

ARCH

ASSESSMENT & RESEARCH
ON CHILD FEEDING



Objective of the ARCH Project:

Generate evidence and strengthen policies and programs that promote optimal infant and young child nutrition.

Policy and programmatic achievements

At the global level, ARCH research and advocacy have contributed to:

- The adoption of World Health Assembly resolution 69.9 in 2016, which produced guidance to end the inappropriate promotion of foods for infants and young children.
- The revision of the Codex standard on follow-up formula, finalized in 2023.
- The publication of numerous scientific papers on the availability, promotion, labelling, and consumption of foods for infants and young children in Senegal.

At the national level, ARCH research and advocacy have contributed to:

- The Government of Senegal's commitment to updating the Inter-ministerial Decree N3969 (1994), by developing a draft Decree to regulate the marketing of foods for infants and young children.
- The creation of a Maternal Diet - Infant and Young Child Feeding (AM-ANJE) guide.
- Building capacity of health workers to counsel on optimal feeding practices for infants and young children.



Key Recommendations

Policies and programs should seek to improve the nutrition of infants and young children by taking the following actions:

Policies

1. Adopt the draft Decree to regulate the marketing of foods for infants and young children.
2. Develop national standards regulating the nutritional composition, packaging, and labeling of commercially produced complementary foods.
3. Adopt texts and measures to limit the consumption of added sugars and unhealthy foods and beverages among infants and young children.

Programs

1. Implement programming that will support local, small and medium-sized businesses to produce complementary foods with improved nutritional composition and labeling.
2. Build capacity of healthcare providers and community stakeholders regarding the Code of marketing of breastmilk substitutes and counseling and support for continued breastfeeding up to two years of age and beyond.
3. Provide strong nutrition education to mothers and caregivers before they begin complementary feeding, including guidance on limiting infant and young child consumption of added sugars and unhealthy foods and beverages.

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Select ARCH research has been published in
Maternal & Child Nutrition and can be accessed
by scanning the following QR code:



BRIEF 1

STUDY OF COMMERCIALY PRODUCED COMPLEMENTARY FOOD (CPCF) LABELLING PRACTICES

DAKAR, SENEGAL, 2013

Definition of Commercially Produced Complementary Foods (CPCF):

Any commercially produced food or drink, excepting breastmilk substitutes, with a label indicating that it is intended for children under two years of age, by :

1. Using words targeting this age group (e.g., “baby”, “infant”, “young child”) ;
2. Having information on the label recommending the product be provided to a child under two years of age ; or
3. Using image(s) of a child appearing to be under two years of age or images or text related to infant feeding (e.g., image of a baby bottle).



Context

Good nutrition is central to infant and young child growth and development. Complementary feeding is a crucial period during which optimal nutrition can give children a strong start in life.

Objectives

1. Identify CPCF intended for newborns and children under two years of age that are sold in Dakar Department.
2. Describe the degree to which labels of these CPCF conform to relevant national and international guidance.

Methodology

A cross-sectional study was conducted in Dakar Department, identifying CPCF products sold across 31 points of sale. Label information was extracted and evaluated against the *International Code of Marketing of Breast-milk Substitutes*.

Key results

1. Most CPCF are not manufactured locally.

- Among the 84 CPCF products identified by the study, 93% were imported from Europe.

2. Inappropriate labelling practices are widespread and could negatively impact optimal infant and young child feeding.

- Among the 84 product labels analyzed, only 24% provided information regarding a daily ration or serving size.
- Although guidance states that it is inappropriate to recommend that CPCF be fed by bottle, 21% of CPCF labels recommended this practice, including over 1/3 of cereal CPCF labels.
- Even though claims are forbidden on products for infants and young children, 83% of labels included nutrient content claims (e.g., “source of iron and calcium”).

3. Violations of the *International Code of Marketing of Breast-Milk Substitutes* are prevalent.

- Roughly 25% of the products in the study explicitly or implicitly stated that the product was appropriate for children under 6 months of age.
- Among CPCF products made by companies that also manufacture breast-milk substitutes, 92% of labels included invitations (e.g., invitation to the consumer to contact the company), which may be considered a violation of the Code.

