>
<th>Recommended actions to increase dietary intake</th>
</tr>
</thead>
</table>
| Zinc         | • Assess and ensure availability, accessibility, affordability, and desirability of natural foods rich in zinc, including beef, chicken liver, chicken, eggs, chickpeas, and dairy, as well as zinc-biofortified and fortified foods.  
• Ensure adequate coverage and quality of large-scale zinc fortification.  
• Consider micronutrient powders and/or supplementation.  
• Ensure adequate coverage and quality of zinc supplementation for diarrhea treatment. |
| Vitamin A    | • Maintain high rates of continued breastfeeding.  
• Assess and ensure availability, accessibility, affordability, and desirability of natural foods rich in vitamin A, including beef liver, chicken liver, dark green leafy vegetables, orange/yellow fruits and vegetables, eggs, dairy, and fish, as well as vitamin A-biofortified and fortified foods.  
• Ensure adequate coverage and quality of large-scale vitamin A fortification.  
• Consider micronutrient powders and/or continued supplementation. |
## Nutrient Gap Assessment (CONGA)

### Nutrient Gap

**Calcium**

- Maintain high rates of **continued breastfeeding**.
- Assess and ensure availability, accessibility, affordability, and desirability of natural foods rich in calcium, including small fish, dark green leafy vegetables, and dairy as well as calcium-fortified foods.
- Consider calcium-containing **micronutrient powders** and/or **supplementation**.
- Collect **biochemical** and **dietary data** in young children.

**Iron**

- Assess and ensure availability, accessibility, affordability, and desirability of natural foods rich in iron, including chicken liver, beef liver, beef, dark green leafy vegetables, and lentils/chickpeas, as well as iron-biofortified and fortified foods.
- Ensure **adequate coverage** and **quality** of large-scale iron fortification.
- Consider **micronutrient powders** and/or **supplementation**.

**Iodine**

- Maintain high rates of **continued breastfeeding**.
- Ensure availability of, access to, and use of **adequately iodized salt**.

### Conclusion

There is clear evidence of significant gaps in zinc, vitamin A, calcium, iron, and iodine in young children’s diets during the complementary feeding period (6–23 months) in Bangladesh. There may also be other important nutrient gaps, and there is likely subnational geographic variation in the magnitude of these gaps, but evidence is limited. The best food sources of micronutrients of concern that are relatively available in Bangladesh are chicken liver, beef liver, beef, dark green leafy vegetables, dairy, eggs, dried beans, small fish, chicken, and orange/yellow fruits and vegetables. These foods need to be available, accessible, affordable, and desirable as complementary foods to be consumed in adequate quantities by young children. Other approaches to fill gaps for micronutrients of concern should also be considered, including biofortification, fortification, and supplementation, particularly where food insecurity, social norms, palatability, and desirability make sufficient consumption from accessible diverse foods infeasible. Continued breastfeeding should be encouraged and can help young children consume enough vitamin A, calcium, and iodine.

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6 Some potential risks have been associated with supplemental iron in children with adequate iron status. Products with low iron doses may be more appropriate in this context.
REFERENCES


3. National Institute of Population Research and Training (NIPORT), and ICF. 2019. Bangladesh Demographic and Health Survey 2017-18: Key Indicators. Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT, and ICF.


