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In-Country Assessments of Baby Food Companies' Compliance with the International Code of Marketing of Breast-milk Substitutes

Thailand Report

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Disclaimer

Westat, with its local subcontractor in Thailand, was responsible for the collection of data related to company compliance with the International Code of Marketing of Breast-milk Substitutes and any additional country-specific regulations related to marketing of these products. Westat is responsible for the analysis of the data related to compliance with the BMS marketing standards and for preparation of summary reports that have been incorporated by Access to Nutrition Foundation (ATNF) into the scoring of company performance for the 2018 Access to Nutrition Global Index. Westat and its local subcontractor engaged with health care facilities, mothers of infants who attended those facilities, health workers at the facilities, and retailers as part of the data collection and analysis process.

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Acronyms

ATNF	Access to Nutrition Foundation
ATNI	Access to Nutrition Index
BMS	Breastmilk Substitute
CF	Complementary Foods
FOF	Follow-on Formula
GUM	Growing-up Milk
HCF	Health Care Facility
IF	Infant Formula
IBFAN	International Baby Food Action Network
IGBM	Interagency Group on Breastfeeding Monitoring
IHPF	The International Health Policy Program Foundation
NetCode	Network for Monitoring and Support for Adherence to the Code
UNICEF	United Nations Children's Fund
WHA	World Health Assembly
WHO	World Health Organization

Executive Summary

In the spring of 2017, the Access to Nutrition Foundation (ATNF) commissioned a survey in Bangkok, Thailand to assess systematically baby food manufacturers' compliance with the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly (WHA) Resolutions (together referred to hereafter as the Code). Further, ATNF assessed the extent to which companies comply with national Notifications of the Food and Drug Administration (FDA) with respect to labeling, in areas where the regulations go beyond the provisions of the Code. The purpose of this study is to determine whether those companies whose BMS products and/or complementary foods (CFs) were for sale in Bangkok conform fully with the provisions of the International Code of Marketing of Breast-milk Substitutes, subsequent WHA resolutions and national regulations controlling the marketing and labeling of these products, in order not to undermine optimal infant and young child nutrition, which is a significant contributor to combating undernutrition and infant deaths. The data and analysis from this study will inform the third Global Access to Nutrition Index, with anticipated publication in the spring of 2018. The study derived the definition of products studied from the Code and subsequent relevant WHA resolutions. According to these documents the Code applies to both foods and beverages (including CFs) for infants and young children from birth to 36 months of age. Breastmilk Substitutes (BMS) include: infant formula (IF – for infants less than 6 months of age); follow-on formula or follow-up formula (FOF – for infants from 6 months of age); growing-up milk (GUM – for children from 12 months of age up to 36 months or beyond); and complementary foods (CFs – marketed as suitable for infants and young children from birth to 6 months of age). WHA 69.9 makes a series of recommendations about how CFs for infants and young children from 6 – 36 months of age should be marketed.[1] The Code also applies to the marketing of bottles and teats but they were not included in this study.

The definition of a BMS product used to guide data collection for this study differs from that of the three pilot studies in Vietnam, Indonesia, and India.[2] Those studies defined a BMS product as infant formula, follow-on formula, growing up milk for use from 12-24 months, and CFs recommended for infants less than 6 months of age. This study also includes formulas intended for infants up to 36 months of age. Moreover, for the first time, this study assesses whether CFs intended for children from 6 – 36 months of age are marketed in line with the recommendations of WHA 69.9. While data were collected on the extent of companies' compliance with WHA 69.9, these data are not

[1] http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R9-en.pdf?ua=1

[2] More information is available at www.accesstonutrition.org.

presented in the main results tables, in line with ATNF's decision to exclude such findings from companies' scores in the 2018 Global Access to Nutrition Index in order to retain comparability with the results presented in the 2016 Global Access to Nutrition Index. Rather, reference is made to these findings in the commentary relating to each Article. ATNF has indicated that future studies will include these results.

In 2014, the World Health Organization (WHO) established a Global Network for Monitoring and Support for Adherence to the Code (referred to as NetCode).[3] NetCode subsequently developed the "Protocol for the Assessment and Monitoring of 'The Code' and Relevant National Measures" to meet their objectives and provide practical tools and guidance for effective monitoring.[4] ATNF and Westat based the methodology of the Thailand study on this initial 2015 NetCode protocol. NetCode released a subsequent Toolkit with an updated protocol in October 2017 after our data collection and analysis were completed. Future studies will be based on this updated protocol.[5]

The NetCode protocol calls for data collection at multiple levels to examine different aspects of Code compliance. This includes:

- Interviews with mothers of infants less than 24 months (2 years) in health care facilities (HCFs);
- Interviews with health workers in HCFs;
- Identification of informational materials produced by baby food manufacturers available in HCFs and retail stores;
- Identification of sales promotions by baby food manufacturers in retail stores;
- Analysis of product labels and inserts of all available products on the local market; and
- Media monitoring of traditional and online advertising.

We fully examined these channels of promotion in the conduct of this study.

The NetCode protocol also requires the assessment of the compliance with any national measures relating to marketing relevant products—in the case of Thailand, FDA label regulations—if they go beyond the requirements of the Code. The aspects of BMS marketing that were controlled through

[3] http://www.who.int/nutrition/netcode/en/

[4] http://www.who.int/nutrition/netcode/protocol_summary.pdf?ua=1

[5] http://www.who.int/nutrition/netcode/toolkit/en/

law and regulation in Thailand at the time of the study were: (i) advertising of infant formula and follow-on formula products per Section 41 of Food Act B.E. 2522 (1979),[6] and (ii) labels for breastmilk substitutes and CFs, the requirements for which are set out in Notifications of the Ministry of Public Health No. 157 BE 2537 (1994), No. 158 BE 2537 (1994) No 194 BE 2543 (2000).[7]

Our analysis of the Code and relevant national regulations determined that the national regulations expand on the Code in several ways, particularly with respect to product labeling, and advertising. Those label regulations set out their own definitions of some terms which were used in the analysis of product labels. Moreover, this study provides a baseline against which to measure the effectiveness of the new regulation in curtailing marketing of BMS and CF prior to the enactment of the Control of Marketing of Infant and Young Child Food Act that the Thailand National Legislative Assembly passed on April 4, 2017. When this study began, the legislation was in draft form. We obtained and reviewed an unofficial English translation available in July 2017.[8] The marketing elements of the legislation are due to come into force on September 8, 2017 after data collection for this study was completed, and the labeling provisions become effective on September 8, 2018.

This report presents findings from the Thailand study, carried out in Bangkok in June and July 2017. ATNF selected this city because NetCode recommends conducting the study in the city with the largest population.

The methodology and procedures that we followed include:

- Field-level training of 8 interviewers and their 4 supervisors conducted in July 2017;
- Field data collection of interviews with 330 mothers and 99 health workers in 33 HCFs conducted in July and August 2017;
- Monitoring advertising or product promotion in various media conducted during June and July 2017;
- Monitoring 43 retail outlets (10 large and 33 small) for observation of product promotion in June and July 2017; and

[6] http://food.fda.moph.go.th/law/data/act/E_FoodAct2522.pdf

[7] http://food.fda.moph.go.th/law/announ_moph151-200.php

[8] http://www.searo.who.int/thailand/news/control-marketing-of-infant-and-young-child-food-act(2017).pdf?ua=1

- Purchasing and systematic analysis of 224 labels and inserts representing 182 unique BMS and CF products in June and July 2017.[9]

Initially, there were more private HCFs selected for the sample compared to public HCFs. However, a substantial number of the selected private HCFs refused entry resulting in re-drawing additional sample with more public HCFs. Due to the paucity of private HCFs in the final study sample, qualitative data from interviews with mothers with children under 24 months who received health services at private HCFs in Bangkok is also included in this study to gain insights into practices in such HCFs.

This work builds on and intends to complement other monitoring exercises carried out in Bangkok by PWC on behalf of FTSE4Good.[10] The results of the PWC study and letters from FTSE4Good to Danone and Nestlé outlining its areas of concern (and the companies' responses) are available on FTSE's website.[11]

Data were collected for 25 companies whose products were found in Thailand. This report highlights particularly five of the six largest global baby food manufacturers that will be included in the 2018 Access to Nutrition Index BMS sub-ranking whose products were found in Thailand, namely Abbott, Danone, Kraft Heinz, Nestlé and RB/Mead Johnson Nutrition.[12] Hereafter, these five companies are referred to as ATNI-focus companies.

The principal results of this study are:

Article 4: Information and Education

- **Information to Mothers:** The study team observed 8 informational or educational materials in the 33 HCFs and 43 retail outlets. Three were observed at the HCFs, and 5 were observed in retail outlets. These materials referenced 13 unique formula products.

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[9] Some products had labels from multiple containers (e.g., small and large size containers). Note that, as shown in Table ES-1, this report presents results for a subset of 119 of the 224 labels/inserts purchased and abstracted in Bangkok. This report excludes 105 labels for CFs 6-36 month products.

[10] http://www.ftse.com/products/indices/F4G-BMS. The FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. Companies that market breastmilk substitutes have to meet FTSE4Good's BMS marketing inclusion criteria for admission into the FTSE4Good Index.

[11] Ibid.

[12] Friesland Campina is one of the six large global manufacturers included in that sub-ranking, but it does not sell products in Thailand.

They did not reference CFs. The materials were produced by three of the multi-national baby food manufacturers (Danone, Nestlé, and RB/Mead Johnson Nutrition).

- **Equipment donated to HCFs:** There were 38 observations of equipment at 14 of the 33 HCFs. Of those, 36 equipment items were found to display brand names or logos. The majority (~67%) of the observed equipment was from Danone with RB/Mead Johnson Nutrition second (25%).

Article 5: The General Public and Mothers

- **Advertising and Promotions:**[13] Overall, 274 (~83%) of the sample of mothers reported seeing at least one BMS promotion in the last six months. These reports represented a total of 797 advertisements, promotions or messages. The mothers most frequently recalled seeing ads for BMS products on television (65%) and social media (~19%). Traditional media monitoring by local company iSentia of a small number of television and radio channels, and some print publications, found a total of 31 advertisements that referred to a total of 37 products. These 31 advertisements were repeated a total of 1,066 times. A large majority of advertisements were for GUMs (~84%), and from RB/Mead Johnson Nutrition, Danone and Nestlé.

  The online media monitoring was conducted for two months, June and July, and included baby food companies' own media (websites and social platforms including YouTube, Facebook, Twitter and Instagram; parenting and child websites popular in Thailand; and 7 prominent online retailers). A total of 104 promotions were found on the companies' own media. Danone had the greatest number of promotions (~33%), with Facebook as its most prominent medium. Among companies' own media, company/brand websites appeared to be the most used medium for promotions (~58% of the total) followed by companies' Facebook accounts.

- **Gifts and Samples:** Forty-seven (~14%) of the mothers reported receiving samples of an eligible BMS product from a company representative. The majority of the samples were either IFs (~33%) or GUMs (33%). Most mothers could not remember the company name of the reported sample. However, of the ATNI focus companies, 2 samples were reported to have been made by Nestlé and RB/Mead Johnson Nutrition.

- **Point-of-Sale Promotions:** The field team identified 154 promotions in the 43 retail outlets. These promotions represented 186 products, the majority of the promotions were for GUMs (151), and the remaining for FOFs (18) and IFs (17). An eight-week online monitoring component observed a total of 2,673 promotions on 5 of the 7 online retail sites and for all companies. Of the total number of online promotions, 2,350 were promotions for products made by 4 of the 5 ATNI-focus companies (Kraft Heinz was the exception). ATNF verified with the companies that they had commercial contracts with these retailers; additional promotions were identified but on online retailer sites with which these companies did not have a commercial relationship. Of the total 2,673 online promotions observed, 2,342 (~88%) were price-related and 308

[13] Covered products are those formulas marketed as suitable for children 0-36 months of age and CF marketed as suitable for infants of 0-6 months of age as these are breastmilk substitutes.

(~12%) were free gifts. The majority (~69%) of online promotions were for GUMs. Across both physical and online retailers, there were most point-of-sale promotions for RB/Mead Johnson Nutrition (927). The second highest number of promotions were for Nestlé products (824), followed by Danone (490) and Abbott (247).

- **Gifts or Coupons to Mothers:** Of the 330 women interviewed, 53 (16%) reported receiving a gift associated with a BMS company. Of the 58 total instances of receiving a gift, 19 were from company representatives and 7 were from shop personnel. For the most part, mothers could not remember the specific company. However 2 of the free gifts were from Nestlé, 2 were from RB/Mead Johnson Nutrition, and 1 was from Danone. There were 17 reports of receiving coupons from a company representative or shop personnel. Again, most mothers could not remember the specific company of the coupon, but 1 coupon was from RB/Mead Johnson Nutrition.

- **Company Contact with Mothers:** Of the 330 mothers interviewed, 10 mothers reported contact from a company representative or shop personnel to use BMS and/or CF products. This represented 12 total contacts.

Article 6: Health Care Systems

- **Promotions in HCFs:** Overall, 26 (~8%) of the 330 mothers reported a health worker suggesting the use of BMS products. These mothers gave 35 reports, although the company name was unknown in the majority of reports (~63%). Fifteen (15%) of the 99 health workers reported that a company representative contacted them to provide product samples to mothers. This represented 16 reported contacts. Among the five ATNI focus companies, the most frequently reported were RB/Mead Johnson Nutrition (3), Danone (2), followed by Abbott and Nestlé, each with 1 reported contact.

- **Promotional Materials in HCFs:** Promotional materials were observed in 8 (24%) of the 33 HCFs. Among those 8 HCFs, 17 items showing brand names/logos were observed, and 19 total promotional items were observed. By company, and of the 17 items, 7 promotional materials displaying brand names/logos were from Danone, 7 from RB/Mead Johnson Nutrition, 2 from Nestlé, and 1 from Abbott.

Article 7: Health Workers

- **Information and Educational Materials to Health Workers:** No such eligible materials were observed in Thailand.

- **Financial or Material Inducements:** Six (6%) of the 99 health workers reported contact by a company to provide a personal gift. Of those 6 reports, 3 contacts were from Nestlé and 3 were from "other" companies. Eleven health workers (11%) reported 13 instances of a company representative making future offers to sponsor events or workshops for HCF staff or to provide payment to attend events or workshops outside the facility. Of these 13 reports, 4 were from Nestlé, 1 was from Abbott, 1 was from RB/Mead Johnson Nutrition, 6 were from "other," and 1 was from an unknown company. As these were self-reported and inappropriate to receive, it is possible that there could be some underreporting.

- **Gifts and Samples for Health Workers:** Fifteen (15) of the 99 health workers interviewed reported 16 instances of receiving samples of a BMS product. Of the 330 mothers, 105 (~32%) reported receiving a free sample of a BMS product. Of those mothers, 51 reported 55 occurrences of receiving a free sample from a health worker.

Article 9: Labeling

- **Inclusion of Important Message and Statement:** Overall, 119 product labels, and inserts, if any, for BMS products marketed by 25 companies were analyzed.[14] All labels for the 44 IFs and 30 FOFs included the required important message statement as well as the statement of the superiority of breastfeeding. Sixty percent (60%) of IFs and 63% of FOFs were missing a statement to use the BMS product only under recommendation of a health worker. The labels of all 44 IFs had information for appropriate preparation. All 44 of the IF labels were compliant in that they did not include pictures of infants, or idealize the use of IF.