Key recommendations

1. Operationalize existing international guidance by assisting countries to develop clear and specific regulations that protect optimal infant and young child feeding practices.
2. Revise Senegal's 1994 *Inter-Ministerial Decree*, which currently regulates marketing of breast-milk substitutes, to provide updated guidance on regulating the promotion and labelling of breast-milk substitutes and commercially produced complementary foods.



BRIEF 2

STUDY OF THE PROMOTION OF FOODS FOR INFANTS AND YOUNG CHILDREN AT POINTS-OF-SALE

DAKAR, SENEGAL, 2013

Definition of promotion: Any marketing technique to increase sales (IBFAN 2007). Examples include price discounts, coupons, free samples, and advertising.



Context

Senegal's 1994 *Inter-ministerial decree setting the conditions for marketing of breast milk substitutes* includes explicit provisions prohibiting the distribution, sale, advertising, and idealized representation of breastmilk substitutes in the health system. However, it does not regulate promotion of breastmilk substitutes (BMS) or commercially produced complementary foods (CPCF) at points-of-sale (POS) outside of the health system.

Objectives

1. Estimate the prevalence of promotion of foods for infants and young children at POS in Dakar Department, with a focus on BMS, CPCF, and unhealthy commercial foods and beverages commonly consumed by young children in this context.
2. Assess the types of promotional practices used at POS for these products.

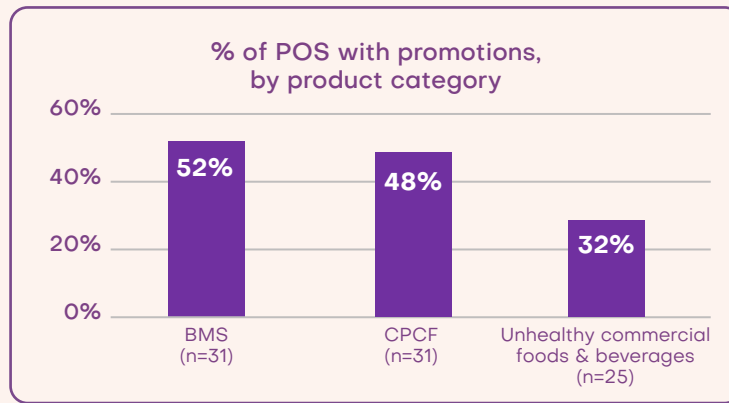
Methodology

Data was collected from 31 POS in Dakar Department – including small retailers, pharmacies, and supermarkets – using data collection forms that captured POS characteristics and types of promotional practices observed.

Key results

1. Promotion is widespread.

- Promotion of BMS was observed in over half of the POS selling these products (see Figure below).
- Five of the seven pharmacies visited promoted all three stages of BMS (infant formulas, follow-up formulas, and growing up milks).



- CPCF were subject to similar levels of promotion, with promotion at almost half of their POS.
- A third of POS selling unhealthy commercial foods and beverages commonly consumed by young children had promotions of these products.

2. Product display was the most common promotional practice.

- 87% of promotional practices involved product displays (e.g., special brand or product shelves, window displays, posters, new product launches).
- 12% of promotional practices involved price-related promotions (e.g., coupons, discounts) and 2% were free gifts.

Key recommendations

The 1994 *Inter-ministerial decree* forbids promotion of BMS within the health system. Additional guidelines are needed to regulate the promotion of foods consumed by infant and young children in Senegal by :

1. Strengthening the application of all provisions in the *International Code of Marketing of Breast-milk Substitutes* and subsequent World Health Assembly resolutions.
2. Raising awareness among manufacturers, distributors, and retailers about inappropriate promotional practices, with clear and transparent communication regarding the responsibilities of each stakeholder.



BRIEF 3

STUDY OF PROMOTION AND CONSUMPTION OF COMMERCIAL FOODS FOR INFANTS AND YOUNG CHILDREN AT HEALTH FACILITIES

DAKAR, SENEGAL, 2014



Context

Inappropriate promotion of commercial products in health facilities can undermine optimal infant and young child feeding. Appropriate counselling and support is needed to reinforce positive infant and young child feeding practices.

Objectives

1. Estimate the prevalence of promotion of breastmilk substitutes (BMS) and commercially produced complementary foods (CPCF) within the health system.
2. Measure the prevalence of consumption of BMS, CPCF, and unhealthy commercial foods and beverages by infants and young children.
3. Document mothers' experiences of breastfeeding support and counseling related to complementary feeding at health facilities.

