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MCSP Nutrition Brief

Key Country Experiences in Addressing Junk Food Consumption in Maternal, Infant, and Young Child Nutrition Programming

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Background

Consumption of junk foods¹ has been observed with increasing frequency in low- and middle-income countries and has been implicated in the rising rates of overweight, obesity, and diet-related non-communicable diseases, including heart disease and diabetes. Junk food consumption can contribute to the ‘double burden of malnutrition’, which is defined as the ‘dual burden of undernutrition² and overweight/obesity occurring simultaneously within a population’ (Shrimpton & Rokx, 2012). Countries experiencing a ‘nutrition transition’ are characterized by several key factors, including increasing consumption of junk foods, and a growing number of meals purchased and/or consumed away from home. Families in both urban and rural areas are affected by increased access to unhealthy, processed foods, as the prevalence of child overweight is rising in many low- and middle-income countries. A cross-sectional survey conducted in four urban Asian and African contexts found that 23-74% of children 6-23 months of age had consumed a commercially prepared snack food the previous day (Pries et al., 2017).

Junk foods are defined as foods that are unhealthy, which contain added sugar, are high in fat, and/or high in salt. These foods are low in nutrient content.

Processed foods are any food which is not in its raw and natural state, and can include healthy foods, such as fortified complementary foods.¹ Foods fried in oil or other fats, i.e. fried potatoes, are considered “minimally processed” and “moderately processed” foods can contain additional flavor additives (i.e., sweeteners, salt, flavors, or fats)-such as, canned fruits in syrup. “Highly processed” foods such as margarine and “highly processed stand-alone” foods such as cookies, biscuits, chips/crisps, candy, sugar sweetened beverages (juice, flavored water), soft drinks, and refined-grain breads are also in this category of foods.

It is imperative that efforts to improve maternal, infant, and young child nutrition practices and nutritional status in low- and middle-income countries address the consumption of low-nutrient, processed foods. Improved maternal, infant, and young child nutrition practices are part of the solution to reach a 40% reduction in the number of children under 5 years of age who are stunted and no increase in childhood overweight, as outlined in World Health Assembly 2025 targets (WHO, 2014).

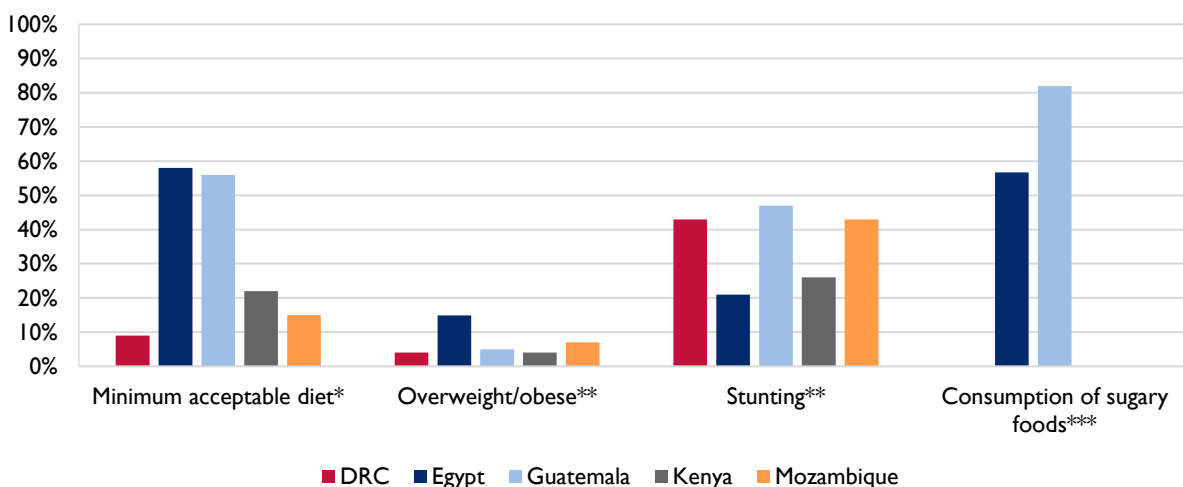
¹ Healthy fats are not included in this definition. See Poti et al., 2015, in References for further detail.