- **Inclusion of Required Information:** All product labels included information about ingredients, composition and batch number. However, every product assessed fell short of all the required standards; each had one or more incidences of non-compliance. Of the 119 BMS labels analyzed for this report (i.e., excluding labels for CFs 6-36 months), 59% (22% IFs, 12% FOFs, and 25% GUMs) had some language with nutrition and health claims. None of the labels for powdered infant formula (IFs, FOFs, and GUMs) provided a warning on pathogenic microorganisms to meet the requirement.

A summary of observed non-compliance for all producers of covered formula and CFs found in Bangkok is presented in Table ES-1. This table provides the number of reported and observed incidences of non-compliance found in Bangkok during the study period for ATNI-focus companies and for the other companies.

Important conclusions and recommendations include:

- **Point-of-Sale Promotions:** The largest number of non-compliances were promotions in both physical "brick-and-mortar" retailers as well as online retail outlets. Nearly all of these were price-related promotions offered by online retailers. The number of observed promotions, especially online, is an area of considerable concern. Baby food companies and the Thai government should ensure that distributors and retailers are aware of their responsibilities under the Code and make clear that they should not discount or promote BMS products. There should be rigorous enforcement of the restriction of digital media to promote products.

[14] This number excludes the 105 labels for CF 6-36 products which were also analyzed but not included in this report.

Table ES-1. Summary of non-compliances, by Code sub-article and company

			Non-compliances by relevant Code sub-article					
			4.2	4.3	5.1	5.3	6.3 & 6.8	9.2 & 9.4
Company	Number of BMS product labels included in the study[1]	Total number of non-compliances	Products on informational/ educational materials at HCFs and retail outlets[2] *Table 5-3*	Observations of Equipment at HCFs *Table 5-5*	Products in media monitoring (traditional and online) *Tables 5-8 & 5-9*	Promotions at retail outlets (including online stores)[2] *Tables 5-13 & 5-14*	Promotional material at HCFs *Table 5-17*	Product Labels[3] *Table 5-19*
Abbott	15	286	0	1	22	247	1	15
Danone	39	612	1	24	40	501	7	39
Kraft Heinz	0	0	0	0	0	0	0	0
Nestlé	39	902	3	2	27	829	2	39
RB/Mead John. Nutrition	18	1007	9	9	29	935	7	18
Other[4]	8	378	0	0	23	347	0	8
Total	**119**	**3,185**	**13**	**36**	**141**	**2,859**	**17**	**119**

Source: ATNF Thailand (2017)

[1] The total number of BMS/CF labels abstracted in the Thailand study was 224 (representing 182 unique products), however this column includes only the 119 BMS product labels (for the four product types of IF, FOF, GUM, and CF < 6 months). The 105 CF 6-36 month product labels (10 made by Kraft Heinz, 10 made by Nestle, and 85 made by 'Other' companies) are excluded from this report.

[2] Informational/educational materials observed at HCFs and retail outlets (Table 5-3), and promotions observed at physical retail outlets (Table 5-13) can have more than one product type. In such cases each product type referenced on a single informational/educational material or on a single promotional material, respectively, is counted here as a unique promotion.

[3] Counts of labeling non-compliances include Sub-articles 9.2 and 9.4 of The Code, as well as WHA 58.32 and relevant Thai regulations (those which exceed The Code). Each label included in the labeling analysis can have more than one non-compliance, however this column shows the counts at the unique label level (e.g., number of labels with at least one (i.e., one or more) non-compliance). Additionally, CF 6-36 products (105 products total) were not included in label analysis and are not counted in this column.

[4] "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, Organix, Hain Celestial Group Inc., Zantun & Victor, Namchow, Hanyang F&D Co. Ltd., Summer Sky Co. Ltd., Joe-Ry Family Co. Ltd., Aulion Co. Ltd., Buddy Fruits, and Yick Chi Confectionery Co. Ltd.

- **Advertising and Promotion:** The monitoring of traditional and online media sources revealed a great number of advertisements and promotions. The mothers' most frequent mode of recalled advertisement was television advertisements followed by social media. It was surprising, given the rise of online media, that no promotions were found on the parenting and child magazines nor from the website memberships that were created. Baby food manufacturers should be made aware of their responsibilities under the Code and work to strengthen corporate policies related to practices that are inconsistent with the intent of the Code and Thai regulations.

- **Labeling:** All of the labels of the BMS products assessed had at least one non-compliance. The Thai government needs to step up the enforcement of companies' compliance with national labeling regulations, especially given that they are being strengthened with the passage of the 'Milk Act'.

- **Equipment donated to HCFs:** A good deal of equipment displaying brand names/logos were observed at the HCFs in contravention of the Code. There was no information collected on the timing of the receipt of this equipment. Given the recommendation in WHA 69.9 that no equipment or materials should be donated to HCFs, baby food companies should take steps to cease all such donations.

- **Promotional materials in HCFs:** Promotional materials were observed in several HCFs showing brand names/logos. This constitutes non-compliance with the Code.

- **Informational and Educational Materials:** Relatively little printed information or educational material distributed by manufacturers was observed at the HCFs or retail outlets. However, these observations do not include many private HCFs and may underreport their prevalence.

- **Company Contact with Mothers:** Direct contact by companies with mothers appears to be relatively rare in Bangkok. However, future efforts to ensure baby food manufacturers' compliance with the Code should include a focus on restricting the use of social media to contact mothers.

These findings appear to accord with the findings and reports of International Baby Food Action Network /ICDC (IBFAN) and that of FTSE4Good.[15,16]

Limitations of this study include:

- This study was a one-time cross-sectional survey for the point of time that it was conducted. These indicators are representative of the sample and not necessarily generalizable to a larger population in Bangkok, nor elsewhere in Thailand.

[15] http://www.ibfan.org/art/IBFAN_CRC59_Thailand-2012.pdf

[16] http://www.ftse.com/products/indices/F4G-BMS

- The most significant limitation was that the quantitative sample lacked representation from private HCFs, as noted. Thus, the study does not provide as full a picture as it might have done of marketing practices in such HCFs.

- Much of the information needed to assess compliance comes from interviews with mothers and with health workers. Self-reported events or information can be misreported for various reasons, as described in Chapter 7. Moreover, the study included interviews only with women with infants and young children under 24 months of age, rather than under 36 months of age, the scope of application of the Code and WHA 69.9. Mothers' reports of marketing of products intended for children aged 24 – 36 months may therefore be under-reported.

- The interviewers selected health workers within each HCF following the NetCode protocol. They might or might not have been the best worker to interview with respect to facility-related issues, i.e., others might have had more experience of companies' marketing activities in the facility. For example, the study may have under-reported contacts and offers made by baby food company representatives.

- The selection of retail outlets to observe point-of-sale promotions was purposive, not representative. Because of this design, we cannot generalize the study results to the universe of stores in Bangkok. Additionally, observations were made only on one day so it is possible that some stores would have had promotions if visited over a period of time.

- The study does not include an assessment of the level of cross-promotion via CF 6-36 months of formula products because the version of NetCode used did not include a methodology to do such as assessment. Further, neither WHA 69.9 nor the NetCode protocol used for this study addresses cross-promotion within BMS product types.

- The monitoring of traditional media covered only 4 terrestrial television channels and did not include cable or digital television channels. Thus, the number of advertisements reported is probably much lower than those being aired across the entire television network. Similarly, only 2 radio channels were monitored live for 2 months, and only 25 newspapers and 65 magazines were monitored. Had all radio channels and all relevant print media been monitored, it is likely that many more advertisements would have been identified.

- This study did not assess the level of promotions via text messages and other social media, therefore, it is likely that this form of promotion is underestimated. We did not assess this because of the difficulty in measuring this and because NetCode did not provide specifications. However, anecdotal evidence and other reports highlight that this form of marketing is becoming pervasive.

- Although we believe that promotion of BMS products is likely to be highest in urban Bangkok, we have no empirical evidence from other urban or rural areas of Thailand to confirm this belief.

Background 1

A. Rationale for Conducting the Thailand Study

The Access to Nutrition Foundation (ATNF) is a not-for-profit organization, based in The Netherlands, that was established in 2013 to develop and publish the Access to Nutrition Indexes (ATNIs). The first Global Index, launched in 2013, scored and rated 25 of the world's largest food and beverage manufacturers on commitments, performance and disclosure on addressing obesity and undernutrition. The second edition of the Global Index was introduced in January 2016 and rated 22 companies similarly; the third edition is due to be published in early 2018. It is for this Index that this study is being undertaken. More information is available at www.accesstonutrition.org. The Indexes are intended to: (1) enable companies to benchmark their own performance against international standards and best practice and compare themselves to their peers; and (2) provide an objective source of information for all stakeholders to use to evaluate companies' responses to two of the world's most pressing nutrition-related public health challenges.

ATNF and Westat first piloted similar surveys to these to assess the marketing of breastmilk substitutes (BMS) during 2015 in Vietnam and Indonesia. ATNF and Westat collaborated again on the third pilot study in India in 2016. The results were used to inform the first 2016 India Index in the same way that the studies in Vietnam and Indonesia fed into the 2016 Global Index. This report on Thailand builds on that prior experience plus the work by IBFAN-GIFA's "Report on the Situation of Infant and Young Child Feeding in Thailand,"[17] and that of FTSE4Good (for whom PWC conducted a study of Danone and Nestlé's marketing activities in 2016-17). The PWC report as well as the letters from FTSE4Good to Danone and Nestlé outlining its areas of concern (and the company's response) are available on FTSE4Good's website.[18]

[17] http://www.ibfan.org/art/IBFAN_CRC59_Thailand-2012.pdf

[18] http://www.ftse.com/products/indices/F4G-BMS

In 2014, the World Health Organization (WHO) established a Global Network for Monitoring and Support for Adherence to the Code (referred to as NetCode). NetCode's objectives were to assist Member States and civil society to:

1. Strengthen their capacity to monitor the Code and all relevant subsequent World Health Association (WHA) resolutions; and

2. Effectively enforce and monitor national Code legislation and regulations.

NetCode subsequently developed the "Protocol for the Assessment and Monitoring of 'The Code' and Relevant National Measures" to meet their objectives and provide practical tools and guidance for effective monitoring.[19] ATNF and Westat based the methodology of the Thailand study on the initial 2016 NetCode protocol. In October 2017, NetCode released a Toolkit that includes "Monitoring the Marketing of Breast-Milk Substitutes: Protocol for Periodic Assessment" and "Monitoring the Marketing of Breast-Milk Substitutes: Protocol for Ongoing Monitoring Systems."[20] Since the release occurred after our data collection and analysis were complete, we did not base our study on the updated methodology.

Bangkok was chosen as the geographical location for this fourth study. This city was selected by ATNF because the NetCode protocol recommends conducting the study in the largest city.

The assessment was designed to determine whether those companies whose BMS products and/or complementary foods (CFs) were for sale in the study area conform fully with the provisions of the International Code of Marketing of Breast-milk Substitutes (the Code), subsequent WHA resolutions and national regulations controlling the marketing and labeling of these products, in order not to undermine optimal infant and young child nutrition, which is a major contributor to combating undernutrition and infant mortality.

Moreover, this study provides a baseline measure of BMS and CF marketing prior to the enactment of the Control of Marketing of Infant and Young Child Food Act that the Thailand National Legislative Assembly passed on April 4, 2017. When this study began, the legislation was in draft form. We obtained and reviewed an unofficial English translation in July 2017.[21] The marketing

[19] http://www.who.int/nutrition/netcode/en/

[20] http://www.who.int/nutrition/netcode/toolkit/en/

[21] http://www.searo.who.int/thailand/news/control-marketing-of-infant-and-young-child-food-act(2017).pdf?ua=1

elements of the legislation went into force on September 8, 2017 and the labeling provisions will come into force on September 8, 2018.

B. The Importance of Breastfeeding for Infant and Child Health

It is estimated that 830,000 deaths globally could be avoided if every baby were breastfed within the first hour of life.[22] Moreover, WHO advocates that to achieve optimal growth, development and health:

- All children should be breastfed exclusively for the first six months;
- Breastfeeding should continue until the age of two or beyond; and
- At six months old, and not before, safe and appropriate CFs should be introduced to infants' diets to meet their evolving nutritional requirements.

Breastfeeding confers a range of health and other benefits, as extensive evidence has demonstrated.

Babies who breastfeed are at a lower risk of:

- Gastroenteritis;
- Respiratory infections;
- Sudden infant death syndrome;
- Obesity;
- Type 1 and 2 diabetes; and
- Allergies (e.g., asthma, lactose intolerance).[23]

Breastfeeding also reduces the need for antibiotics and other medicines.[24] Evidence is also mounting that the initiation and duration of breastfeeding may influence obesity in later life.[25]

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[22] Save the Children (2013).

[23] https://www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/infant-health-research/

[24] http://www.who.int/features/factfiles/breastfeeding/en/

[25] http://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/prenatal-postnatal-obesity/

Several benefits to mothers have been identified, which include greater protection against breast and ovarian cancer, and hip fractures in later life. Recent evidence has demonstrated an association between prolonged breastfeeding and postmenopausal risk factors for cardiovascular (CV) disease. These illnesses all represent the greatest threats to women's health across all ages.[26] Extensive breastfeeding, therefore, also contributes to health service cost savings.

Nutrition and health specialists, therefore, should encourage as many women as possible to breastfeed. In the poorest countries particularly, breastfeeding can prevent hundreds of thousands of infant deaths and protect children throughout their lives. While a small number of women cannot breastfeed, and some infants with rare metabolic diseases cannot be breastfed, the vast majority of babies can be breastfed by their mothers.

Prior to the passage of the Control of Marketing of Infant and Young Child Food Act in 2017, there were no legal measures in Thailand for implementing the Code other than restricting the advertisement of infant formula and food for young children to technical information provided in medical journals or to health workers.[27,28] Some articles of the Code have been incorporated into laws and regulations related to food labeling.[29] In a recent UNICEF report on Thailand, 39.9% of infants were breastfed within one hour of birth, and ~23% of infants under 6 months were breastfed exclusively at 6 months. Only 42% of infants under 6 months received breastmilk as the predominant source of nutrition.[30]

C. History and purpose of the Code on Marketing of Breastmilk Substitutes

The WHO first released the Code in 1981 (see Appendix A). From 1982 through 2016, fifteen additional resolutions were adopted by the WHA that expand on and clarify the Code, and for compliance purposes are considered part of the Code (see Appendix B).

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[26] Ibid.

[27] WHO Marketing of Breast Milk Substitutes: National Implementation of the International Code Status Report 2016.

[28] FDA announcement issued in 2012 in relation to Section 41 of **Food Act B.E. 2522 (1979) (this is the Act to refer to):** Announcement title "Criteria for food advertisement (2nd issue) B.E. 2555 (2012)"

[29] Notification of the Ministry of Public Health No. 157. 158, and 194.

[30] https://www.unicef.org/thailand/Thailand_MICS_Full_Report_EN.pdf

The Code was developed as a tool to protect and promote the practice of breastfeeding and to ensure the appropriate marketing of BMS products, bottles and teats. The Code is a recommendation from the WHA calling on Governments to implement its provisions through appropriate national legislation or regulations.