Methodology

A cross-sectional study was conducted, with data collected through interviews with mothers of children under 24 months of age who were attending health facilities in Dakar Department. Interviews focused on mothers' experiences in health facilities as well as their behaviors since the birth of their youngest child under 24 months of age.

Key results

- 1. Promotion of BMS and CPCF is widespread in health facilities.**
 - 92% of health workers interviewed reported being frequently approached by representatives of BMS manufacturers to promote their products.
 - Almost 20% of mothers reported seeing images or logos of BMS and/or CPCF on equipment used in the health facilities.

- 16% of mothers reported seeing posters with BMS and/or CPCF in the health facilities.
- 2. BMS, CPCF, and unhealthy commercial foods and beverages are consumed by many infants and young children. In the previous day, among children 6-23 months of age :**
- 20% had consumed a BMS; 49% had consumed a CPCF; and 59% had consumed an unhealthy commercial food or beverage (e.g., chips, cookies, candies).
- 3. Counselling and support for breastfeeding need to be strengthened in the health system.**
- Less than 20% of mothers said they received information related to breastfeeding during prenatal consultations.
 - 29% of mothers said that a health worker recommended they use a BMS.

Key recommendations

These results indicate an urgent need for improvement in infant and young child feeding (IYCF) support and practices in health facilities in Senegal, through:

1. Regulation and monitoring of inappropriate promotion of commercial products, especially BMS, in health facilities.
2. Capacity building of health workers regarding the *International Code of Marketing of BMS*, counseling, and support for optimal IYCF practices, including breastfeeding.



BRIEF 4

STUDY USING THE DRAFT WHO NUTRIENT PROFILE MODEL TO EVALUATE LABELS OF COMMERCIALY PRODUCED COMPLEMENTARY FOODS SOLD IN URBAN AND PERI-URBAN AREAS

DAKAR AND GUEDEAWAYE, SENEGAL, 2021

Definition of Commercially Produced Complementary Foods (CPCF): Any commercially produced food or drink, excepting breastmilk substitutes, that is labelled or marketed as suitable for older infants (6–12 months old) or young children (12–36 months old), by meeting at least one of the following criteria :

1. Having a recommended age of introduction of less than three years of age ;
2. Having a label using the words “baby”, “infant”, “toddler”, “young child”, or synonyms ;
3. Having a label including image(s) of a child appearing to be under three years of age or who is feeding with a baby bottle; or
4. Presented in any other way as being intended for children under three years of age.



Context

The World Health Organization (WHO) has encouraged the development and use of nutrient profile models (NPM) to guide decisions about which foods intended for infants and young children are inappropriate for promotion. In 2019, the WHO Regional Office for Europe published a nutrient profile model specific to CPCF, entitled the ‘Draft WHO EURO Commercially Available Complementary Food Nutrient Profile Model’ (Draft NPM).

Objectives

1. Assess the nutrient composition of CPCF sold in a peri-urban and urban area of Senegal against the nutrient composition thresholds of the Draft NPM.
2. Assess labeling practices of these CPCF in relation to the labeling requirements of the Draft NPM.
3. Quantify the number of CPCF sold that meet both the nutrient composition thresholds and labeling requirements of the Draft NPM.

Methodology

A cross-sectional study purchased 348 different CPCF from 41 points-of-sale in Dakar Department (n=10) and Guédiawaye Department (n=31). Product label information was extracted, then assessed against the nutrient composition thresholds and labeling practice requirements of the Draft NPM.

Key results

1. Most CPCF sold in Senegal are imported.

- Of the 348 CPCF products identified, 92.5% were imported and only 7.5% were manufactured locally. There was a total of 25 international and 7 domestic manufacturers.
- The majority (82%) of CPCF were manufactured in Europe.

2. Only 17% of the 329 CPCF assessed met all applicable nutrient composition thresholds of the Draft NPM.

- Less than 10% of dry, powdered, or instant cereal/starchy food products; 22% of purees; and 14% of meals with chunky pieces met all applicable nutrient composition thresholds for their category.
- No snacks/finger foods met the nutrient composition thresholds for their category.
- Added sugars/sweeteners were particularly problematic for some categories. Only 12% of the dry, powdered, or instant cereal/starchy food products and 0% of the snacks/finger foods met the 'no added sugar/ sweeteners' requirement.