## ANNEX

Key evidence used to inform ratings

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>High burden gap</th>
<th>High certainty evidence</th>
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<tbody>
<tr>
<td><strong>Zinc</strong></td>
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<tr>
<td><strong>Biochemical data:</strong> National prevalence of zinc deficiency was 45% in children 6–59 mo (serum zinc &lt; 9.9 mmol/L) and 57% in NPNL WRA (serum zinc &lt; 10.1 mmol/L) in the 2011/12 NMS (1).</td>
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<tr>
<td><strong>Dietary data:</strong> 43% of breastfed children 6–23 mo consumed meat, fish, or poultry in the past 24 h nationally in the 2014 DHS (no change since the 2011 DHS) (2, 3).</td>
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<tr>
<td><strong>Nutrient intake in children:</strong> The 2011/12 NMS found that children 24–59 mo consumed zinc below or on the lower end of the RDA and the majority of zinc consumed came from non-animal sources (1). A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of zinc was below RDA for children 9–24 mo (4).</td>
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<tr>
<td><strong>Nutrient intake in WRA:</strong> The 2011/12 NMS found that NPNL women only consume 33–50% of the daily requirement of zinc. The content of phytate in the food, an inhibitor of zinc absorption was also assessed and content was found to be particularly high (&gt; 15, per a phytate-zinc molar ratio) indicating high inhibition of zinc absorption from diet (4).</td>
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<tr>
<td><strong>Food supply nutrient availability:</strong> The amount of zinc available in the food supply was estimated to be inadequate for &gt; 30% of the national population in 2009 and 2010 (5, 6) and for 43% of the national population in 2011 (7).</td>
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<tr>
<td><strong>Vitamin A</strong></td>
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<tr>
<td><strong>Biochemical data:</strong> National vitamin A deficiency prevalence (serum retinol &lt; 0.70 µmol/L) among children 6–59 mo was 21% in the 2011/12 NMS (1).</td>
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<tr>
<td><strong>Dietary data:</strong> 67% of children 6–23 mo consumed vitamin A-rich foods in the past 24 h nationally in the 2014 DHS (minimal increase from 64% in the 2011 DHS) (2, 3).</td>
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<tr>
<td><strong>Nutrient intake in children:</strong> The 2011/12 NMS found that children 24–59 mo consumed vitamin A in lower quantities than the RDA and 60% of vitamin A consumed came from plant sources. School-aged children 6–14 years were also found to consumed less vitamin A than RDA and 71% of vitamin A consumed was from plant sources (1). A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of vitamin A was well below RDA for children 9–24 mo (4).</td>
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<tr>
<td><strong>Nutrient intake in WRA:</strong> The 2011/12 NMS found that NPNL women consumed less vitamin A than RDA, and 77% of vitamin A consumed came from plant sources (1).</td>
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<tr>
<td><strong>Food supply nutrient availability:</strong> The amount of vitamin A available in the food supply was estimated to be inadequate for &gt; 70% of the national population in 2009 and 2010 (5, 6) and for 97% of the national population in 2011 (7).</td>
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<tr>
<td><strong>Supplementation:</strong> National vitamin A supplementation coverage for children 6–59 mo was 62% in the 2014 DHS (no change from 2011) (2, 3).</td>
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7 CotD, Cost of the Diet; DHS, Demographic and Health Survey; h, hours; Mod, Moderate; mo, months; NMS, National Micronutrient Survey; NPNL, non-pregnant, non-lactating; RDA, Recommended Dietary Allowance; WRA, women of reproductive age (15–49 years); y, years.
### Calcium

**High burden gap** | **Moderate certainty evidence**

**Dietary data:** 29% of breastfed and 48% of non-breastfed children 6–23 mo consumed animal milk, respectively, and 6% of breastfed children and 13% of non-breastfed children 6–23 mo consumed other dairy foods in the past 24 h nationally in the 2014 DHS (little change from the 2011 DHS) (2, 3).

**Nutrient intake in children:** A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of calcium was well below RDA for children 9–24 mo (4).

**Diet modeling:** A 2013 CotD analysis in Sylhet Division found that calcium needs would be difficult to meet in children’s diets based on the price of calcium-rich locally available foods (9).

**Food supply nutrient availability:** The amount of calcium available in the food supply was estimated to be inadequate for > 70% of the national population in 2009 and 2010 (5, 6) and for 95% of the national population in 2011 (7).

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### Iodine

**High burden gap** | **Moderate certainty evidence**

**Biochemical data:** National prevalence of iodine deficiency (urinary iodine concentration < 100 μg/L) was 40% in children 6–14 y and 42% in NPNL in the 2011/12 NMS (1). A 2014/15 study in Dhaka City found that 83% of children aged 6–12 y were deficient in iodine, 20% had grade 1 goiter, and 24% had grade 2 goiter (10).

**Household iodized salt coverage:** 82% of households with children under 5 found to have iodized salt in the 2011 DHS (2). A 2015 survey found that while 66% of household salt had some iodine, only 51% of households had adequately iodized salt (≥ 15 ppm) (11).

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### Iron

**Moderate burden gap** | **High certainty evidence**

**Biochemical data:** National prevalence of iron deficiency (serum ferritin < 12.0 ng/ml) and iron deficiency anemia (haemoglobin < 11.0 g/dl and serum ferritin < 12.0 ng/ml) in children 6–59 mo was 11% and 7%, respectively, in the 2011/12 NMS. The 2011/12 NMS also found prevalence of anemia (haemoglobin < 11.0 g/dl) in children 6–59 mo to be 33% (1). The 2011 DHS found that anemia prevalence in children 6–59 mo was 51% (with rates > 60% for children 6–23 mo) (2).

**Dietary data:** 55% of breastfed children 6–23 mo consumed iron-rich foods in the past 24 h nationally in the 2014 DHS (negligible change from 54% in the 2011 DHS) (2, 3).

**Nutrient intake in children:** The 2011/12 NMS found that children 24–59 mo consumed iron in lower quantities than RDA and approximately 80% of iron consumed came from non-animal sources. School-aged children 6–14 years also consumed less iron than RDA and that vast majority of iron consumed was from non-animal sources (1). A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of iron was below RDA for children 9–24 mo (4).

**Nutrient intake in WRA:** The 2011/12 NMS found that NPNL women consumed less iron than RDA, with the vast majority coming from non-animal source foods (1).

**Diet modeling:** A 2013 CotD analysis in Sylhet Division found that iron needs would be difficult to meet in children’s diets based on the price of iron-rich locally available foods (9).

**Food supply nutrient availability:** The amount of iron available in the food supply was estimated to be inadequate for > 70% of the national population in 2010 (6) and for 99% of the national population in 2011 (7).