D. Aspects Covered by the Code and This Study

As interpreted for this study in Thailand, the definition of covered products is derived from the Code, subsequent WHA resolutions, and subsequent guidance issued by WHO in May 2016 – WHA 69.9.[31] According to these documents, the Code is considered to be applicable to both foods and beverages (including CFs) for infants and young children. This guidance applies to several types of baby food for feeding children up to 36 months of age, including: infant formula (IF – for infants less than 6 months of age); follow-on formula—sometimes called follow-up formula—(FOF – for infants from 6 months of age); growing-up milk (GUM – for children from 12 months of age up to 36 months or beyond); and CFs marketed as suitable for infants and young children from the age 0 to 6 months of age. WHA 69.9 makes additional recommendations related to the marketing of CFs for infants and young children from 6 – 36 months of age.

It is important to note that the Thailand study is the first study to use the new definitions based on WHA 69.9. It should also be noted that if a formula product spanned more than one age range, it was classified in the labeling analysis as belonging to the younger product type, e.g., a product listed for 0-12 months was classified as an infant formula. The Code also applies to the marketing of bottles, pacifiers and teats but information for these products was not collected in this Thailand study.

The Code sets out its recommendations on marketing of these products in the following articles:

- Article 1. Aim of the Code;
- Article 2. Scope of the Code;
- Article 3. Definitions;
- Article 4. Information and education;

[31] http://www.who.int/mediacentre/news/releases/2016/wha69-28-may-2016/en/

- Article 5. The general public and mothers;
- Article 6. Health care systems;
- Article 7. Health workers;
- Article 8. Persons employed by manufacturers and distributors;
- Article 9. Labeling;
- Article 10. Quality; and
- Article 11. Implementation and monitoring.

This study focused on assessing compliance with those elements of Articles 4-9 covered by the NetCode protocol, which is described in Chapter 2, Section B, with the specific recommendations that were to be addressed, also taking into account all relevant WHA resolutions. Articles 1-3 of the Code provide the context for the study but are not monitored per se. Article 10 would require special inspection of manufacturing processes, which is not covered by the NetCode protocol and therefore not within the scope of this study. Similarly, Article 11 is primarily targeted to governmental responsibilities, is not addressed by the NetCode protocol, and was not within the scope of this study. As the NetCode protocol was completed prior to May 2016 when WHA 69.9 came into effect, the methodology used for the study was extended to encompass the recommendations of that resolution. Additionally, this approach was adapted to take into consideration the national regulations included in the Notification of the Ministry of Public Health. These are described more fully in Chapter 3, Sections A and B.

E. Process of Selecting Westat

Westat was selected through an ATNF-initiated competitive bid process in March 2015 to conduct the pilot studies in two pre-selected countries, Vietnam and Indonesia, based on the Interagency Group on Breastfeeding Monitoring (IGBM) Protocol. As a result of that successful collaboration, Westat was asked to conduct the subsequent pilot study in India as well as the study in Thailand.

F. Westat Description

Westat is an employee-owned health and social sciences research organization based in Rockville, Maryland, with more than 2,000 staff members. Westat is one of the leading survey implementation

organizations in the United States (U.S.), and the company has extended its expertise to the design and conduct of surveys in developing countries. Westat's professional staff includes senior statisticians with international reputations in survey sample design and statistical analysis; senior scientists in fields such as nutrition, epidemiology, and medicine; international survey experts; and global health evaluators.

Westat has not carried out studies for the infant food industry (manufacturers or business associations), nor does it have any such companies or bodies on its roster of clients. Westat has no conflict of interest in conducting and reporting on this study.

Westat has supported many national surveys for the U.S. Federal Government. Particularly relevant examples are the National Health and Nutrition Examination Survey (NHANES), the leading source of national statistics on health conditions and nutritional status of the U.S. population, which Westat has conducted for the National Center for Health Statistics (NCHS) for the past 20 years; and the U.S. Department of Agriculture (USDA) Food and Nutrition Service Infant and Toddler Feeding Practices Study, which is examining breastfeeding practices in a low income population (the Women, Infants, and Children [WIC] nutrition-assistance program).

Westat has supported health and social science research in developing countries since 1982. Westat has worked in more than 50 countries, and is incorporated in Thailand, which is the base for Westat's Southeast Asia activities. For these global studies, Westat has established strong management controls to ensure the quality and timeliness of work in country. Westat has also developed substantial experience in identifying qualified local partner organizations that can perform the fieldwork. See the description of Westat's local partner below.

G. In-Country Partner Description

The in-country data collection partner for this study was selected in response to a Request For Proposals (RFP) entitled "Thailand Assessment of Marketing of Breast-milk Substitutes." The International Health Policy Program Foundation (IHPF) based in Bangkok, Thailand was chosen. IHPF was established in 1998 and is a semi-autonomous program conducting research on the national health priorities related to health systems and policy in Thailand. With established facilities and staff, IHPF has identified and addressed key emerging issues in health systems with the application of tools in health economics, health financing, and health policy analysis. Throughout

the past three years, IHPF has conducted cross-sectional surveys and qualitative breastfeeding policy research projects.

Prior to selecting IHPF as an in-country data collection partner, Westat verified that IHPF had no commercial links to the BMS companies being assessed. ATNF also confirmed that the staff of the professional media monitoring service, iSentia, had no personal links to representatives of BMS companies.

H. Support from the Thailand Ministry of Health and the Bangkok Metropolitan Administration

Prior to conducting the study in Thailand, Westat, ATNF and IHPF contacted the Ministry of Health and the Bangkok Metropolitan Administration (BMA) to gain their support to conduct this study. The study objectives, the methodology, and study requirements were submitted to the respective ethical Internal Review Boards (IRBs). Both Westat and IHPF secured approval from their respective IRBs to conduct the survey as is required for surveys addressing health issues.

I. Project Management

The Westat management team consisted of a Project Director and a Senior Analyst, who have significant experience working and establishing international collaborations. Other senior members of Westat's team included Project Managers, to oversee the media monitoring and label abstraction; a Survey Statistician, to consult on survey sample design, weighting and variance estimates; an Information Technology (IT) Manager and Data Manager, to ensure adequate IT support to the project and oversee database programming and data processing. A Research Assistant worked closely with the senior managers.

IHPF's Project Manager provided in-country insights and managed institutional relationships and resources. IHPF provided two senior field supervisors who had primary technical responsibility for the work in-country and who oversaw the field interviewers.

Responsibilities for survey work were allocated to maximize in-country resources, while using Westat's expertise for management, development, quality control (QC), and data analysis. Westat

personnel, in collaboration with ATNF, handled the finalization of survey instruments, selection of the sample, customization of the training, programming the data entry system, cleaning and analyzing data, and preparation of the final report. IHPF translated the survey instruments, organized and provided training to the field staff, collected and entered all data on tablets, and performed field QC. Note that the use of tablets to collect data is an innovation for this project, as recommended by NetCode.

ATNF provided project management support to Westat via status updates and also by providing guidance at several stages of the Thailand study. During the development phase and data collection process, ATNF participated in weekly calls with Westat and the IHPF Project Manager and senior researchers. An overview of the study timeline is provided in Appendix C.

2 Research Objectives

A. Primary Objective

The primary objective of this study was to monitor compliance with the provisions of the Code, subsequent relevant WHA resolutions, and national regulations, where applicable, by all manufacturers selling BMS and/or CF products (as defined for this study) in Bangkok. This was achieved by measuring the type and scale of apparent non-compliance with these provisions through interviews and observations, and attributing them to individual manufacturers. A listing of all companies that were identified as selling BMS and/or CF products in Bangkok, as well as the products found by the study team, is included as Appendix D. They numbered 182 unique products made by 25 different manufacturers. All of the 25 companies sell at least one formula product or covered CF.

B. Study Tool

The design of the survey was based, with permission from the WHO,[32] on a protocol developed by NetCode, and titled Protocol for the Assessment and Monitoring of 'The Code' and Relevant National Measures. Development of this protocol began in 2014 and was released in 2016. Its ownership rests with WHO. Compliance with the provisions of the Code, subsequent relevant WHA resolutions, and national measures was measured using the NetCode protocol.[33] As noted on their website, "*WHO, in consultation with UNICEF, has created NetCode, the Network for Global Monitoring and Support for Implementation of the International Code of Marketing of Breast-milk Substitutes and Subsequent relevant World Health Assembly Resolutions. NetCode is a partnership with UN system organizations, WHO Collaborating Centers, NGOs, and selected Member States dedicated to protecting all sectors of society from the inappropriate and unethical marketing of breast-milk substitutes and other products covered by the scope of the International Code and relevant WHA resolutions.*"

[32] Permission to base the survey on the NetCode protocol does not imply any endorsement of the resulting report by WHO.

[33] http://www.who.int/nutrition/netcode/protocol_summary.pdf?ua=1

However, as the first version of the NetCode protocol which this study is using was completed prior to the adoption of WHA resolution 69.9, it did not encompass its recommendations. ATNF and Westat, therefore, amended the protocol to incorporate those recommendations into the study. Further, the methodology was extended to capture marketing and promotion on online retail sites and websites aimed at young women and mothers.

ATNF selected the NetCode protocol following recommendations from expert stakeholders they consulted. The NetCode protocol is a tool which enables monitoring of compliance with the Code and additionally, upon adaptation, with national regulations, in countries which have such regulations. The NetCode protocol and forms were adapted to the Thailand context and took into consideration the national label regulations, as described in Chapter 3, Sections A and B.

The NetCode approach to monitoring compliance uses a scientific research methodology with specified sampling. The NetCode protocol is based on sound research techniques. The protocol is particularly appropriate for establishing a baseline indication of levels of non-compliance with the Code and/or local regulations if the latter exceed the provisions of the Code. Future research findings using this same/similar protocol can then be compared to the baseline, as a means of assessing the success of implementation of the Code and/or local regulations. The findings can also be used by Governments to augment their monitoring activities, and potentially to strengthen, if necessary, regulations and enforcement.

The NetCode protocol recommends a sample size of 330 interviews with mothers of young children up to 24 months to assess the compliance with specific Articles of the Code related to information that can be reported by the mothers.

C. The Code Articles and WHA Resolutions Addressed in the Thailand Study

Using the sample design and the data collection forms in the NetCode protocol, adapted to the Thailand context in consideration of the national label regulations, and needs of this study, we were able to estimate the prevalence of non-compliance for each of the following requirements of the Code and the national label regulations. (How the study addresses the additional national label regulations is set out in Chapter 3.)

It should be noted that WHA 69/7 was an Addendum to the Report by the Secretariat on the Maternal, infant and young child nutrition and provided "Guidance on ending the inappropriate promotion of foods for infants and young children" on May 13, 2016.[34] The WHA accepted that guidance and adopted Resolution WHA 69.9 on May 28, 2016 on "Ending inappropriate promotion of foods for infants and young children."[35] We used this specific guidance of WHA A69/7 Add.1 to inform modifications to the NetCode forms.

Article 4. Information and Education

4.2. Informational and educational materials, whether written, audio, or visual, dealing with the feeding of infants, and intended to reach pregnant women and mothers of infants and young children should include clear information on all the following points:

- The benefits and superiority of breastfeeding;
- Maternal nutrition, and the preparation for and maintenance of breastfeeding;
- The negative effect on breastfeeding of introducing partial bottlefeeding;
- The difficulty of reversing the decision not to breastfeed; and
- Where needed, the proper use of infant formula, whether manufactured industrially or home-prepared.

When such materials contain information about the use of infant formula, they should include:

- The social and financial implications of its use;
- The health hazards of inappropriate foods or feeding methods; and
- Such materials should not use any pictures or text which may idealize the use of breastmilk substitutes.

4.3. Donation of informational or education equipment or materials by manufactures or distributors should be made only at the request and with the written approval of the appropriate government authority or within guidelines given by the government for this purpose. Such equipment or materials may bear the donating company's name or logo, but should not refer to a proprietary

[34] http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_7Add1-en.pdf

[35] http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R9-en.pdf

product that is within the scope of this Code and should be distributed only through the health care system.

Augmented by:

WHA 69.9

3. Calls upon manufacturers and distributors of foods for infants and young children to end all forms of inappropriate promotions, as set forth in the guidance recommendations.

WHA A69.7 Add.1

16. Recommendation 6. Companies that market foods for infants and young children should not create conflicts of interest in HCFs or throughout health systems. Health workers, health systems, health professional associations and nongovernmental organizations should likewise avoid such conflicts of interest. Such companies, or their representatives, should not:

- Donate or distribute equipment or services to HCFs.

Article 5. The General Public and Mothers

5.1. There should be no advertising or other form of promotion to the general public of products within the scope of this Code.[36]

5.2. Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.

[36] As per FDA announcement issued in 2012 in relation to Section 41 of **Food Act B.E. 2522 (1979) (this is the Act to refer to):** Announcement title "Criteria for food advertisement (2nd issue) B.E. 2555 (2012)", advertisement of infant formula and food for infant and young child is restricted to technical information provided in medical journals or to health workers.

5.3. In conformity with paragraphs 1 and 2 of this Article, for products within the scope of this Code, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as:

- Special displays;
- Discount coupons;
- Premiums;
- Special sales;
- Loss-leaders; and
- Tie-in sales.

5.4. Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breastmilk substitutes or bottle-feeding.

Augmented by:

WHA A69/7 Add.1

16. Recommendation 6. Such companies, or their representatives, should not:

- Give any gifts or coupons to parents, caregivers and families.

5.5. Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

Article 6. Health Care Systems

6.2. No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.

6.3. Facilities of health care systems should not be used for:

- The display of products within the scope of this Code;
- For placards or posters concerning such products; or
- For the distribution of material provided by a manufacturer or distributor other than that; and
- Specific to Article 4.3.

6.8. Equipment and materials, in addition to those referred to in Article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

Augmented by:

WHA 69.9

3. Calls upon manufacturers and distributors of foods for infants and young children to end all forms of inappropriate promotions, as set forth in the guidance recommendations.

WHA A69.7 Add.1

16. Recommendation 6. Such companies, or their representatives, should not:

- Donate or distribute equipment or services to HCFs.

Article 7. Health Workers

7.2. Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottlefeeding is equivalent or superior to breastfeeding. It should also include the information specified in Article 4.2.

7.3. No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.

7.4. Samples of infant formula or other products within the scope of this Code, or of equipment or utensils for their preparation or use should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level. Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.

Augmented by:

WHA 69.9

4. Calls upon health workers to fulfil their essential role in providing parents and other caregivers with information and support on optimal infant and young child feeding practices and to implement the guidance recommendations;

WHA A69/7 Add.1

16. Recommendation 6. Companies that market foods for infants and young children should not create conflicts of interest in HCFs or throughout health systems. Health workers, health systems, health professional associations and nongovernmental organizations should likewise avoid such conflicts of interest. Such companies, or their representatives, should not:

- Provide free products, samples or reduced-price foods for infants or young children to families through health workers or HCFs, except:
  - as supplies distributed through officially sanctioned health programmes. Products distributed in such programmes should not display company brands;
- Donate or distribute equipment or services to HCFs;
- Give gifts or incentives to health care staff;
- Use HCFs to host events, contests or campaigns;
- Give any gifts or coupons to parents, caregivers and families;
- Directly or indirectly provide education to parents and other caregivers on infant and young child feeding in HCFs;
- Provide any information for health workers other than that which is scientific and factual; and

- Sponsor meetings or health professionals and scientific meetings.

