

# Tracking consumption of unhealthy commercial food and beverages during the complementary feeding period

Findings from a longitudinal cohort study of 10–19 month-olds  
in rural/peri-urban Kandal Province

**Helen Keller Intl** conducted a study to assess and track unhealthy commercial food and beverage (UCFB) consumption of children living in rural/peri-urban Kandal province, Cambodia during the complementary feeding period and identify UCFB consumption patterns of these children. A longitudinal survey was conducted in Khsach Kandal district, with interviews conducted by telephone to ensure the safety of staff and participants during the Covid-19 pandemic. A total of 567 caregivers of children aged 10–14 months were enrolled and interviewed (timepoint 1). Caregivers were interviewed again each month when children were 11–15 months (timepoint 2), 12–16 months (timepoint 3), 13–17 months (timepoint 4), 14–18 months (timepoint 5) and 15–19 months (timepoint 6). Every month, data about caregiver and household characteristics were collected and a food frequency questionnaire (FFQ) was used to measure children’s consumption of UCFB in the previous week and the number of days of consumption. The FFQ consisted of nine categories of UCFB (Box 1) based on sentinel unhealthy foods and beverages noted in the 2021 WHO infant and young child feeding indicators and which prior research has identified as commonly consumed by Cambodian infants and young children. From the weekly FFQ, a score was generated based on how many of the seven days in the prior week each of the nine categories of UCFB was consumed. From these scores, terciles were created to identify low, moderate and high frequency consumers of UCFB at each time point. Based on UCFB score at each timepoint and changes in these scores over the six months of follow-up, children were grouped into one of three consumption patterns (Box 2).



Photo From : USAID Cambodia

**Box1: Categories of unhealthy commercial foods and beverages include:**

1. Sweet biscuits/crackers
2. Savory crisps/crackers
3. Bakery items (cake, doughnuts, sponge cake)
4. Confectionery items (candy, sweets, chocolate)
5. Soft drinks
6. Sweet milks
7. Juice drinks
8. Malt/chocolate drinks
9. Instant noodles

**Box 2: UCFB consumption patterns**

- **Maintaining/transitioning into a healthy consumption pattern.** These children held a consistently low UCFB score or moved from a high to low UCFB score over the six months.
- **Developing an unhealthy consumption pattern.** These children moved from a low to high UCFB score over the six months.
- **Maintaining an unhealthy consumption pattern.** These children held a consistently high UCFB score over the six months.



Photo From : Helen Keller International

## Our findings show that high consumption of unhealthy commercial foods and beverages began during infancy and tracked into early childhood

### Findings: UCFB consumption patterns and characteristics associated with UCFB consumption patterns

- The majority of children either maintained (45.7%, n=246) or developed (43.5%, n=234) an unhealthy consumption pattern and only 10.8% (n=58) of children maintained a healthy consumption pattern or transitioned from an unhealthy consumption pattern to a healthy one.
- Education was a factor that was significantly associated with children's UCFB consumption patterns. A significantly higher proportion of caregivers of children maintaining or transitioning into a healthy consumption pattern attended at least a secondary level of education compared with caregivers of children maintaining an unhealthy consumption pattern (63.8% vs 43.1%; p=0.016).

### Findings: UCFB consumption and Tracking

- The proportion of children who consumed any UCFB in the previous week increased steadily from 81.7% (n=463) at timepoint 1 to 97.4% (n=488) at timepoint 6.
- The median UCFB score in the previous week increased from 4 at timepoint 1 to 11 at timepoint 6 and the median number of UCFB categories consumed in the previous week increased from 2 at timepoint 1 to 4 at timepoint 6.
- These findings indicate that not only did the frequency of consumption increase but also the variety of UCFB categories consumed.
- The most common UCFB category consumed across all age groups was sweet milk, which increased from 3 days per week at timepoint 1 to 7 days per week at timepoint 6.
- High consumers of UCFB at timepoint 1 had 4.7 times the odds of being high consumers of UCFB at timepoint 6 (p<0.001), indicating that UCFB consumption did track during the complementary feeding period.



Photo From : USAID Cambodia

## Key recommendations

Our findings reveal that high consumption of unhealthy commercial foods and beverages begins early –consumption of these products starts during infancy and tracks into early childhood. What is first consumed early on can influence what children prefer and what caregivers feed for months or years after. It is therefore vital to intervene early with caregivers to safeguard child diets, especially in contexts where micronutrient gaps exist in the diets of infants and young children.

- To reduce UCFB consumption among infants and young children, caregivers' awareness of the nutritional quality of these products needs to be increased. Our study also found that children with unhealthy consumption patterns were more likely to have a caregiver with a lower level of education. Efforts to improve diet quality among older infants and young children in LMIC contexts require a more in-depth understanding of reasons caregivers feed their children UCFB. We must equip caregivers with knowledge and skills to enable optimal complementary feeding.
- We urge the Cambodian government to invest in communications strategies that highlight the risks of introducing nutrient-poor foods that are high in added sugar and salt to children early in life. Caregivers, particularly mothers and grandmothers, should be encouraged to feed locally available nutrient-rich foods as snacks during the complementary feeding period to improve child health, growth and development and reduce risks of obesity later in life. Such action aligns well with the strategic plan to expand 1,000 days health counseling and services for mothers and children under 2 years of age under the 'healthy diets for all' priority in Cambodia's Roadmap for Foods Systems for Sustainable Development 2030.
- Drivers of feeding practices need to be better understood, and interventions developed and implemented that enable healthier diets of infants and young children in Cambodia.

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