Country Experiences Addressing Junk Food Consumption

How Did MCSP Work with Countries to Address Junk Food Consumption Within the Context of Maternal, Infant and Young Child Nutrition Programming?

Using formative assessments, implementation research and e-learning, MCSP developed culturally relevant messages and counseling materials on junk food consumption in Egypt, Kenya, Mozambique, the Democratic Republic of the Congo (DRC), and Guatemala aimed at reaching mothers of children under five years of age.

Figure 1. Key Child Nutrition Indicators by Country, Demographic & Health Survey Data (2008-2015)



*In children 6-23 months

**In children under 5

***In non-breastfeeding children

Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), Ministère de la Santé Publique (MSP) and ICF International. 2014. *Enquête Démographique et de Santé en République Démocratique du Congo 2013–2014*. Rockville, Maryland, USA: MPSMRM, MSP and ICF International.

El-Zanaty, Fatma and Ann Way. 2009. *Egypt Demographic and Health Survey 2008*. Cairo, Egypt: Ministry of Health, El-Zanaty and Associates, and Macro International.

Ministry of Health and Population [Egypt], El-Zanaty and Associates [Egypt], and ICF International. 2015. *Egypt Health Issues Survey 2015*. Cairo, Egypt and Rockville, Maryland, USA: Ministry of Health and Population and ICF International.

Ministerio de Salud Pública y Asistencia Social (MSPAS), Instituto Nacional de Estadística (INE), ICF International. 2017. *Encuesta Nacional de Salud Materno Infantil 2014–2015*. Informe Final. Guatemala: MSPAS/INE/ICF.

Kenya National Bureau of Statistics, Ministry of Health, National AIDS Control Council, Kenya Medical Research Institute, National Council for Population and Development and ICF International. 2015. *Kenya Demographic and Health Survey 2014*. Nairobi, Kenya and Rockville, MD: KNBS and The DHS Program/ICF International.

Ministerio da Saúde (MISAU), Instituto Nacional de Estadística (INE) and ICF International (ICFI). 2011. *Moçambique Inquérito Demográfico e de Saúde 2011*. Calverton, Maryland, USA: MISAU, INE and ICFI.

Use of Trials of Improved Practices (TIPs)

In Egypt, Kenya, and Mozambique, development of key counseling messages and materials on junk food consumption were based on the formative assessments or research using the Trials of Improved Practices (TIPs). Consisting of three household visits to the mother, TIPs is a consultative methodology used to determine existing infant and young child feeding (IYCF) practices in the first visit, negotiate with the mother new practices to try in the second visit, and following up with them one week later (the third visit) to determine if they were able to practice the counseled behaviors, what they thought of them, and if they would continue to practice them (Manoff Group, 2015). The methodology identifies barriers, solutions to the barriers, and facilitating factors to practicing optimal IYCF, which emanate from the mothers trying out the practices in their households — their real context.