17. Likewise, health workers, health systems, health professional associations and nongovernmental organizations should not:

- Accept free products, samples or reduced-price foods for infants or young children from companies, except:
  - as supplies distributed through officially sanctioned health programmes. Products distributed in such programmes should not display company brands;
- Accept equipment or services from companies that market foods for infants and young children;
- Accept gifts or incentives from such companies;
- Allow companies that market foods for infants and young children to distribute any gifts or coupons to parents, caregivers and families through HCFs;
- Allow such companies to directly or indirectly provide education in HCFs to parents and other caregivers; and
- Allow such companies to sponsor meetings of health professionals and scientific meetings.[37]

Article 9. Labeling

9.2. Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points:

- The words "Important Notice" or their equivalent;
- Statement of the superiority of breastfeeding;
- A statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use;
- Instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation;

[37] http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_7Add1-en.pdf

- Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula. They may, however, have graphics for easy identification of the product as a breastmilk substitute and for illustrating methods of preparation;
- The terms "humanized," "materialized" or similar terms should not be used;
- Inserts giving additional information about the product and its proper use, subject to the above conditions, may be included in the package or retail unit. See "type of material" code; and
- When labels give instructions for modifying a product into infant formula, the above should apply.

9.3. Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant.

9.4. The label of food products within the scope of this Code should also state all the following points:

- The ingredients used;
- The composition/analysis of the product;
- The storage conditions required;
- The batch number; and
- The date before which the product is to be consumed, taking into account the climatic and storage conditions of the country concerned.

WHA Resolution 58.32

1.(3) To ensure that clinicians and other health-care personnel, community health workers and families, parents and other caregivers, particularly of infants at high risk, are provided with enough information and training by health-care providers, in a timely manner on the preparation, use and handling of powdered infant formula in order to minimize health hazards; are informed that powdered infant formula may contain pathogenic microorganisms and must be prepared and used

appropriately; and where applicable, that this information is conveyed through an explicit warning on packaging.[38]

WHA A69/7 Add.1

2. The term "foods" is used to refer to both foods and beverages (including CFs).

3. This guidance applies to all commercially produced foods that are marketed as being suitable for infants and young children from the age of 6 months to 36 months.

13. Recommendation 4. The messages used to promote foods for infants and young children should support optimal feeding and inappropriate messages should not be included. Messages about commercial products are conveyed in multiple forms, through advertisements, promotion and sponsorship, including brochures, online information and package labels. Irrespective of the form, messages should always:

- Include a statement on the importance of continued breastfeeding for up to two years or beyond and the importance of not introducing complementary feeding before 6 months of age;
- Include the appropriate age of introduction of the food (this must not be less than 6 months); and
- Be easily understood by parents and other caregivers, with all required label information being visible and legible.

14. Messages should not:

- Include any image, text or other representation that might suggest use for infants under the age of 6 months (including references to milestones and stages);
- Include any image, text or other representation that is likely to undermine or discourage breastfeeding, that makes a comparison to breastmilk, or that suggests that the product is nearly equivalent or superior to breastmilk;
- Recommend or promote bottle feeding; and

[38] http://www.who.int/nutrition/topics/WHA58.32_iycn_en.pdf

- Convey an endorsement or anything that may be construed as an endorsement by a professional or other body, unless this has been specifically approved by relevant national, regional or international regulatory authorities.

Specifications for what was considered possible non-compliance with the specific recommendations, based on the data that were collected on the study's data collection forms, can be found in Appendix E.

3 Methodology: NetCode Protocol

Westat followed the NetCode protocol closely to conduct the study, adapted in a several ways where necessary, to align to the specific country context.

A. Comparison of the Code to Prevailing National Legislation and Label Regulations

Westat sought to identify all relevant legislation and regulations relating to marketing and labeling products being assessed by this study. Other than restricting the advertisement of infant formula and food for infants and young children to medical journals and health workers, no national legislation was in force when the study was started to restrict the marketing of these products.[39] The only relevant regulations were several relating to how these products are labeled.

Westat obtained English versions of these regulations, including Notifications of the Ministry of Public Health No. 157 BE 2537 (1994) re: Food for Infant and Food of Uniform Formula for Infant and Small Children; No. 158 BE 2537 (1994) re: Supplementary Food for Infants and Young Children; and No 194 BE 2543 (2000) re: Labels that were related to labeling breastmilk substitutes and CFs.[40] Westat carefully compared the regulations with the Code to identify products and standards that are different from the Code. Analysis revealed that the regulations were similar or exceeded some recommendations of the Code.

English translations of the Thai regulations differ from (and in some cases appear to exceed) the relevant Code recommendations. A listing of the Thai regulations that differ or exceed the relevant Code recommendations is included in Appendix F.

[39] FDA announcement issued in 2012 in relation to Section 41 of **Food Act B.E. 2522 (1979) (this is the Act to refer to):** Announcement title "Criteria for food advertisement (2nd issue) B.E. 2555 (2012)"

[40] http://food.fda.moph.go.th/law/announ_moph151-200.php

B. Adaptations of Forms

As the Thailand FDA regulations included specific wording related to some key requirements of the Code, a few changes were needed to Form 6 – Label Abstraction. These changes are included in Appendix G.

The NetCode forms were also amended to enable data on all types of BMS and CF noted in Chapter 2 above to be collected and differentiated, for all companies selling products in Bangkok. Some re-formatting of the forms was undertaken to ease data collection via tablets, which resulted in a slightly different look than the NetCode protocol forms. The customizations did not alter the collection of objective measures as designed in the NetCode protocol.

IHPF staff translated the Consent forms and the forms used for in-field data collection (NetCode Forms 1, 2, 3, 5, and 7) to the Thai language. The translations underwent review by a bilingual study staff at Westat for changes needed to retain the English meaning. The form translations did not alter the collection of objective measures as designed in the NetCode protocol.

General study definitions and definitions specific to each form are included in Appendix H. The English version of the final forms used for data collection can be found in Appendix I.

C. Data Collected

To capture information in assessing possible non-compliance with the Code, it was necessary to:

- Interview mothers;
- Interview health workers;
- Evaluate promotional and educational materials found in those HCFs visited for interviews;
- Evaluate any marketing and promotions within selected retail stores and on online retailers' websites;
- Evaluate product labels and inserts of available products; and
- Monitor selected media, traditional and digital.

The NetCode protocol contains six data collection forms, each designed to capture objective information from each of the unique sources and relating to specific Articles of the Code.

Form 1. Designed to collect information from mothers of children younger than 24 months to determine whether they:

- Recalled having been advised to use commercial or prepackaged food or drink products other than breastmilk;
- Recalled receiving any sample or coupons for any commercial or prepackaged products for children 0-36 months of age;
- Recalled receiving any gift of articles or utensils associated with any company that sells commercial or prepackaged food or drinks for children 0-36 months of age; and
- Recalled having seen promotions or messaging for commercial or prepackaged food or drink products for children 0-36 months old, or for companies that sell these products.

Form 2. Designed to collect information from health workers in HCFs to assess incidents in the last six months where staff:

- Recalled personnel from companies that sell any types of formulas or baby foods or drinks intended for infants/children 0-36 months reaching out to staff;
- Recalled receiving promotional, informational and educational materials, samples of formulas or CFs for infants or young children between 0-36 months, gifts, or coupons for distribution to mothers and other caregivers of infants and young children;
- Recalled having received, from companies in the last six months, promotional, informational and educational materials; personal gift items; or maternity or baby equipment; and
- Recalled having companies display products or conduct promotional activities in the facility;
- Recalled having companies seek direct contact with mothers or other caregivers, or facility staff; and
- Recalled having received offers for providing free supplies of any products for infants and children 0-36 months; donations of equipment; sponsored events or workshops for the HCF staff; or payment for or other support to staff to attend events or workshops outside the HCF from companies in the last six months.

Form 3. Designed to collect data on promotional, information and educational materials in selected HCFs to identify incidences of:

- Company-sponsored equipment; or promotional, informational or educational materials for patients or health workers; and
- Company-sponsored logos on medical or office equipment.

Form 5. Designed to collect information on point-of-sale promotions in selected retail outlets to assess the number of those retail outlets where such promotions may be as well as to assess the number and nature of promotions.

Form 6. Designed to collect information on product labels and inserts for infant formula and CFs for infants and young children 0-36 months.

Form 7. Designed to collect information on observations in HCFs and retail outlets to assess the extent of promotions related to all types of infant formula and CFs for infants and young children 0-36 months.

All information collected from mothers and health workers focused on the period within the past six months. All information collected from retail shops and other public domain areas related to the period of the survey, reflecting the products and information as available during the period the survey was conducted.

To show appreciation for their time and to thank them for participating in a study interview, IHPF gave mothers a gift of a set of three children's books (worth approximately US$4). Health workers were also given a thank you gift of a set of eight children's books for the HCF (worth approximately US$19), as is usual practice in Thailand.

D. Sampling of Districts and HCFs in Bangkok

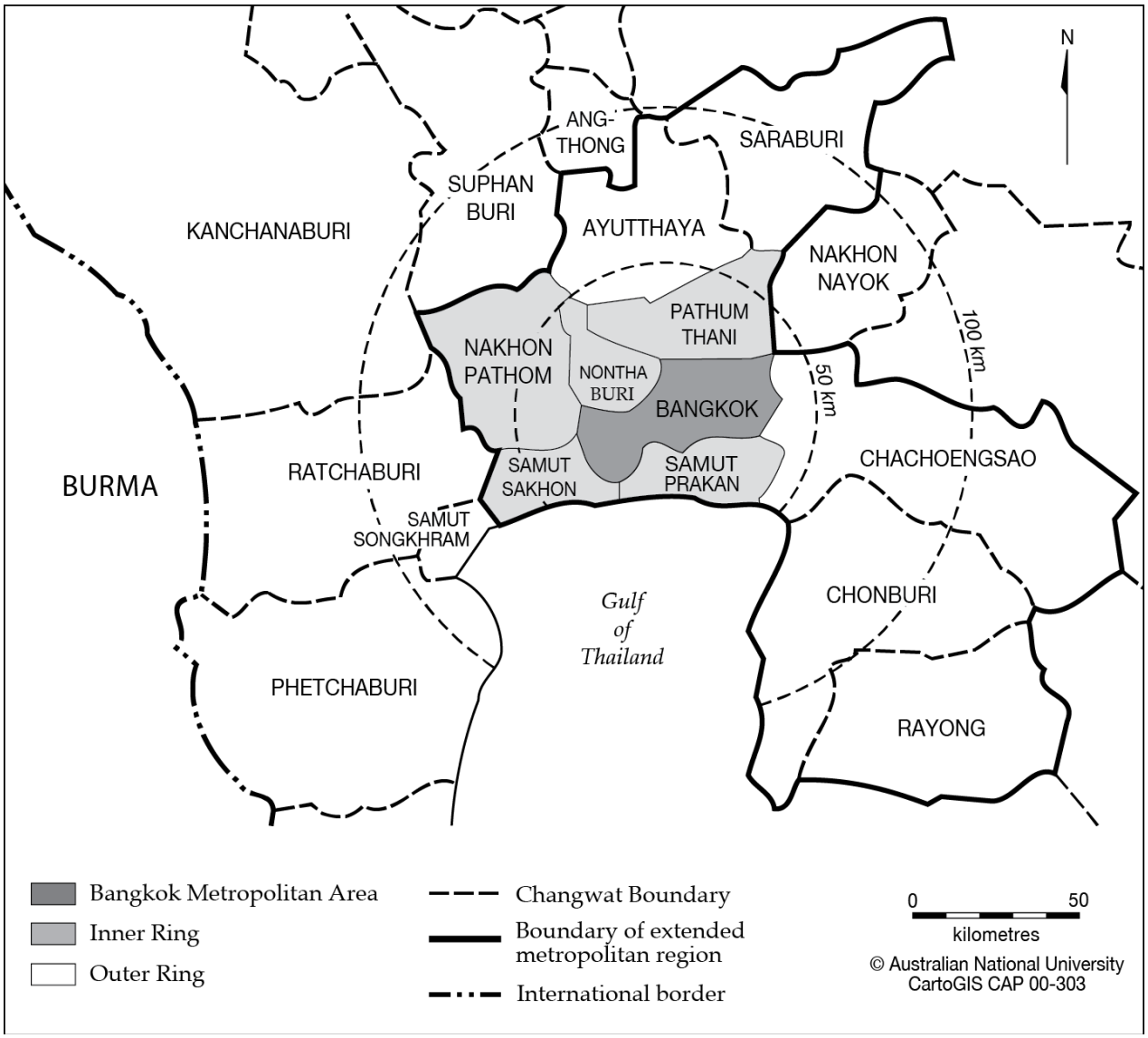
A two-stage sample design was developed for this study. Ten geographical areas (districts or cluster of districts), referred to as primary sampling units (PSUs), were selected in the first stage using probability proportional to size systematic sampling. Within the 10 sampled districts, 33 HCFs were selected for the study, with an additional set of 23 replacement HCFs held in reserve (totaling 56).

The goal was to recruit 33 HCFs in the sampled districts for the in-person interviews of eligible women.

Selection of Districts

The initial work consisted of an evaluation of the use of the districts as the PSUs. Figure 3-1 shows a map of the Bangkok geographical districts. The 50 districts in Bangkok, the district population data from the 2010 census, and the number of HCFs are shown in Appendix J.

Figure 3-1. Bangkok Thailand Geographical Districts



Source: Australian National University of Asia and the Pacific (http://asiapacific.anu.edu.au/mapsonline/base-maps/bangkok-metropolitan-area)

For the 183 public and private HCFs, the average number of facilities is about 4, ranging from 1 to 7 facilities. For sampling purposes, districts with fewer than four HCFs were combined with contiguous districts, resulting in a total of 33 "combined" districts for sampling. The main considerations when combining the districts were (a) to get enough HCFs per combined area and (b) to create geographically well-defined and reasonably efficient entities for data collection. The list of combined districts is shown in Appendix K.

A total of 10 combined districts containing 16 administrative districts were selected systematically with probability proportional to the number of females aged 15-49. The list of the 10 selected combined districts, and the number of sampled HCFs within each one, is shown in Table 3-1.

Table 3-1. Selected combined districts

Combined district ID	Combined district name	District code	Total population	Female population	Females age 15-49	Number of HCFs
S07	Chom Thong	35	197,409	101,456	61,486	6
S13	Din Daeng/Phaya Thai	26/14	286,087	149,269	97,684	8
S15	Bang Sue	29	132,948	68,049	40,665	4
S20	Vadhana	39	171,150	88,822	67,800	5
S24	Khlong Sam Wa/Min Buri/Nong Chok	46/10/3	613,687	308,747	202,507	7
S25	Lat Krabang	11	299,775	148,269	108,707	4
S26	Prawet/Saphan Sung	32/44	340,362	173,056	115,112	5
S27	Bang Kapi/Wang Thonglang	6/45	579,604	310,269	236,301	7
S29	Suan Luang	34	235,063	120,656	80,124	6
S31	Don Mueang/Lai Si	36/41	382,385	192,953	121,782	4
Total						56

Selection of HCFs

As shown in Table 3-1, there were 56 sampled HCFs (main and reserve) in the selected combined districts. The distribution of the original sample of HCFs by facility type is shown in Table 3-2. HCFs are overseen/administered by various entities, as shown in Table 3-2.