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8 The estimates for consumption of animal milk are for all children 6–23 months, however, it is recommended that children under 12 months of age do not consume milks (flavored or plain) (8).
<table>
<thead>
<tr>
<th>Vitamin $B_{12}$</th>
<th>Moderate burden gap</th>
<th>Low certainty evidence</th>
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<tbody>
<tr>
<td><strong>Biochemical data:</strong></td>
<td>The 2011/12 NMS found that 22% of NPNL WRA suffer from vitamin $B_{12}$ deficiency (serum $B_{12} &lt; 200$ pg/ml) (16% marginal deficiency and 6% deficiency). Deficiency was not estimated in children (1).</td>
<td></td>
</tr>
<tr>
<td><strong>Dietary data:</strong></td>
<td>43% of breastfed children 6–23 mo consumed meat, fish, or poultry, 6% consumed dairy, and 28% consumed eggs in the past 24 h nationally in the 2014 DHS (3).</td>
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<tr>
<td><strong>Nutrient intake in children:</strong></td>
<td>A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of vitamin $B_{12}$ was below RDA for children 9–24 mo (4).</td>
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<tr>
<td><strong>Nutrient intake in WRA:</strong></td>
<td>The 2011/12 NMS found that NPNL women in rural and food insecure areas consumed less vitamin $B_{12}$ than those in urban/slum areas or in areas with higher food security (1).</td>
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</tr>
<tr>
<td><strong>Food supply nutrient availability:</strong></td>
<td>The amount of vitamin $B_{12}$ available in the food supply was estimated to be inadequate for 74% of the national population in 2009 (5) and for 35% of the national population in 2011 (7).</td>
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<table>
<thead>
<tr>
<th>Folate</th>
<th>Moderate burden gap</th>
<th>Low certainty evidence</th>
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<tbody>
<tr>
<td><strong>Biochemical data:</strong></td>
<td>The 2011/12 NMS found that 9% of NPNL WRA suffer from folate deficiency (serum folate &lt; 6.8 nmol/L). Deficiency was not estimated in children (1).</td>
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<tr>
<td><strong>Nutrient intake in children:</strong></td>
<td>A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of folate was below RDA for children 9–24 mo (4).</td>
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<tr>
<td><strong>Nutrient intake in WRA:</strong></td>
<td>The 2011/12 NMS found that NPNL WRA consume plant source folate is much greater quantities than animal source folate (1).</td>
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<tr>
<td><strong>Food supply nutrient availability:</strong></td>
<td>The amount of folate available in the food supply was estimated to be inadequate for &gt; 90% of the national population in both 2009 (5) and 2011 (7).</td>
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<thead>
<tr>
<th>Vitamin $B_1$</th>
<th>Moderate burden gap</th>
<th>Low certainty evidence</th>
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</thead>
<tbody>
<tr>
<td><strong>Nutrient intake in children:</strong></td>
<td>A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of thiamine for children 9–24 mo was below RDA (4).</td>
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<tr>
<td><strong>Food supply nutrient availability:</strong></td>
<td>The amount of thiamine available in the food supply was estimated to be adequate for in 2010 (6) and inadequate for 65% of the national population in 2011 (7).</td>
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</table>

<table>
<thead>
<tr>
<th>Vitamin C</th>
<th>Low burden gap</th>
<th>Low certainty evidence</th>
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<tbody>
<tr>
<td><strong>Nutrient intake in children:</strong></td>
<td>A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of vitamin C was adequate for children 15–24 mo (but below RDA in children 9–12 mo) (4).</td>
<td></td>
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<tr>
<td><strong>Food supply nutrient availability:</strong></td>
<td>The amount of vitamin C available in the food supply was estimated to be inadequate for 18% of the national population in 2010 (6) and inadequate for 69% of the national population in 2011 (7).</td>
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<table>
<thead>
<tr>
<th>Niacin</th>
<th>Low burden gap</th>
<th>Low certainty evidence</th>
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<tbody>
<tr>
<td><strong>Dietary data:</strong></td>
<td>43% of breastfed children 6–23 mo consumed meat, fish, or poultry (the highest sources of niacin) in the past 24 h nationally in the 2014 DHS (no change from the 2011 DHS) (2, 3).</td>
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</tbody>
</table>
### Niacin (continued)

**Low burden gap** | **Low certainty evidence**
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**Nutrient intake in children:** A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of niacin for children 9–24 mo was below RDA (4).

**Food supply nutrient availability:** The amount of niacin available in the food supply was estimated to be very close to adequate in 2010 (6) and inadequate for 21% of the national population in 2011 (7).

### Vitamin B₆

**Low burden** | **Low certainty evidence**
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**Nutrient intake in children:** A small cohort study between 2010 and 2012 in an underprivileged slum in Mirpur, Dhaka found intake of vitamin B₆ for children 9–24 mo was below RDA (4).

**Food supply nutrient availability:** The amount of vitamin B₆ available in the food supply estimated to be inadequate for 0% of the population in 2011 (7).

### ANNEX REFERENCES