Table 1. Key Messages on Junk Food Consumption From TIPs Studies by Country

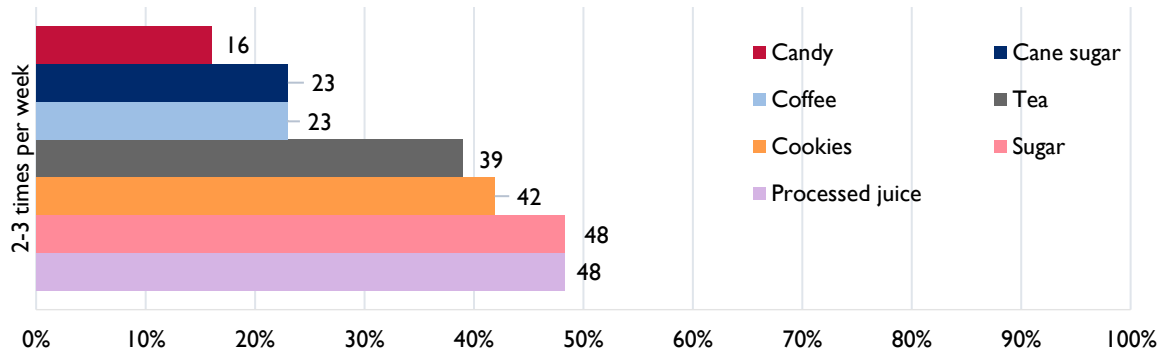
Country	Key Feeding Problem	Key Counseling Messages to Address Feeding Problem	Motivation
Egypt (MCHIP, 2014)	<ul style="list-style-type: none"> Baby is fed non-nutritive liquids or foods (potato chips, store-bought small sponge-cakes filled with creme, soda) 	<ul style="list-style-type: none"> Stop giving non-nutritive liquids or foods (potato chips, store-bought small sponge-cakes filled with creme, soda). Babies younger than two years of age should never have these foods. Instead, give a snack such as half a banana, a piece of cooked sweet potato, a piece of pear 	<ul style="list-style-type: none"> These foods are not nutritious for your baby and do not help your baby grow These foods contain preservatives, coloring, and food additives, which are harmful to your baby These foods are often rich in salt or sugar and can cause dental caries and diseases in children and later in life (e.g., high blood pressure, problems with kidneys, obesity, diabetes) These foods are very expensive. It is cheaper and better to buy an egg or some fruit
Kenya (MCSP, 2017a)	<ul style="list-style-type: none"> Baby eating unhealthy snacks (e.g., soda, processed juice, or fried potatoes with sauce) 	<ul style="list-style-type: none"> Stop giving unhealthy processed “junk” foods, such as soda and processed juice, fried potatoes with sauce, sweets, and biscuits Give healthier snacks, such as fruits (e.g., whole bananas, avocado, mangoes, and oranges) Healthy snacks recommended include locally available fruits, nuts, and porridge, etc. 	<ul style="list-style-type: none"> Unhealthy snacks only add fats and sugars, and no other nutrients Unhealthy snacks are more expensive These foods will not help your child to grow well and do not contribute to good health Healthy snacks have more nutritive value Fruits and legumes – such as peanuts – are available locally and affordable Fruits improve the appetite of the child
Mozambique (MCSP, 2017b)	<ul style="list-style-type: none"> Child is fed non-nutritive liquids or foods (artificial juices in powder form diluted in water, soft drinks, sugary cakes, cookies) 	<ul style="list-style-type: none"> Stop giving these types of foods or liquids. Instead of buying cookies or cakes, buy peanuts, meat, or fish to cook stews with, or an egg, or a healthy snack like a piece of fruit Give your child a snack such as half a banana or a piece of cooked sweet potato Give your child half a cup of clean, treated water instead of soft drinks and artificial juices 	<ul style="list-style-type: none"> These foods and liquids are no nutritious for your child and do not help your child grow These foods and liquids contain preservatives, which can be harmful to your child These foods are often rich in salt or sugar and can cause dental caries and diseases later in life These foods are very expensive. It is cheaper for you and better for the child to buy an egg or some fruit

Use of Formative/Implementation Science Research

MCSP used formative research to examine how to strengthen nutrition services within integrated community case management (iCCM) of child illness, which provided an opportunity to improve IYCF and care practices, including junk food consumption, (Friedman & Wolfheim, 2014). iCCM guidelines focus on the identification, treatment, and referral of children who are sick with diarrhea, pneumonia, and/or malaria, as well as malnutrition. Yet, while guidelines often include nutrition, they are often carried out ineffectively to support improvements in IYCF (WHO & UNICEF, 2012). MCSP used the information to inform on an approach to strengthen preventative and curative aspects of nutrition into iCCM.

In the DRC, this study revealed that sugary biscuits, sweets/candies, and sweetened and caffeinated beverages are a notable part of young children’s diets (with consumption of 12-36 grams, equivalent to up to 1/4 cup of sugary snacks, per week) (Figure 2). Biscuits may sometimes be added to porridge or tea, and can be fed at meal times, rather than just as a snack (Kavle et al., 2018). Most mothers faced financial challenges and stated nutrient-rich foods such as meat, milk, fruits, and vegetables were cost-prohibitive for the family, which limited the diet diversity of the children (Kavle et al., 2018). While some facility- and community-level health providers have been trained in IYCF, gaps in services remain, due to lack of resources, SBCC materials, inadequate counseling skills, and a lack of a solid understanding of key nutrition counseling messages on IYCF to provide families (Linguissi et al., 2017; Maketa et al., 2013). Information on reducing or eliminating junk food consumption was incorporated into revised MOH IYCF counseling cards in DRC.