Since the targeted number of participating HCFs was 33, we selected a reserve sample of 23 HCFs, totaling 56 HCFs, as shown above in Table 3-2. Prior to allocating the HCFs to the main and reserve samples, the list of HCFs was sorted by combined district identifier and facility type (Bangkok Metropolitan Administration, Ministry of Defense, Private).

Table 3-2. HCFs in sampling frame and sample by type

Facility type	Number of HCFs in sampling frame	Number of HCFs in sample
Bangkok Metropolitan Administration	77	23
Ministry of Defense	5	1
Ministry of Education	3	0
Ministry of Finance	1	0
Ministry of Public Health	4	0
Office of the Prime Minister	1	0
Private	91	32
Thai Red Cross	1	0
Total	**183**	**56**

Participation for the private HCFs in both the main and reserve sample was lower than anticipated. In order to meet the target of 33 participating HCFs, a supplemental sample of 23 HCFs was selected from the BMA in July 2017. HCFs in this supplemental sample were chosen by their proximity to the sampled districts. All supplemental HCFs were in districts that were contiguous to at least one selected district in the original sample. From the second sample, 12 HCFs were included so that the final number of HCFs included in the study was 33, 30 public and 3 private.

Once the supplemental sample of HCFs was provided, IHPF began contacting the HCFs to gain approval to visit and conduct interviews. Approval from the Ministry of Health and the BMA was required in order to gain access to the HCFs.

E. Selecting the Mothers in HCFs

The NetCode protocol called for interviews with five mothers of children below six months and five mothers of children 6-24 months (2 years) old conducted over a period of a single day at each facility.

For each of the HCFs, the target was to conduct 10 interviews with mothers. Since it was assumed some mothers might not be available, might be ineligible, or might refuse to be interviewed, we prepared to approach 16 mothers, to obtain 10 completed interviews per facility. It proved too restrictive/difficult to achieve the requirement of five mothers with children below and over six months of age; therefore this stipulation was relaxed and IHPF field collection teams approached all eligible mothers with children younger than 24 months (2 years).

In some smaller facilities, it was not possible to interview 10 mothers in one day. If the team failed to do so, they returned a second day to reach their target of ten completed interviews per facility.

A total of 330 mothers with children younger than 24 months (2 years) were interviewed (10 at each of the 33 HCFs). There were 115 (35%) mothers with children less than six months and 215 (65%) mothers with children 6-24 months. There were 36 refusals, resulting in a participation rate of approximately 90% (see supplementary Table A in Appendix L).

F. Selecting the Health Workers in HCFs

The NetCode protocol called for interviews with three health workers per facility. The interviews were conducted separately to ensure independent responses from each person. The protocol suggested that the three health workers interviewed include: the clinic director (or the head of the department); a physician; and either a nurse or midwife. The data collection team were instructed not to interview the receptionist or janitorial staff. On arrival at the HCF, the IHPF team asked for a list of the names and designations of all health workers who have contact with mothers of young infants up to 24 months and who were present during the days when the team would visit. For this study in Bangkok, the types of health workers included nurses, doctors, midwives and assistants in the well-baby clinics and maternity clinics.

The team selected three health workers per HCFs and interviewed each.

A total of 99 health workers were interviewed (3 at each of 33 HCFs). One health worker refused to participate in the study, resulting in a participation rate of 99%.

G. Selecting and Visiting Retailers

As part of the model for assessing compliance with the Code and local regulations, the NetCode protocol requires one small retailer or pharmacy in proximity to each HCF to be visited to determine whether there were any promotions or materials for products covered by the Code. The NetCode protocol also requires 10 large retail stores that sell a high volume and variety of products under the scope of the study to be visited, selected on the basis of local knowledge that they carry the majority of the covered products available for sale nationally.

A health worker at the facility was asked for the location of the closest store or the interviewer identified a nearby retail outlet by walking around the area near the HCF.

A total of 43 physical retail outlets were visited, 33 small retail outlets and 10 large retail outlets.

Although the NetCode protocol does not call for online retailers to be included in the study, ATNF included such stores, given the increasing importance of this sales channel. IHPF staff also monitored 6 online retail sites for the month of June and July 2017. Westat identified several potential websites and IHPF confirmed that the ones that were the most popular and frequently visited retail websites in Bangkok.

H. Identifying and Evaluating BMS and CF Products

ATNF and Westat staff performed a detailed internet search and review to assemble a preliminary list of all known products sold in Bangkok that are BMS and CFs according to the study definition, and therefore, subject to the Code and the Thailand FDA regulations. Products included those of major international manufacturers, other manufacturers from outside of Thailand, and in-country manufacturers. This list was provided to IHPF staff who further refined the list by confirming which of these products was available in Bangkok and a final product list was prepared. A large and small pack of every product was purchased and photographed for analysis of the labels and inserts.

These products did not need to be purchased at a location near one of the sampled HCFs, since we expected the labels and inserts for products to be the same no matter where in the city they were sold.

For purchasing, the intent was to buy the smallest and largest size available in an effort to determine whether there were differences on the labels.

If the field teams found the product list was incomplete and identified additional products during their visits to retailers, those products were added to the overall list and a sample was purchased as well. As noted previously in the report, we abstracted a total of 224 product labels (representing 182 unique BMS and CF products manufactured by 25 companies). However only the 119 BMS product

labels are included in this report; 105 labels for CF 6-36 month products are excluded from this report. (See Appendix D).

I. Media Monitoring

Based on figures of the compound annual growth rate of the media and entertainment spending in Thailand between 2016 and 2020, internet advertising is the dominant medium in Thailand and makes up more than 22.5% of media spending. Television and video is second, representing about 14.6% and advertisements accessed via the internet is third representing about 7.4% of spending in Thailand.[41] Websites dedicated to pregnant women and mothers are also available; these media are potential channels for BMS and/or CF advertisements. The media monitoring component of the NetCode protocol requires assessment of traditional and internet advertising. We chose to monitor the following paid-for media channels:

- Traditional: television, radio and print media including newspapers and parenting magazines.
- Internet: top websites geared towards pregnant women and mothers of infants, and popular online retail websites.

ATNF entered directly into an agreement with iSentia, a local media monitoring organization, to monitor selected television, radio and print publications. Most of the information from these sources was generated in an automated fashion. Data was obtained for six months, from March – August 2017.

Companies' own advertising was also monitored. The protocol does not differentiate between companies' and brands' own websites and their social media in terms of an internet source; however, due to the growth of social media, Westat identified the local company and brand websites as well as the four main social media platforms (each company's Facebook page, Instagram, YouTube channel and Twitter feed). Westat trained IHPF to manually monitor these media, as well as online retailer activity, for two months (June and July 2017).

[41] https://www.statista.com/statistics/586555/media-entertainment-growth-thailand/

Prior to conducting the media monitoring, Westat developed the Protocol for Media Monitoring in Bangkok, Thailand, trained IHPF staff, and clarified the information needed from the social media platforms and websites to ensure that everyone understood the BMS and CF products and age ranges that should be included in the study. IHPF followed these guidelines for online media monitoring:

- **Company and Brand Websites.** Once a week over the two-month period, the monitor accessed 12 company and 5 brand websites and scan for advertisements and promotions. The monitor used Microsoft Snipping Tool to capture screen shots of the advertisements.
- **Parent and Child Websites.** Once a week over the two-month period the monitor accessed 15 most popular websites related to mothers and babies, and scanned for BMS and CF advertisements and promotions. The monitor used Microsoft Snipping Tool to capture screen shots of the advertisements.
- **Social Media.** Once a week over a two-month period, the monitor accessed BMS and CF company-specific Facebook pages, Instagram, YouTube channel(s) and Twitter feeds, and captured any advertisements or promotions by taking a picture, video, or screenshot, as appropriate.
- **Online Retailers.** Once a week over the two-month period, the monitor accessed the 7 most popular online retail websites and scanned for BMS and CF advertisements and promotions. The monitor used Microsoft Snipping Tool to capture screen shots of the advertisements

In total, iSentia monitored 4 terrestrial television channels, 65 printed magazines, 25 newspapers, and 2 radio channels. IHPF conducted weekly monitoring 57 of the major international baby food manufacturers' websites and their 4 social media platforms (YouTube, Instagram, Facebook, and Twitter). Additionally, IHPF monitored 6 large retail and 19 parenting and child websites.

The Westat Project Manager reviewed the advertisements data for completeness and quality.

J. Representativeness of Results

The design of the NetCode protocol yields a convenience sample of mothers of infants and young children less than 24 months (2 years) and health workers for the sampled areas of Bangkok. Therefore, the prevalence estimates in this report pertain to the study participants only. These results cannot be generalized to the overall population of mothers or health workers in Thailand.

The prevalence estimates for promotions observed in retail outlets cannot be extrapolated to the overall catchment area of the study, since the selection was a convenience sample. For product labels and media advertising, this study conducted a census; therefore, the prevalence estimates do apply to the sampled area of Thailand.

K. Defining Potential Non-Compliance

For each Article of the Code for which the NetCode protocol collected data, our study team collated definitions from the protocol of what would be considered non-compliance with the Code. These definitions are provided in Appendix E, organized by Sub-article of the Code, and showing the exact questions and codes that factored into defining possible non-compliance. As described in Section A above, additional definitions of non-compliance were added as a result of the specific provisions of any national regulations that exceeded the Articles of the Code. These additional definitions are also included in Appendix E.

It should be noted that for the interview data from the mothers and the health workers, we have emphasized that this is based on recall, and thus, we are not able to verify that the reported event accurately demonstrates non-compliance with the Code. A further discussion of this limitation is presented in Chapter 7, Limitations. For any items directly observed by our field team, such as informational materials, promotions, and product labels, we did see the actual items, and therefore, we have called these "observations."

For label and inserts non-compliances, the Westat Research Assistant performed 100% QC of Form 6 (label and insert data) for 17% of select key variables. The Westat Project Manager then shared the findings with ATNF for final review.

4 Fieldwork Preparation and Training

A. Organization of Field Work

Personnel for data collection in the field included 8 field staff, 4 field supervisors, and 1 project coordinator. The field staff were formed into 4 teams, each accompanied by a field supervisor. These teams were responsible for interviewing mothers and health workers, while the field supervisor performed data collection at the retail outlets and HCFs. The project coordinator was responsible for overall coordination, contacting HCFs, and making appointments for the data collection staff.

A team of two in-country Westat staff analyzed the labels of the BMS and CF products.

B. Selection and Training of Field Staff

IHPF had a pool of experienced local field staff members in Bangkok, who have partnered with IHPF for similar studies. IHPF recruited a team of 8 local field staff members from Bangkok for this study. The field staff were recent graduates who had received IHPF study training. The Project Coordinator screened and interviewed each of the potential field staff members. IHPF recruited more than the required number of data collectors to account for any attrition. Considering the local culture, field staff were gender-matched to set respondents at ease. For example, only female field staff were responsible for interviewing mothers.

Prior to the scheduled training in Bangkok, Westat conducted a four-hour Train-the-Trainer training via Skype with the IHPF Project Coordinator and two senior field supervisors who planned to lead the training in Bangkok. Westat conducted a question-by-question review of the NetCode forms. Westat IT staff conducted a separate two-hour training via Skype on collecting the data via the tablets. IHPF led the training at their facilities in Bangkok for four days in early July 2017 to provide all selected data collection staff with the knowledge and skills necessary for data collection using the NetCode protocol. IHPF conducted the training in Thai, and the attendees included ATNF staff, Westat Senior Managers, IHPF Project Coordinator, field supervisors and field staff. The training followed the approach recommended in the NetCode protocol, and was based on the protocol. It

introduced the field staff to the importance of breastfeeding, oriented them to the Code and national label regulations, and trained them on the use of the NetCode questionnaires. IHPF reviewed a PowerPoint presentation with the field staff that contained an overview of all information. The training provided in-depth information on using the data collection forms and tablets. At the end of the review, the field staff practiced mock interviews and role-plays to simulate use of the forms for interviewing. IHPF led a field test with the field supervisors and field staff to give experience of visiting and performing interviews in the clinics and to ensure the field staff understood the proper interviewing techniques and use of tablets for data collection. IHPF conducted two other field tests at two large and one small retail outlet to give experience in looking for BMS and CF products and promotions. The team also practiced how to complete Forms 5 and 7 for retail store promotions.

Westat conducted a separate training for in-country staff responsible for evaluating the labels and inserts of the BMS and CF products purchased for completion of Form 6. For further detail on the training, please find the IHPF training agenda in Appendix M.

C. Introductions to Clinics

In order to conduct the surveys at the HCFs in Bangkok, IHPF obtained IRB approval from the Institute for the Development of Human Research Protection (IHRP), Ministry of Public Health (for all private clinics) and the BMA (for all public primary health clinics). The IRB submission provided information about the purpose and objectives of the study, who conducted the study, interviewed description of the study participants, and reiterated the maintenance of the confidentiality of the information collected.

After IHPF obtained IRB approval from the IHRP and the BMA, they contacted each HCF in the original sample and requested approval to conduct the study at the facility. Of the 32 private HCFs in the original sample, only 3 provided approval. Twenty-two of the 23 public HCFs in the original sample provided approval. One facility (Ministry of Defense) was ineligible because it did not have well-baby clinics. Since a large number private HCFs refused approval for data collection, a supplemental sample of 23 BMA public HCFs was drawn. Twelve of these replacement HCFs were used in the final sample. A total of 33 HCFs participated in the study, 30 public and 3 private.

The field supervisors, with help and direction from the IHPF Project Coordinator, carried out the task of contacting HCFs, explaining study objectives and obtaining permission for the team to

conduct interviews with mothers and HCF staff. All field supervisors as well as the field staff members were able to communicate in Thai. The project coordinator made contact with the HCFs in advance of the day when the field collection team planned to visit. IHPF made initial attempts to obtain this permission via a phone call. If necessary, field supervisors met the responsible facility staff, such as the senior doctor, head/chief nurse, manager, office staff, in person to obtain permission. At the same time, supervisors also gathered information about the clinics within a particular facility to locate the respondent population, best day of the week and time to approach potential respondents; as well as estimate the number of potential respondents that visited a facility on a given day. The project coordinator scheduled actual data collection based on this important information to perform data collection in most efficient and least disruptive manner.

D. Data Collection and Entry

Field staff completed electronic versions of the data collection forms on tablets, following the procedures outlined in the data collection training and the NetCode protocol. Westat in-country staff trained the IHPF field supervisors to upload the data from the tablets at the end of each day following data collection. The Westat Data Manager reviewed all uploaded data and provided any data discrepancies to the IHPF Project Coordinator for resolution. Westat and IHPF repeated this task until all discrepancies were resolved for all data collection forms.

Westat implemented special QC procedures for analysis of product labels. Each BMS and CF product was given a unique identifier. Westat provided in-country staff with the list of BMS and CF products, with their unique identifier. This topic was included in their label abstraction training and they used the unique product identifiers when completing Form 6 in an Excel spreadsheet. These unique identifiers were pre-populated in the Excel spreadsheet and were also used to catalogue each product's images in a systematic manner. Adopting this standardized procedure proved very effective in performing cross-form data QC and in assuring that the right images were correctly associated to the companies and brands.

Westat's Data Manager and Senior Project Manager reviewed the clean raw data from the field further for completeness and accuracy before producing the analysis tables.