3. None (0%) of the 329 CPCFs assessed met all applicable labeling requirements of the Draft NPM.

- Few (12%) CPCF included a comprehensive message about the importance of continued breastfeeding up to two years and beyond.
- More than half (57%) of CPCF labels used images or text suggesting that the product was suitable for infants under 6 months of age.
- Except for one puree product, all CPCF did not meet the «no claim» requirement of the Draft NPM, making at least one claim each.

4. According to the Draft NPM, no CPCF were suitable for promotion to older infants and young children (6–36 months).

- None of the 348 CPCF included in the study met all applicable nutrient composition thresholds and labeling requirements of the Draft NPM.

Key recommendations

Policies and programs should seek to ensure that CPCF for children ages 6–36 months are appropriately formulated and labelled. The following actions are necessary :

1. Adapt the Draft NPM to the Senegalese context, to ensure that CPCF sold have appropriate nutrient compositions and labels for older infants and young children.
2. Use the results of this study to strengthen advocacy for the adoption of the draft Decree to regulate the marketing of foods for infants and young children.
3. Support small and medium-sized local businesses in improved composition and labelling of CPCF and thus increase the supply of local CPCF that meet standards for good infant and young child nutrition.

BRIEF 5

STUDY OF THE CONSUMPTION OF UNHEALTHY FOODS AND BEVERAGES (UFB) AMONG YOUNG CHILDREN

GUEDEAWAYE, SENEGAL, 2021

Definition of Unhealthy Foods and Beverages (UFB):

Any sweet beverage (e.g., juice, sweet milk), sweet food (e.g., cookie, candy), or fried/salty food (e.g., chips, donut) with an 'unhealthy' nutrient profile (using the United Kingdom Food Standards Agency model).



Context

Nutrient-dense, healthy diets are essential during young childhood to ensure optimal growth and development. UFB are generally nutrient-poor and rich in sugar, sodium, and/or unhealthy fats, making them inappropriate for infant and young child feeding.

Objectives

1. Describe the diets of young children and quantify UFB consumption.
2. Assess associations between UFB consumption and nutrition outcomes.

Methodology

A cross-sectional study collected data from 724 primary caregivers of children 12 to 35.9 months of age living in Guédiawaye Department. The study included a questionnaire, a 24-hour dietary recall, and anthropometric measurements (weight, height).

Key results

1. **Unhealthy foods and beverages (UFB) make up a significant share of young child diets.**
 - Almost 90% of children consumed at least one UFB in a 24-hour period.
 - On average, 22% of children's total energy intake of non-breastmilk foods came from UFB.

2. Sugar is a key area of concern.

- Adding sugar to foods and beverages fed to young children was very common practice (e.g., half of children consumed milk with sugar added in the previous day).
- Sweet commercial products were often prioritized over less-sweet alternatives (e.g., sweet vanilla yogurt was consumed far more than plain yogurt).

3. High consumption of UFB is associated with reduced nutritional quality of diets.

- The third of the sample with the highest UFB consumption ('high consumers', n=241) had diets that were denser in protein, fiber, and 7 of the 11 micronutrients studied (Ca, Fe, Zn, vitamins B1, B2, B6 and B12), as compared to the third of the sample with the lowest UFB consumption ('low consumers', n=241).
- The diets of high UFB consumers were also significantly denser in total sugar, total fat, and saturated fat.

4. UFB increasingly dominate diets as children age through young childhood.

- UFB constituted on average 19% of total energy intake (non-breastmilk foods) for children aged 12 to 17 months. This percentage increased steadily, reaching almost 28% for children aged 30 to 35 months.

Key recommendations

Policies and programs should seek to improve young child nutrition by:

1. Promoting healthy food environments, making healthy options more accessible, affordable, attractive, and appealing than UFB.
2. Specifically addressing UFB in infant and young child feeding policies and programs. For example, developing dietary recommendations that suggest avoiding or limiting the consumption of UFB for this age group.
3. Counselling populations on what UFB are and how to improve the healthfulness of diets. This should include counselling before complementary feeding of young children begins and throughout early childhood to prevent increasing consumption of UFB with age.
4. Building awareness regarding the importance of reducing and/or eliminating added sugars in foods and beverages given to infants and young children, including among healthcare providers, community stakeholders, and caregivers of young children.