Figure 2. Percentage of Foods Consumed at least 2-3 Times Per Week that are Processed “Junk” Foods or Warm/Sweet Beverages, by Children Aged 6-59 Months



E-Learning to Strengthen Knowledge and Skills of Health Providers

E-learning, according to the WHO, is learning that takes place through electronic technology or media (WHO, 2018). In 2012, in Guatemala, the Diplomado e-learning course was developed by the FANTAIH project to strengthen the knowledge and skills of health providers to improve the provision of services and counseling on nutrition at the primary health care level (i.e., in health posts) (Palmieri et al., 2017). MCSP assessed the impact of the Diplomado course on health providers’ knowledge and found a 28% increase in pre- to post-test scores among providers who took the Diplomado course. MCSP has adapted the complementary feeding unit to include messages on consumption of junk foods. This also includes counseling messages for caregivers on which foods should be avoided, including junk foods, and provides alternative healthy foods which can be fed to children. The following messages on healthy eating were incorporated into the Diplomado:

- Promote the consumption of unprocessed natural foods, that is, all kinds of fruits, vegetables, herbs, seeds, meats and foods that have not been processed
- Motivate the mother to decrease the consumption of processed foods, such as junk foods, cup soups, sweets, candies, canned foods, and all those foods that contain an excessive amount of sodium, fat, or sugar
- Explain why it’s best/healthiest that the mother avoid eating foods, such as: fried chicken, potato chips, tacos, and other foods that contain high saturated fat (meat fat, butter, margarine, cream, and oil)

Program Implications

How Can Programs Address Junk Food Consumption Within the Context of Maternal, Infant and Young Child Nutrition Programming?

Optimal MIYCN practices are critical to prevent all forms of malnutrition during the first two years of life and are an important component of USAID’s 2014-2025 Multi-sectoral Nutrition Strategy and reaching Ending Preventable Child and Maternal Death (EPCMD) goals. The 2016 Lancet series on breastfeeding found that longer periods of breastfeeding are associated with a 26 percent reduction in the likelihood of a child becoming overweight or obese (Victora, 2016). MIYCN programming should address barriers that impede immediate and exclusive breastfeeding during the first 6 months of life, including perceptions of

insufficient breast milk. They should also discourage early introduction of foods and liquids, including junk foods, as a remedy to perceived lack of breast milk, which displaces and disrupts exclusive breastfeeding. The importance of feeding nutritious complementary foods and not feeding junk foods as part of the daily meals and/or snacks is critical information to convey to families with children, 6–23 months of age.

Key Recommended Interventions to Address Junk Food Consumption Among Infant and Young Children at the Country Level (MCSP, 2016; Jaacks et al., 2017)

- National level:
 - Include overweight and obesity in key policy and strategic documents.
 - Address junk food consumption and as part of IYCF feeding programming and strategy
- Health facility level:
 - Healthcare providers and families need to understand healthy versus unhealthy weight gain and can learn to monitor excessive and/or rapid weight gain within the context of undernutrition programming.
 - Its best to advise families that junk foods are detrimental to the growth of children and the entire family's health and well-being, and providers should be trained to provide nutrition counseling for families during routine growth monitoring visits.
- Community level:
 - Provide supportive environments (i.e., mothers/community support groups, campaigns with IYCF messaging) to discuss with mothers and their families about reducing and/or eliminating the introduction of junk foods and sweetened beverages and explain the health consequences of these foods on child health, growth, and development.
 - Alternatives to sugary and high-fat foods, including available, affordable, and local foods such as fruit or sweet potato or other locally available foods, should be encouraged for consumption by infants and young children.
- Regulation of and early exposure to junk foods:
 - Remove or limit access to kiosks and sellers of unhealthy snacks near preschools, nurseries, and schools.
 - Regulate the marketing of breast milk substitutes, per the WHO *International Code of Marketing of Breastmilk Substitutes*, as well as the marketing of inappropriate complementary foods, including junk foods, to infants and young children, as recommended by WHO (WHO, 2006 & 2015b).
 - Enact food labeling legislation, such as mandatory front-of-package labels and a 'nutrition seal' obtained with compliance to nutritional standards (i.e., Mexico).
 - Regulate the marketing of junk foods and sweetened beverages to children, particularly early in life, which includes television programs.
 - Ensure standards and guidelines are in place for nutritious food provision at preschools and early childhood development centers.
 - Consider tax regulations as a means for controlling consumption of sweetened beverages and processed foods.
- Data Gaps in survey data and formative assessments:
 - Disaggregation of DHS data on types of sugary (i.e., biscuits, cookies, cakes), high-fat, and/or high salt foods, (i.e., fried foods, chips/crisps) and drinks (i.e., soft drinks, sweetened juices) that are consumed by infants and young children is needed to provide insight into trends and food patterns every three to five years. Currently, these data are not disaggregated by type of sugary foods and high fat and/or high salt foods consumed.