Study Results 5

The aim of the NetCode protocol is to assess compliance by baby food and drink manufacturers with selected Articles of the Code and relevant national regulations. In practice, this is done by measuring possible non-compliance, i.e., by observing where a particular provision of the Code does not appear to be followed. The results from the analysis of data collected in this study are presented below, organized by Article of the Code for which data were captured in the NetCode protocol's data collection forms, and adapted as noted in Chapter 3. For each Article, if there were a substantial number of observations, the accompanying table shows data overall and disaggregated by company name.

Table 5-1 shows the characteristics of the Thailand sample. Following the NetCode protocol, 33 HCFs were included in the study sample. Thirty (30) of the 33 HCFs (~91%) were public HCFs, and only three (9%) were private HCFs. All of the private HCFs in the final sample were hospitals, whereas only two of the public HCFs were hospitals. The remaining 28 public HCFs were primary health clinics (e.g., clinics offering well baby services). As noted, initially, there were more private HCFs selected for the sample compared to public HCFs, however a significant number of the selected private HCFs refused entry resulting in re-drawing a new sample with more public HCFs.

Due to the paucity of private HCFs in the final study sample, IHPF collected additional qualitative data via individual interviews with 6 mothers with children under 24 months and who received health services at private HCFs in Bangkok. Results from these qualitative interviews are also included in this chapter.

As per the NetCode protocol, the quantitative sample of mothers included 10 mothers per HCF, resulting in a total sample size of 330 mothers. About 35% of mothers (115) had a child less than 6 months of age, and 65% of mothers (215) had a child 6-24 months of age.[42]

[42] Note that the original NetCode protocol stipulated an even distribution of mothers in these two groups, or five of each age group per HCF, but that requirement was relaxed for Thailand to allow for completion of the full sample of 330 interviews.

Among the sample of health workers in this study, the most common category of staff member was nurses. Nurses accounted for about 78% of the respondents (77 of the 99 respondents) to the health worker questionnaire (Form 2).

Finally, Table 5-1 shows that the study included 33 small retailers (selected to be "proximate to" the sample HCF), as well as 10 large retailers, totaling 43 retail outlets visited for direct observation of baby food promotions.

Table 5-1. Characteristics of participants

	no.	%
Characteristics of HCFs		
Private	3	9.1%
Hospitals	*3*	*100.0%*
Clinics	*0*	*0.0%*
Public	30	90.9%
Hospitals	*2*	*6.7%*
Primary health clinics	*28*	*93.3%*
Total HCFs	**33**	**100.0%**
Characteristics of Surveyed Mothers		
Mothers with a child < 6 months of age	115	34.8%
Mothers with a child 6-24 months of age	215	65.2%
Total mothers interviewed	**330**	**100.0%**
Characteristics of HCF Staff		
Center director	1	1.0%
Department head	5	5.1%
Doctor	2	2.0%
Nurse	77	77.8%
Midwife	0	0.0%
Other	14	14.1%
Total HCF staff interviewed	**99**	**100.0%**
Characteristics of Retail Outlets		
Small retailers (1 in proximity to each *HCF*)	33	76.7%
Large retailers	10	23.3%
Total retail outlets visited	**43**	**100.0%**

Source: ATNF Thailand (2017)

Table A in Appendix L shows the district ID, HCF ID, the number of mothers interviewed who had children less than 6 months, the number of mothers interviewed who had children 6-24 months, and the number of health workers interviewed in this study. This table shows that within the final sample of HCFs, the study had high participation rates among both mothers and health workers, at 90.2% and 99.0%, respectively. However, due to the difficulty IHPF experienced in receiving the necessary permissions from private HCFs (i.e., the great number of refusals among sampled private

HCFs in Bangkok), and therefore the need to replace refusal HCFs with additional HCFs, the participation rate among HCFs in the original sample was 48.5%.

A. Article 4: Information and Education

Data were collected to allow assessment of compliance with Sub-article 4.2, informational and educational materials, and Sub-article 4.3/WHA 69.9 relating to donations of equipment or materials to HCFs.

Sub-article 4.2. Informational and educational materials dealing with the feeding of infants and intended to reach pregnant women and mothers of infants and young children.

As shown below in Table 5-2, this study observed 8 informational/educational materials in the sample of 33 HCFs and 43 retail outlets. Three of the materials were observed at the HCFs, and the remaining 5 materials were observed at the retail outlets. A total of 13 baby food or drink products were referenced on the eight informational/educational materials, 4 products among the materials at HCFs, and 9 products among the materials at retail outlets.

Of the 13 unique products referenced on the observed informational and educational materials, 9 were RB/Mead Johnson Nutrition products, 3 were Nestlé products, and 1 was a Danone product. Consistent with our findings in India, Vietnam, and Indonesia, the use of informational and educational materials to reach women in Thailand appears to be quite limited.

Table 5-2. Observations related to sub-article 4.2: Informational/education materials and referenced products at HCFs and retail outlets

	At HCFs (n=33)	At Retail Outlets (n=43)	Total
No. of informational/educational materials observed	3	5	8
No. of products referenced in informational/educational materials*	4	9	13
No. of products referenced, by company			
Abbott	0	0	0
Danone	1	0	1
Kraft Heinz	0	0	0
Nestlé	0	3	3
RB/Mead Johnson Nutrition	3	6	9
Other**	0	0	0

Source: ATNF Thailand (2017)

* Informational/educational materials clearly intended for health workers are not included in these counts. Nor are any observed materials which reference "not a specific product" (only those that reference 4 of the main product types [IF, FOF, GUM, CF <6] are included). In addition, a single informational/educational item observed at a health care facility or retail outlet could refer to more than one product type (for example, both IF and FOF). Therefore the number of products shown in this row may not match (may be greater than) the number of informational/educational materials observed, shown in the first row.

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnicbaby, and "other (specify)".

Table 5-3 shows data by product type on the observed informational/educational materials. Of the 13 products referenced on the 8 observed informational/educational materials, most of them (7 products) were GUM products. Three were IF products, and 3 were FOF products. No CFs were referenced on the observed informational/educational materials.

This table also shows non-compliance data by specific sub-articles from Article 4.2 of the Code. For example, all 13 of the referenced products were non-compliant with respect to sub-article 4.2d, the inclusion of clear information on "the difficulty of reversing the decision not to breast-feed."[43] In addition, the lower portion of this table shows that all 13 referenced products on the 8 observed materials were non-compliant as per Article 4.2; in other words, they all had at least one or more sub-article 4.2a-i non-compliance.

[43] World Health Organization (WHO). 1981. *International Code of Marketing of Breast-milk Substitutes*. Geneva, Switzerland.

Table 5-3. Observations related to sub-article 4.2: Informational and educational materials at HCFs and retail outlets, by product type

	By product type				
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36	Complementary Food (CF) < 6 mos	Total Products*
No. of products referenced in observed informational/educational materials					
At HCFs	1	1	2	0	4
At Retail Outlets	2	2	5	0	9
No. of non-compliances, by sub-article 4.2 non-compliance type					
a. Benefits and superiority of breastfeeding	0	0	2	0	2
b. Maternal nutrition, and the preparation for and maintenance of breastfeeding	0	0	3	0	3
c. The negative effect of partial bottle-feeding	2	2	7	0	11
d. Difficulty reversing not breastfeeding	3	3	7	0	13
Among baby milk products only:					
f. Social and financial implications of using formula	0	0	0	-	0
g. Health hazards of inappropriate foods or feeding methods	0	0	0	-	0
h. Health hazards of unnecessary/ improper use of commercial baby milk products	0	0	0	-	0
i. No pictures or text idealizing BMS	0	0	0	-	0
No. of products with *any* (one or more) type of sub-article 4.2 non-compliance	3	3	7	0	13
Percent of total products with any (one or more) type of sub-article 4.2 non-compliance	23.1%	23.1%	53.8%	0.0%	100%
No. of products with *any* (one or more) type of sub-article 4.2 non-compliance, by company					
Abbott	0	0	0	0	0
Danone	0	0	1	0	1
Kraft Heinz	0	0	0	0	0
Nestlé	1	1	1	0	3
RB/Mead Johnson Nutrition	2	2	5	0	9
Other**	0	0	0	0	0

Source: ATNF Thailand (2017)

* Informational/educational materials clearly intended for health workers are not included in these counts. Nor are any observed materials which reference "not a specific product" (only those that reference four of the main product types [IF, FOF, GUM, CF <6] are included).

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

Table 5-4, in contrast, shows these data at the *material* level, rather than at the *product* level. Of the 8 eligible informational/educational materials observed in the Bangkok sample of the 33 HCFs and 43 retail outlets, all of which are non-compliant as per Article 4.2 of the Code, 6 are from RB/Mead Johnson Nutrition, 1 is from Danone, and 1 is from Nestlé.

Table 5-4. Observations related to sub-article 4.2: Informational and education materials at HCFs and retail outlets

	Total materials*
No. of materials with any (one or more) type of sub-article 4.2 non-compliance	8
No. of materials with any (one or more) type of sub-article 4.2 non-compliance, by company	
Abbott	0
Danone	1
Kraft Heinz	0
Nestlé	1
RB/Mead Johnson Nutrition	6
Other**	0

Source: ATNF Thailand (2017)

* Informational/educational materials clearly intended for health workers are not included in these counts. Nor are any observed materials which reference "not a specific product" (only those that reference the four product types [IF, FOF, GUM, CF <6], as shown in the prior table, are included).

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

Sub-article 4.3 augmented by WHA69.9 Recommendation 6: Companies that market foods for infants and young children should not create conflicts of interest in health facilities or throughout health systems. Such companies or their representatives should not … 'donate or distribute equipment[44] or services[45] to health facilities.'

Data for this assessment of Sub-article 4.3 were captured by field team supervisors' observations of equipment at the 33 HCFs in the sample (specifically, NetCode Forms 3 and 7). These results are shown in Table 5-5. In this study, there were 38 observations of equipment at 14 of the 33 HCFs in the sample (~42% of the sample of HCFs). Of those, 36 were found to display brand names or logos. The majority of the observed equipment items were from Danone (24 items, or about two-thirds, ~67%, of the total observations). Nine equipment items from RB/Mead Johnson Nutrition were also observed (25% of the total).

[44] Sub-Article 4.3 of the Code allowed donations of equipment and materials as long as they did not make reference to a proprietary product within the scope of the Code. WHA 69.9 strengthened the original language by calling on companies to not make any donations of equipment of services.

[45] The version of the NetCode protocol used for this study does not provide for assessment of the delivery of services.

Table 5-5. Observations related to Sub-article 4.3: Equipment at HCFs, by company

	Total	%
Observations of equipment at HCFs (n=14)	38	–
Equipment displaying brand names/logos*	36	100%
Equipment by company		
Abbott	1	2.8%
Danone	24	66.7%
Kraft Heinz	0	0.0%
Nestlé	2	5.6%
RB/Mead Johnson Nutrition	9	25.0%
Other*	0	0.0%

Source: ATNF Thailand (2017)

* The difference between 38 and 36 are 2 observed equipment items which did not show a brand name/logo. Of these 2 observations, 1 is from Danone and 1 is from RB/Mead Johnson Nutrition. This report presents the data showing non-compliance with the Code and WHA resolutions up to but not including WHA 69.9; therefore these two observations are not included in the disaggregated values in this table.

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

B. Article 5: The General Public and Mothers

Data were collected to allow assessment of compliance with various sub-articles of Article 5 of the Code. These data include interviews with mothers of children up to 24 months of age (NetCode Form 1), as well as the media monitoring component of the study.

Sub-article 5.1. No advertising or other form of promotion to the general public of products within the scope of this Code.[46]

The 330 mothers in the sample were asked if, in the past 6 months, they had seen any advertisements, promotions or messages "from companies that sell any commercial or prepackaged food or drink products for children 0-36 months old" on a wide range of media. Table 5-6 shows the number of advertisements, promotions or messages reported by the sample of mothers, disaggregated by media type and company.

Overall, 274 mothers of the 330 in the sample (~83%) reported seeing at least one BMS promotion in the past 6 months. A total of 797 advertisements, promotions or messages were reported by the

[46] Covered products are those for children 0-36 months of age, including all commercial baby milk products (i.e., infant formula [IF], follow-on formula [FOF], and growing up milk [GUM]) as well as complementary food products [CF] for children between 0 and 6 months.

274 mothers, and the great majority of them, over 65%, were television ads. The next most frequently-reported channel was social media, at 154 reports (or 19% of the total number of advertisements, promotions or messages).

When looking at the mothers' reports by media and by company name, we see that for most of the reports, or 648 of the 797 total reports (~81%), the specific company name was not known to the mothers. In other words, Table 5-6 shows that mothers in the sample quite commonly reported seeing BMS advertisements or promotional messages in the media, particularly on television, but they did not frequently recall the specific companies promoted.

Table 5-6. Mothers' reports related to sub-article 5.1: No advertising or promotion to the general public

	By media type									
	Tele-vision	Radio	Maga-zine	Shop or Phar-macy	Bill-board	Social Media	Inter-net	Com-munity Event	Other/ don't know	Total
All mothers' (n=274) reports	521	3	14	22	6	154	55	0	22	797
Percent of total reports	65.4%	0.4%	1.8%	2.8%	0.8%	19.3%	6.9%	0.0%	2.8%	100%
By company										
Abbott	0	0	0	0	0	0	0	0	0	0
Danone	3	0	0	0	0	1	0	0	0	4
Kraft Heinz	0	0	0	0	0	1	0	0	0	1
Nestlé	16	1	0	1	0	4	2	0	1	25
RB/Mead Johnson Nutrition	6	0	0	0	0	2	0	0	1	9
Other*	78	1	0	0	1	13	14	0	3	110
Don't know	418	1	14	21	5	133	39	0	17	648

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)".

The qualitative interview data with 6 mothers from private HCFs were consistent. Mothers were familiar with BMS company advertisements in the media (television, radio, social media), but they did not necessarily know the company or brand names. These mothers most commonly recalled "Dumex" (a Danone product) and "Enfa" (RB/Mead Johnson Nutrition), which are brands. Interestingly, one respondent reported that she had observed in web forums baby food company staff "pretending to be mothers" and giving information to other mothers in the forum.

In addition to interviews with mothers, the study also included a media monitoring component, with direct observations of both traditional media sources (such as television, newspaper, magazine, and

radio), as well as online media sources (including company and brand websites, YouTube, Facebook, Twitter, and Instagram). A professional media monitoring service, iSentia, was hired to monitor traditional media, whereas the in-country local contractor was trained to conduct online media monitoring. Table 5-7, below, shows the total number of products identified by type of traditional medium and by product type. Table 5-8 shows the number of unique advertisements and the number of times these advertisements were repeated (aired/reprinted). A total of 31 advertisements were found that referred to a total of 37 products. The 31 advertisements were repeated a total of 1,066 times. Interestingly, a large number of advertisements were noted for GUMs (84%), and most were from RB/Mead Johnson Nutrition, Danone and Nestlé and on television. For RB/Mead Johnson Nutrition, there were 10 television advertisements for GUMs, three of which also included IFs and FOFs.

