

SNACK FOOD CONSUMPTION AND PROMOTION

— DRIVERS AND IMPLICATIONS FOR INFANT AND YOUNG CHILD NUTRITION —

Good nutrition during the first 1,000 days between a woman's pregnancy and a child's second birthday is required for optimal growth and development. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life followed by the introduction of nutritionally adequate and safe complementary foods, combined with continued breastfeeding up to a child's second birthday or beyond. Good nutrition during the complementary feeding period (between 6-23 months) helps protect children against the lifelong effects of malnutrition, including impaired cognitive ability and reduced school and work performance.

Helen Keller International, through the Assessment & Research on Child Feeding (ARCH) project, assessed the consumption of commercially produced snack foods by children 6-23 months of age in four African and Asian urban contexts: Dakar, Senegal; Dar es Salaam, Tanzania; Kathmandu Valley, Nepal; and Phnom Penh, Cambodia. This study was conducted to inform programs and policies for improved infant and young child feeding at the national and global levels.

NUTRITIOUS DIETS COMBAT POOR GROWTH AND MALNUTRITION

Malnutrition remains a critical challenge in many parts of the world, with the highest rates found in African and Asian countries. The availability and consumption of commercially produced snack foods in low- and middle-income countries threaten the health of children. In countries where malnutrition rates are high—such as Cambodia, Nepal, Senegal

and Tanzania—efforts to ensure children receive adequate nutrition are especially vital.

COUNTRY	Stunting* among children under age 5 (%) ³	Minimum acceptable diet** for children 6-23 months (%) ⁴
Senegal	19	8
Nepal	37	32
Cambodia	32	30
Tanzania	35	10 ⁵

* Proportion of children too short for their age, an outcome of inadequate nutrition and repeated bouts of infection

** Receiving the appropriate number of feedings per day from an appropriate variety of food groups

During the complementary feeding period, starting at around six months, a child's dietary needs increase. Good nutrition during this period is critical to combat growth faltering and prevent malnutrition. The consumption of energy-dense, nutrient-poor foods that are high in sugar or salt during the complementary feeding period can negatively impact the nutritional status of young children. Such foods can displace other more nutrient-dense foods and lead to inadequate calorie and/or nutrient intake, increasing the risk for childhood stunting. Furthermore, the early introduction of such foods can undermine optimal breastfeeding practices and influence dietary preferences later in life, thereby increasing the risk for overweight/obesity and diet-related non-communicable diseases into adulthood.

¹World Health Organization. (2003). *Global Strategy for Infant and Young Child Feeding*. Geneva: World Health Organization. Retrieved from http://www.who.int/nutrition/publications/gi_infant_feeding_text_eng.pdf

²Pries, A.M., Huffman, S.L., Champeny, M., Adhikary, I., Diop, E.H.I., Megkheang, K., Sy, N.Y., Dhungel, S., Feeley, A., Vitta, B., and Zehner, E. Benjamin, M. (in press). Consumption of commercially produced snack foods and sugar-sweetened beverages during the complementary feeding period in four African and Asian urban contexts. *Maternal & Child Nutrition*.

³United Nations Children's Fund (2016) *The State of the World's Children 2016: A Fair Chance for Every Child*. New York: UNICEF.

⁴Ibid.

⁵Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEG), [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF International (2016). *Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2015-16*. Dar es Salaam, Tanzania, and Rockville, Maryland, USA: MoHSW, MoH, NBS, OCGS, and ICF International.

KEY FINDINGS

The consumption of commercially produced snack foods and beverages among children 6-23 months was highly common in all four study sites.

More than half of children in Dakar and Phnom Penh, and as many as 74% of children in Kathmandu Valley consumed commercially produced foods on the previous day. Over 80% of children in Dakar, Kathmandu Valley, and Phnom Penh consumed these products the previous week.

Proportion of children 6-23 months of age who consumed commercially produced snack foods (%)

STUDY SITE	PREVIOUS DAY	PREVIOUS WEEK
Dakar	59	80
Dar es Salaam	23	54
Kathmandu Valley	74	91
Phnom Penh	55	81

Mothers reported that child preference for snack foods influenced consumption

Child preference and demand for snack food products play an important role in their consumption. Mothers most commonly reported feeding their child a commercial snack food because the “child likes it.” Mothers in Dakar, Dar es Salaam and Phnom Penh also reported feeding snack foods because their child demanded or cried for the products.

Over one-third of mothers in Kathmandu Valley reported feeding commercially produced cookies, candy or cakes because they were convenient options, and one-fifth of Phnom Penh mothers reported feeding cookies because they believed they were healthy. Odds of consuming commercial snack foods increased with the age of the child, with highest rates of consumption among older children.

Consumption of sugary beverages like juice/juice drinks, soft drinks and chocolate/malt drinks also increased as the children got older. Among 12-23 month old children, snack foods were the second most commonly consumed food group in Dakar and third most common in Kathmandu Valley and Phnom Penh. In all four study sites, snack foods were more commonly consumed than micronutrient-rich foods like yellow/orange fleshed fruits and vegetables, dark green leafy vegetables, eggs and yogurt/cheese.