More formative research and qualitative information is needed on the drivers of junk food intake and food choice for mothers and families of infants and young children, including motivations for feeding junk foods, which can aid in the development or mid-course directions in current programming around IYCF. It is essential to address junk food consumption, as part of IYCF counseling and interventions, to prevent all forms of malnutrition.

References

- Friedman L & Wolfheim C. 2014. *Linking Nutrition and (Integrated) Community Case Management (ICCM/CCM): A Review of Operational Experience*. London.
- Jaacks LM, Kavle J, Perry A, et al. 2017. Programing maternal and child overweight and obesity in the context of undernutrition: Current evidence and key considerations for low- and middle-income countries. *Public Health Nutrition*, 20(7):1286-1296.
- Kavle JA, et al. 2018. *Strengthening nutrition in the integrated community case management of childhood illness in the Democratic Republic of the Congo: Qualitative research report*. Washington, DC: MCSP.
- Linguissi LSG, Gwom LC, Nkenfou CN, et al. 2017. Health Systems in the Republic of Congo: Challenges and Opportunities for Implementing Tuberculosis and HIV Collaborative Service, Research, and Training Activities. *International Journal of Infectious Diseases*, 56:62–67.
- Maketa V, Vuna M, Baloji S, et al. 2013. Perceptions of Health, Health Care and Community-Oriented Health Interventions in Poor Urban Communities of Kinshasa, Democratic Republic of Congo. *PLoS ONE*, 8(12):1–8.
- Manoff Group. 2015. *Trials of Improved Practices (TIPs): Giving participants a voice in program design*. Washington, DC: Manoff Group.
- Maternal and Child Health Integrated Program [MCHIP]. 2014. *A counseling guide for infant and young child feeding in two regions of Egypt: Based on results of Trials of Improved Practices (TIPs) stunting study*. Washington, DC: MCHIP.
- Maternal and Child Survival Program [MCSP]. 2016. *Junk food consumption is a nutrition problem among infants and young children: Evidence and program considerations for low- and middle-income countries*. Washington, DC: MCSP.
- MCSP. 2017a. *A counseling guide for complementary feeding for children 6-23 months in Kisumu and Migori, Kenya: Based on results of Trials of Improved Practices (TIPs) complementary feeding assessment*. Washington, DC: MCSP.
- MCSP. 2017b. *A counseling guide for infant and young child feeding in Mozambique: Based on results of Trials of Improved Practices (TIPs) assessment*. Washington, DC: MCSP.
- Shrimpton R & Rokx C. 2012. *The Double burden of malnutrition: A review of global evidence*. *Health, Nutrition and Population (HNP) Discussion Paper*. Washington, DC: The World Bank.
- Palmieri M, Kavle JA, & Mesarina K. 2017. *Informe: Apreciación del Diplomado de Nutrición Materno Infantil*. Guatemala. Washington, DC: MCSP.
- Poti JM, Mendez MA, Ng SW, et al. 2015. Is the degree of food processing and convenience linked with the nutritional quality of foods purchased by US households? *Am J Clin Nutr*, 101(6):1251-62.
- Pries AM, Huffman SL, Champeny M, et al. 2017. 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*, 13(S2).
- Victora CG, Fernando C, Barros FC, et al. 2012. Scaling up maternal nutrition programs to improve birth outcomes: A review of implementation issues. *Food Nutr Bull*, 33(2 Suppl 1):S6-S26.
- World Health Organization [WHO] & UNICEF. 2012. *Joint Statement: Integrated Community Case Management (ICCM)*. Geneva, Switzerland and New York, NY: WHO & UNICEF.
- WHO. 2018. "Health Academy." <http://www.who.int/healthacademy/en/> (Accessed September 24, 2018).

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