Table 5-7. Total number of products by company on traditional media, March-August 2017

	By product type				Total no. of products referenced on the observed materials**
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36 mos	Comple-mentary Food (CF) < 6 mos	
Total	3	3	31	0	37
TV	3	3	25	0	31
Newspaper	0	0	3	0	3
Magazine	0	0	3	0	3
No. of products covered by one or more "launch" ads	3	3	31	0	37
Abbott	0	0	0	0	0
Danone	0	0	6	0	6
Kraft Heinz	0	0	0	0	0
Nestlé	0	0	6	0	6
RB/Mead Johnson Nutrition	3	3	10	0	16
Other*	0	0	9	0	9

Source: iSentia, Thailand (2017)

* Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, and Picnic Baby.

** Note that some adverts promoted more than one product.

Table 5-8. Total number of unique advertisements, products, and times repeated, by company on traditional media, March - August 2017

Company	No. of unique advertisements	No. of products referenced on ads	No. of times ads aired/reprinted
Abbott	0	0	0
Danone	6	6	130
Kraft Heinz	0	0	0
Nestlé	6	6	342
RB/Mead Johnson Nutrition	10	16	306
Other*	9	9	288
Total	**31**	**37**	**1,066**

Source: iSentia, Thailand (2017)

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, and Picnic Baby.

Table 5-9 presents the results of the online media monitoring component of the study. The online media include baby food companies' own media (websites and social platforms including YouTube, Facebook, Twitter and Instagram; parenting and child websites popular in Thailand; and 7 prominent online retailers). This was conducted for two months, June and July, 2017. A complete list of websites that were monitored is available in Appendix N.

As shown in Table 5-9, overall 104 adverts and promotions were found for BMS products on the companies' own media. Danone had the greatest number of promotions (~33% of the total), with Facebook as Danone's most prominent medium. No promotions were found on company websites or social media accounts for Kraft Heinz. Among companies' own media, company/brand websites appeared to be the most used medium for promotions, with 58% of all promotions observed, followed by companies' Facebook accounts (~37%). Among "Other" companies, DG Smart Mom and Dutch Mill were the only two companies that used their brand-specific websites, YouTube and Facebook for promoting BMS products. Facebook was the most used media platform amongst "Other" companies.

Table 5-9. Observations in company's own media related to Sub-article 5.1: No advertising or promotions, by media type

	By media type					Total no. unique ads/promotions observed
	Websites	YouTube	Facebook	Twitter	Instagram	
Company's own media channels						
Abbott	22	0	0	0	0	22
Danone	12	4	18	0	0	34
Kraft Heinz	0	0	0	0	0	0
Nestlé	13	0	8	0	0	21
RB/Mead Johnson Nutrition	11	0	2	0	0	13
Other*	2	2	10	0	0	14
Total	**60**	**6**	**38**	**0**	**0**	**104**

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill and DG Smart Mom.

As shown in Table 5-10, which shows companies' own media by product type, no promotions were found for IFs on companies' own media. Most promotions on companies' own media were reported for GUMs (94%).

Table 5-10. Observations in company's own media related to Sub-article 5.1: No advertising or promotions, by product type

	By product type				Total no. unique ads/ promotions observed
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36 mos	Comple-mentary Food (CF) < 6 mos	
Company's own media channels					
Abbott	0	0	22	-	22
Danone	0	0	34	-	34
Kraft Heinz	-	-	-	0	0
Nestlé	0	0	21	0	21
RB/Mead Johnson Nutrition	0	6	7	-	13
Other*	0	0	14	0	14
Total	**0**	**6**	**98**	**0**	**104**

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill and DG Smart Mom.

Sub-article 5.2. Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.

Data from Form 1, the NetCode questionnaire for the interviews with mothers of children under 2 years of age, were used to assess compliance with Sub-article 5.2 of the Code. Mothers were asked whether they had received in the prior 6 months any free samples of commercial or prepackaged BMS products for children 0-36 months of age from manufacturers or distributors.

Table 5-11 shows that only 47 of the 330 mothers (~14% of the total sample) reported that they had received a free sample of an eligible BMS product from a company representative or shop personnel within the past 6 months. Of those 47 mothers, there were 55 reports of free samples received (i.e., some mothers reported receiving more than one free sample). The majority of the products received were either IF products (18 of the 55 products, or ~33%) or GUM products (also 33%). Ten (10) products were FOF products. There were no reports of free samples of CF 0-6 month products. Nine of the reported products were classified as "other" product types, including (as shown in the footnote to Table 5-11) "infant formula, don't know type," "drinks for babies and young children (6-36 months of age)," and any "Other (specify)" product types.

When looking at these data by company, Table 5-11 shows that most of the mothers' reports of receiving free samples in the prior six months could not be attributed to a specific company. In other words, mothers may recall receiving free samples, but they do not necessarily recall the specific company from which they were received. For 36 of the 55 reports (or ~66%) the company name was unknown to the respondent. This is also consistent with the qualitative findings. However, as shown in Table 5-11, 1 of the reported free samples given to mothers were from Nestlé, and 1 was from RB/Mead Johnson Nutrition. Seventeen (17) of the reported free samples were from the assorted other companies, companies other than the 5 focus companies for this study.

Overall, the mothers' self-reports related to Sub-article 5.2, with about 14% of the sample of mothers reporting that they received a free sample, suggests that there may still be some non-compliance with the Code with respect to providing samples to women. However, it is not possible to determine with these data whether this is associated with individual sales representatives acting on their own initiative, or whether this reflects weaknesses in companies' management systems.

Table 5-11. Mothers' reports related to Sub-article 5.2: No BMS samples to pregnant women, mothers, or members of their families

	By product type					
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36	Complementary Food (CF) < 6 mos	Other*	Total
All mothers' reports (n=47)	18	10	18	0	9	55
Percent of total reported samples	32.7%	18.2%	32.7%	0.0%	16.4%	100%
By company						
Abbott	0	0	0	0	0	0
Danone	0	0	0	0	0	0
Kraft Heinz	0	0	0	0	0	0
Nestlé	1	0	0	0	0	1
RB/Mead Johnson Nutrition	0	0	0	0	1	1
Other*	4	5	7	0	1	17
Don't know	13	5	11	0	7	36

Source: ATNF Thailand (2017)

* "Other" products include: "Infant formula, don't know type", "Drinks for babies and young children (6-36 months of age)", and "Other (specify)".

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)".

The qualitative data provided additional context around free samples of BMS products in Bangkok. Mothers in the qualitative sample reported that they registered on companies' websites (giving their contact information) in order to receive free samples of BMS products. In addition, mothers in the qualitative sample reported that free samples were given out in private hospitals, and that, in their experience, hospitals "rotated the brand of formula" offered to mothers.

Sub-article 5.3. For products within the scope of this Code, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level.

Data to assess compliance with this Sub-article were collected by visiting retail outlets proximate to each of the 33 HCFs in the study, as well as 10 additional large retail outlets (43 total retail outlets). NetCode Forms 5 and 7 assessed promotional materials observed in physical (or "brick and mortar") retail outlets. In addition, data from 7 online retailers were collected for 2 months during June – July, 2017: Big C, Tops, Tesco Lotus, Lazada, Orami, Max Value and Central.

Table 5-12 shows the results from both the physical retailer and online retailer data collection in Thailand. Among the 43 physical retailers, shown in the first set of columns, 154 point-of-sale promotions were observed. Half of these promotions (77 promotions) were price-related (e.g., coupons, etc.), with the next most frequent promotional category being free gifts (45 promotions) and displays (25 promotions).

Westat recorded point-of-sale promotions for all companies' products on 5 of the 7 online retailers. ATNF then verified with the 5 ATNI-focus companies after data collection had ended whether they had contracts in place to supply products to these retailers, directly or via distributors. Any promotions on sites with which the companies did not have a commercial relationship were excluded from the results, on the assumption that such promotions would have been initiated solely by the retailer. Table 5-12, therefore, only shows those promotions on sites where the manufacturers and the retailers have a commercial contract.

A total of 2,673 of such promotions were observed, with the great majority of the online promotions (2,342, or ~88%) price-related. A much smaller proportion of the online retailer promotions (308, or ~12%) were free gifts. As shown in Table 5-12, of the total number of promotions enumerated across the physical retailer and online retailer data collection, nearly all of them (~95%) were found on online retailer sites, while only 5% were observed in the sample of the 43 physical retailers.

When looking at the data by company, in the bottom portion of Table 5-12, it is apparent that the greatest number of promotions was for RB/Mead Johnson Nutrition products, with 927 of the total 2,827 observed promotions (across both physical retailers and online retailers), or nearly 33% of the total number of promotions observed. The second highest number of promotions was from Nestlé, at 824 promotions (29%), followed by promotions for Danone products, at 490 promotions (17%). None were found for Kraft Heinz products, as this company's products were labelled as suitable for 6-36 months.

Table 5-12. Number and type of point-of-sale promotions observed at retail outlets (related to sub-article 5.3), by retail outlet type and company

	Physical retailer ("brick & mortar") n=43		Online retailer n=7		Total no. of promotions	
	No.	% of total promotions	No.	% of total promotions	No.	%
Type of promotion*						
Price related (e.g., coupon/stamps, discounts, special discount sales)	77	3.2%	2,342	96.8%	2,419	100%
Displays (e.g., brand shelf, special displays, shop window, posters/banners, shelf tag/talkers, product launch)	25	100%	*n/a*	*n/a*	25	100%
Free gifts	45	12.7%	308	87.3%	353	100%
Product samples	1	100%	0	0.0%	1	100%
Company representative (physical retailers only)	1	100%	*n/a*	*n/a*	1	100%
Other	5	17.9%	23	82.1%	28	100%
Total promotions observed	**154**	5.4%	**2,673**	94.6%	**2,827**	**100%**
By company						
Abbott	17	6.9%	230	93.1%	247	100%
Danone	47	9.6%	443	90.4%	490	100%
Kraft Heinz	0	*n/a*	0	*n/a*	0	*n/a*
Nestlé	35	4.2%	789	95.8%	824	100%
RB/Mead Johnson Nutrition	39	4.2%	888	95.8%	927	100%
Other*	16	4.7%	323	95.3%	339	100%

Source: ATNF Thailand (2017)

* Note that only promotional materials that reference the four main product types [IF, FOF, GUM, CF<6] are included in these counts. The percentages are row percentages, or the % of the total promotions observed in that row (at both the physical retailers and online retailers).

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

Data for physical retailers (only) are shown in Table 5-13. This table presents the products mentioned on the observed promotions at the 43 physical retail outlets in the study. In other words, in this table, the unit of analysis is the product(s) being promoted on the promotional items enumerated in Table 5-12 (albeit the promotions from the physical retailers only). As shown in Table 5-12, there were 154 total promotions observed at physical retailers. Table 5-13 shows that there were 186 total product types referenced on these promotions. (As noted in the footnote to Table 5-13, a single promotional material observed could refer to more than one product type (for example a shelf tag referencing both IF and FOF).) The majority of the product types (151, or

~81%) were GUM products, followed by 18 FOF products, and 17 IF products. There were no CF less than 6 months products.[47]

Table 5-13. Products mentioned on observed promotions at physical retail outlets (related to Sub-article 5.3), by product type and company

	By product type				
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36	Complementary Food (CF) < 6 mos	Total no. products*
Total Products	**17**	**18**	**151**	**0**	**186**
Percent of total products	9.1%	9.7%	81.2%	0.0%	100%
Type of promotion					
Price related (e.g., coupon/stamps, discounts, special discount sales)	3	3	77	0	83
Displays (e.g., brand shelf, special displays, shop window, posters/banners, shelf tag/talkers, product launch)	8	6	22	0	36
Free gifts	3	6	45	0	54
Product samples	1	1	1	0	3
Company representative (physical retailers only)	1	1	1	0	3
Other	1	1	5	0	7
By company					
Abbott	1	0	16	0	17
Danone	6	5	47	0	58
Kraft Heinz	0	0	0	0	0
Nestlé	2	4	34	0	40
RB/Mead Johnson Nutrition	4	5	38	0	47
Other**	4	4	16	0	24

Source: ATNF Thailand (2017)

* Note that a single promotional material observed could refer to more than one product type (for example a shelf tag mentioning both IF and FOF). Therefore the total number of reported product types in this table may not equal (may be greater than) the total number of reported promotional materials in Table 5-12. In addition, note that only promotional materials that reference the four types of BMS [IF, FOF, GUM, CF < 6] are included in these counts.

** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)".

Table 5-14, below, shows the promotions found on online retailers and disaggregated by product type. The media monitoring team followed six prominent online retailers and observed 2,673 unique

[47] Note that while data were collected for CF 6-36 months products, these data are not included Table 5-13 because WHA 69.9 does not preclude promotions of such products. However, prior analyses found that there were 17 CF 6-36 months products referenced on the observed promotions in the physical retailer. The majority (16) were from "Other" companies and 1 was a Nestlé product.

promotions for BMS products included in the monitoring protocol. A particularly large number of promotions were identified for RB/Mead Johnson Nutrition (33%), followed by Nestlé (~30%).

The data collected for promotions of different types of products indicated that the largest number of promotions in online retailers was for GUMs, with 1,832 of the total 2,673 promotions (~69%).

Table 5-14. Observations in online retailers related to sub-article 5.3: No point-of-sale advertising or promotions

	By product type				
	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36 mos	Comple-mentary Food (CF) < 6 mos	Total no. unique ads/promotions observed
Online retailers					
Abbott	53	22	155	-	**230**
Danone	17	2	424	-	**443**
Kraft Heinz	-	-	-	0	**0**
Nestlé	10	68	711	0	**789**
RB/Mead Johnson Nutrition	273	286	329	-	**888**
Other*	25	85	213	0	**323**
Total	**378**	**463**	**1,832**	**0**	**2,673**

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill and DG Smart Mom.

In addition, for each online retailer, the media monitoring team created a membership subscription to observe any promotions received via email or text. This was included to allow recording of customized promotions for customer members. Besides the standard advertisements on the retailers' websites, customized member emails including promotions were received from Orami and Big C.

In addition, 19 parenting and child magazines were monitored. Membership subscriptions were created for 13 websites. No promotions were found on the websites or received via member emails.

Data were also collected for CFs 6-36 months to understand the relative level of promotion of such products. A total of 742 promotions were found, mostly offered by "Other" companies.

Sub-article 5.4. Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breast-milk substitutes or bottle-feeding, extended by WHA 69.9 Recommendation 6 .. should not give any gifts or coupons to parents, caregivers and families.

Among the mothers interviewed in the Thailand study, 53 (16%) reported receiving a gift "such as a toy, bag, bib, nappies, or diapers, calendar, notebook, growth chart, or something else that is associated with any company that sells commercial or prepackaged food or drinks for children 0-36 months of age" (see NetCode Form 1). These women reported 58 instances of receiving a gift. Nineteen (19) of these reported free gifts were from company representatives, and 7 were from shop personnel, the two categories of donors covered by Sub-article 5.4. Two of the free gifts were from Nestlé, 2 were from RB/Mead Johnson Nutrition, and 1 was from Danone. For most of the reported gifts, however, the specific company name was not known to the mothers.

Form 1 in the NetCode questionnaires also included several questions for mothers regarding receiving coupons for BMS products from manufacturers or distributors. Among the 330 mothers in the study, 22 (just under 7%) reported receiving a coupon. Of these women, there were 17 coupons reportedly received from a company representative or shop personnel (women could report receiving more than one coupon). However, as with the mothers' reports of gifts described in the prior paragraph, most respondents did not know the specific company the coupon was from; only 1 coupon was reported by the mothers to be from one of the 5 focus companies (RB/Mead Johnson Nutrition).