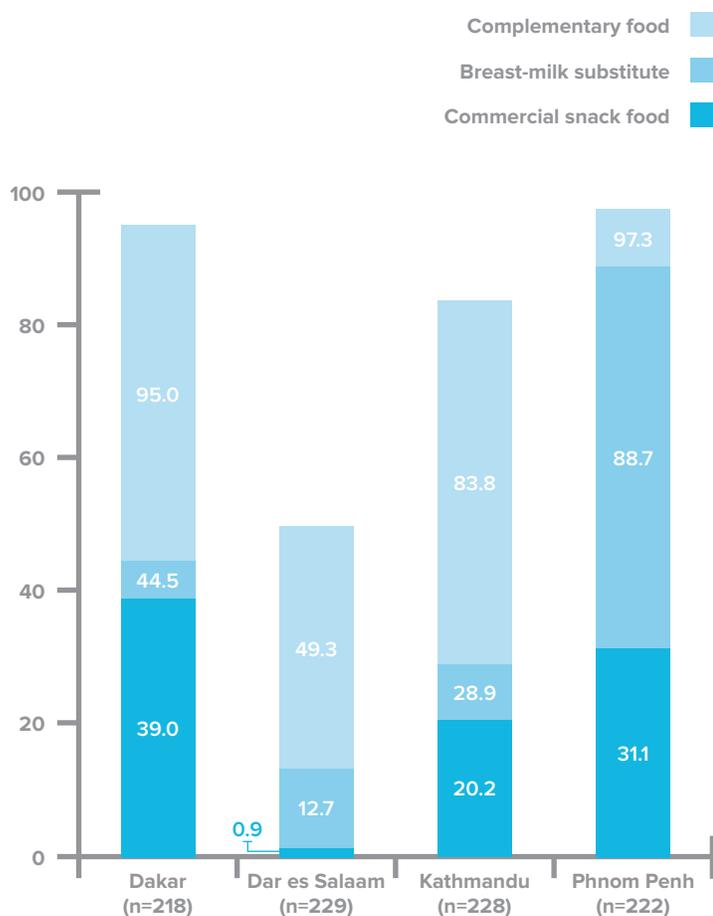
Proportion of children 6-23 months of age who consumed commercially produced snack foods on the previous day, by type of food (%)

STUDY SITE	CAKE/ DOUGHUTS	CANDIES/ CHOCOLATES	COOKIES/ BISCUITS
Dakar	7.8	48.2	24.8
Dar es Salaam	10.9	4.4	10.5
Kathmandu Valley	42.5	18.4	56.6
Phnom Penh	18.9	36.0	12.2

Snack food promotions were observed at a higher rate than those for other products

Mothers were asked to report on their observation of promotional practices for commercially produced food products. Promotional practices were defined as any type of marketing technique intended to increase sales, including media or print advertising, provision of free samples, or any other activity to encourage or induce the purchase of a product. In all study areas, mothers reported seeing promotions for commercially produced snack foods at a higher rate than those for breastmilk substitutes or complementary foods. Almost all mothers in Dakar and Phnom Penh reported observing a snack food promotion.

Proportion of mothers observing promotions of commercially produced snack food products since birth of child 6-23 months (%)



Maternal education and socio-economic status were influential factors, but cost was not

In previous studies, snack food consumption has been found to be higher among lower-income families and those with lower educational attainment. The study found this to be true in some contexts. For example, lower educational attainment was found to drive higher snack food consumption in Dakar and Kathmandu Valley, and children in the lowest wealth group were 1.5 times more likely to consume a snack food than those in the higher wealth groups in Phnom Penh.

Few mothers reported the low cost of these products as the main reason for their use. However, daily expenditure on commercially produced snack foods as reported by mothers was minimal relative to

average household food expenditure: USD \$.003-.18 in Dakar; \$.02 - .09 in Dar es Salaam; \$.05 – .09 in Kathmandu Valley; and, \$.08 – .32 in Phnom Penh.

More research on the influence of marketing and promotion of commercially produced snack foods is needed

In order to better target programs and policies, further research is needed to understand the factors associated with snack food and beverage consumption among infants and young children in low- and middle-income countries.

STRENGTHENING POLICIES AND PROGRAMS FOR IMPROVED CHILD NUTRITION

The consumption of foods high in salt, sugar and trans fats can displace the consumption of more nutritious foods and can impact a child's nutritional status. The promotion of these foods has the potential to undermine progress towards improved child health and nutrition outcomes. Based on the findings of this research, governments, businesses and others may consider the following recommendations to ensure children receive the healthiest start to life:

1. Provide mothers with information on the health consequences of feeding young children commercial snack foods and on benefits of breastmilk and locally produced healthy, complementary foods.
2. Marketing regulations should limit the degree and type of promotions that caregivers and children are exposed to. To that end, governments should fully implement the WHO set of recommendations on the marketing of foods and nonalcoholic beverages to children. A range of strategies should be implemented to limit the consumption by infants and young children of foods that are unsuitable for them.
3. Promote nutritious snack options during the complementary feeding period and discourage consumption of products high in sugar and salt, and low in nutrients.