Sub-article 5.5. Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

Assessment of non-compliance with this Sub-article was based on questions in the NetCode Form 1 about whether a baby food company representative or shop personnel told the mother that, "you should feed any commercial or prepackaged food or drink products other than breastmilk to [your child]" (see Form 1, Question 12).

Note that the question wording in NetCode Form 1 is not directly related to this Sub-article; the question does not specifically ask mothers whether baby food marketing personnel sought "direct or indirect contact" with them. However, these self-reported responses from the sample of mothers

with children less than 2 years regarding recommendations from company representatives or shop personnel to use BMS and/or CF products do approximate the concept of direct/indirect contact, as covered by Sub-article 5.5.

Table 5-15 shows that only 10 of the 330 mothers, or just 3%, reported that shop personnel or company representatives spoke to them to recommend commercial BMS and/or CF products. As measured by these questions in Form 1, direct contact by companies to mothers appears to be relatively rare in in Bangkok. Among those 10 mothers, there were 12 reports of contact (meaning that some mothers had more than one reported contact). The company name portion of the table shows that there was 1 report of contact by a Nestlé company representative, 2 reports of contact by representatives of "Other" companies (not among the 5 ATNI-focus companies), and the remaining 9 reported contacts were by unknown companies.

Table 5-15. Mothers' reports related to Sub-article 5.5: marketing personnel should not seek direct or indirect contact with pregnant women or mothers of infants and young children

	By marketing personnel type		
	Shop Personnel	Company Rep	Total
Mothers' reports of being spoken to about commercial baby food/drink products (n=10)	3	9	12
By company			
Abbott	0	0	0
Danone	0	0	0
Kraft Heinz	0	0	0
Nestlé	0	1	1
RB/Mead Johnson Nutrition	0	0	0
Other*	0	2	2
Don't know	3	6	9

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)".

The qualitative data from IHPF, in contrast, noted that mothers would actively provide their contact information to baby food companies so as to receive free samples, gifts, information, etc. In so doing, "the companies have these mothers' contact information and can keep in touch with the mothers. If the mothers used another brand of infant formula, they would try to persuade [the] mother to use their products." The qualitative data, therefore, describe situations of baby food

companies actively contacting mothers once mothers sign up (submit their contact information for free samples, gifts, etc.).

C. Article 6: Health Care Systems

Data were collected to allow assessment of compliance with the following sub-articles of Article 6.

Sub-article 6.2. No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. WHA 69.9 Recommendation 6 extends this sub-article, specifically: "companies … should not use health facilities to host events, contests or campaigns."

Possible non-compliance with the provisions this Sub-article were identified through two sources: (1) in the mothers' interviews (NetCode Form 1), mothers reporting that a health worker told them to use commercial baby food/drink products; and (2) in the health workers' interviews (NetCode Form 2), health workers reporting that a baby food company representative contacted the HCF or the HCF staff for the purpose of distributing BMS product samples to women. The results related to possible non-compliance with this Sub-article 6.2 are presented in Table 5-16.

Overall, 26 (~8%) of the 330 mothers reported a health worker (e.g., family/general doctor, nurse, gynecologist, midwife, pediatrician, nutritionist, other health workers) telling them to use commercial baby food/drink products. Of those 26 mothers, they gave 35 reports (thus some mothers had more than one reported instance of a health worker telling them to use baby food products).

The data by company in Table 5-16 shows that for most of these reports of a health worker suggesting to use BMS products, the company name was not known to the mothers. For 22 of the reports (~63% of the total reports) the company name was unknown, and for 11 of the reports (~31%) the company name was among the "Other" category of companies. One report was for Nestle products and 1 report was for RB/Mead Johnson Nutrition products.

The lower portion of the table shows that 15 of the 99 health workers in the sample (~15%) reported that a baby food company representative contacted them to provide product samples to mothers. Among those 15 health workers, there were 16 reports of such contact made by baby food

companies. Overall, the health workers were aware of the specific company names of the companies who contacted them. Among the 5 focus companies in the study, the most frequently reported company was RB/Mead Johnson Nutrition (3 reports), followed by Danone (2 reports). Abbott and Nestlé each had 1 report. Seven of the reports were of "other" companies (not among the focus companies), and 2 were of unknown companies.

The results shown in Table 5-16 indicate that the level of contact by baby food companies to mothers appears to be relatively low in the Thailand study (only ~8% of mothers in the sample), whereas the level of contact by baby food companies to HCFs or HCF staff appears to be more common (~15% of health workers in the sample). It is important to remember that the samples of mothers (330) and health workers (99) are quite small, and, as quota samples of patients and staff at the 33 HCFs included in the study, not necessarily representative of the population of mothers and health workers in Bangkok.

However, as mentioned above, qualitative results among 6 mothers using private HCFs indicate that companies do seem to contact mothers, such as one respondent's anecdote of baby food company representatives posing as mothers in online forums. In addition, the qualitative respondents reported that "it is widely known" that baby food companies come to the large private hospitals to promote their products. "Therefore mothers would receive information and samples of various products of different baby food brands."

Regarding the provisions of WHA 69.9, Recommendation 6, see also the results in Table 5-18, further below in this report, regarding health workers' reports of baby food company representatives making offers to sponsor events or workshops for health workers.

Table 5-16. Mothers' and health workers' reports related to Sub-article 6.2: No health care facility should be used for purposes of promoting products within the scope of the Code

	No.	%
Mothers' reports of being told by health workers to use commercial baby food/drink products (n=26)	**35**	**100%**
Mothers' reports, by company		
Abbott	0	0.0%
Danone	0	0.0%
Kraft Heinz	0	0.0%
Nestlé	1	2.9%
RB/Mead Johnson Nutrition	1	2.9%
Other*	11	31.4%
Don't know	22	62.9%
Health worker reports that BMS company reps contacted them to provide product samples to mothers (n=15)	**16**	**100%**
Health workers' reports, by company		
Abbott	1	6.3%
Danone	2	12.5%
Kraft Heinz	0	0.0%
Nestlé	1	6.3%
RB/Mead Johnson Nutrition	3	18.8%
Other*	7	43.8%
Don't know/can't remember	2	12.5%

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

Sub-article 6.3. Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor.

The analysis of Sub-article 4.2, regarding informational and educational materials observed in both HCFs as well as retail outlets, pertains to Sub-article 6.3 as well (see Tables 5-2, 5-3, and 5-4). As noted previously in this report, 8 informational/material items were found in the sample of HCFs and retail outlets, and all 8 were non-compliant as per Sub-article 4.2. However, only 3 of these materials were found in HCFs, and the remaining 5 were in retail outlets (see Table 5-2). Note that during these observations of informational/educational material (and promotions and equipment) in the HCFs (NetCode Forms 3 and 7), IHPF field staff were asked to observe any areas of the facility that were visible and open to them, such as the patient waiting area and surroundings, but they did not attempt to see closed areas, such as private offices or treatment areas.

Prior reports (e.g., India and Vietnam) addressed Sub-article 6.3 as part of Sub-article 4.2 (informational and educational materials), and the text above makes these associations between the findings for Sub-article 4.2 and their relevance to Sub-article 6.3. In addition, and new for Thailand, the NetCode Form 3 and Form 7 now have questions regarding promotional materials observed at HCFs, and so we present those data for Sub-article 6.3, as well as Sub-article 6.8, below.

Sub-article 6.8. Equipment and materials, in addition to those referred to in Sub-article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code. This is augmented by WHA 69.9 Recommendation 6: Companies that market foods for infants and young children should not create conflicts of interest in health facilities or throughout health systems. Such companies or their representatives should not … "donate or distribute equipment[48] or services[49] to health facilities."

Table 5-17 presents findings regarding promotional materials observed at the 33 HCFs in the sample. Promotional materials with brand names or logos were observed in 8 of the 33 HCFs, ~24% of the sample. Among those 8 HCFs with promotional materials showing brand names/logos, 17 items were observed. When WHA 69.9 is taken into consideration, such that any promotions are considered non-compliant, there were 19 promotions observed, two of which did not show brand names/logos. Moreover, as per Sub-article 6.3, above, any promotional material observed in a HCF meets the conditions of non-compliance.

The data by company name show that 7 of these promotional materials with names/logos were from Danone, 7 from RB/Mead Johnson Nutrition, 2 from Nestlé, and 1 from Abbott. There were no promotional materials from Kraft Heinz observed in the HCFs in this study.

[48] Sub-Article 4.3 of the Code allowed donations of equipment and materials as long as they did not make reference to a proprietary product within the scope of the Code. WHA 69.9 strengthened the original language by calling on companies to not make any donations of equipment or services.

[49] The version of the NetCode protocol used for this study does not provide for assessment of the delivery of services.

Table 5-17. Observations related to Sub-article 6.3 and 6.8: Promotional materials at HCFs, by company

	No. of promotional materials showing brand names/logos
Observations of promotional materials at HCFs (n=8)	**17**
Promotional materials with brand names/logos, by company	
Abbott	1
Danone	7
Kraft Heinz	0
Nestlé	2
RB/Mead Johnson Nutrition	7
Other*	0

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

D. Article 7: Health Workers

Data were collected to allow assessment of compliance with the following sub-articles of Article 7.

Sub-article 7.2. Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle feeding is equivalent or superior to breast-feeding.[50]

Possible non-compliance with this Sub-article was addressed by observations of informational/educational materials at HCFs (NetCode Form 3) and specifically intended for health workers and specifically pertaining to the 4 BMS products in the study (IF, FOF, GUM, CF<6 months). There were no such eligible materials observed in Thailand.

[50] WHA 69.9 re-states this provision in Recommendation 6: 'Companies or their representatives should not … provide any information for health workers other than that which is scientific and factual'.

Sub-article 7.3. No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families. [51]

Compliance with Sub-article 7.3 was assessed with data from health workers' interviews in NetCode Form 2. Health workers were asked whether baby food company representatives contacted them, and if so, was it to provide personal gift items. As shown in Table 5-18, 6 of the 99 health workers (about 6% of the sample) reported that they were contacted by baby food companies to provide personal gift items, and there were 6 reports (respondents could report more than one instance). Of those 6 reports, 3 were from Nestlé, and 3 were from "Other" companies (not among the 5 focus companies).

The bottom portion of Table 5-18 shows that 11 of the 99 health workers interviewed in the study (about 11%) reported that a baby food company representative made future offers to sponsor events/workshops for HCF staff or to provide payment for or other support to staff to attend events or workshops outside the HCF. Of those 11 health workers who reported this occurrence, there were 13 reports. Four of these were reportedly made by Nestlé representatives, 1 by Abbott, and 1 by RB/Mead Johnson Nutrition. Six were from "other" companies, and 1 was reported by an unknown company. Note, also, that these results pertain to WHA 69.9, which prohibits companies from sponsoring meetings.

Although relatively few reports were made of baby food companies offering gifts or offers of support for things such as workshops to health workers, it is important to keep in mind that it is possible that there could be some underreporting of this activity, due to the self-reported nature of these data and the influence of social desirability bias (in other words, health workers know that it is not appropriate to receive gifts or accept offers of support from baby food companies, and may want to attend workshops and conferences to advance their knowledge, and therefore will tend to underreport their occurrence). Moreover, due to the high refusals among private HCFs, very few private HCFs (only 3 of the 33 HCFs in the sample) were included in the quantitative component of the Thailand study.

[51] WHA 69.9 reiterates this provision in Recommendation 6: 'Companies or their representatives should not … give gifts or incentives to health care staff …' and Recommendation 7 notes that health workers should not accept gifts or incentives.'

Table 5-18. Health workers' reports related to Sub-article 7.3: no financial or material inducements should be offered to health workers

	No.	%
Health workers' reports that BMS company reps contacted them to provide personal gift items to HCF staff (n=6)	**6**	**100%**
Health workers' reports of gifts, by company		
Abbott	0	0.0%
Danone	0	0.0%
Kraft Heinz	0	0.0%
Nestlé	3	50.0%
RB/Mead Johnson Nutrition	0	0.0%
Other*	3	50.0%
Don't know	0	0.0%
Health workers' reports that BMS company reps made offers to sponsor events/workshops or provide payment or support (n=11)	**13**	**100%**
Health workers' reports of future offers of support, by company		
Abbott	1	7.7%
Danone	0	0.0%
Kraft Heinz	0	0.0%
Nestlé	4	30.8%
RB/Mead Johnson Nutrition	1	7.7%
Other*	6	46.2%
Don't know	1	7.7%

Source: ATNF Thailand (2017)

* "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, and "other (specify)."

Sub-article 7.4. Samples of infant formula or other products within the scope of this Code, or of equipment or utensils for their preparation or use should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level, and health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.

The first provision of Sub-article 7.4, regarding provision of baby food samples to health workers, is addressed by Sub-article 6.2, above. As discussed with respect to Table 5-16, above, 15 health workers reported 16 instances of baby food companies contacting them to provide samples to mothers.

NetCode Form 1 also asked mothers whether they received free samples of BMS products, and from whom. The Form 1 data reveal that 105 mothers (~32% of the 330 mothers interviewed) reported that they received a free sample of a baby food product within the past 6 months. Of

those, however, only 51 women (~15% of the total 330 women in the sample) reported 55 occurrences of receiving a free sample from a health worker, such as doctors or nurses.

E. Article 9: Labeling

Label data were abstracted from 224 products. However, CFs 6-36 products (105 products total) were not included in the final label analysis. It is important to note that for the label analysis, if a product was available in more than one size, each container size was included as a unique product. Generally, labels of all IFs were mostly compliant with sub-article 9.2 and included the words "Important Notice" or their equivalent, a statement of the superiority of breastfeeding, and information for appropriate preparation. The labels of all formula products met the requirements of the Recommendation 4 of WHA 69.9. As shown below in Table 5-19, a total of 263 observations of non-compliance were recorded. All 119 products included in the label analysis had at least one or more non-compliance. Table 5-19 provides the total number of non-compliances, and by company, along with the average number of non-compliances per product (i.e., per unique label included in the labeling assessment). Of the 5 focus companies in this study, RB/Mead Johnson Nutrition had the highest average number of labeling non-compliances, at 2.6.[52]

Data were collected to allow assessment of compliance with the sub-articles of Article 9, WHA 58.32, WHA 69.9 and various Thai regulations pertaining to the labeling of packaged foods and "food for infant/food of uniform formula for infants and small children."[53]

[52] Note that Only one insert was found on the package for "Nan AL 110 Lactose Free Iron and Taurine Infants Baby Food," with text in Thai and Burmese, which primarily described methods of preparation. We did not include this in the dataset used for analysis of labeling non-compliances.

[53] Notification of the Ministry of Public Health No. 157 BE 2537 (1994) re: Food for Infant and Food of Uniform Formula for Infant and Small Children defines "food for infant" as, "…a food aimed for feeding infant of one day old till twelve months old in lieu of or in substitution of mother's milk," which relates to IF (intended for infants zero to six months of age) and FOF (intended for infants six to 12 months of age) products. The regulation also defines "food of uniform formula" as, "…a food aimed for feeding infant from six months old till twelve months old or children from one day old till three years old," which relates to complementary food products intended for infants six to 36 months of age.

Table 5-19. Number of unique product labels assessed, and number of labeling non-compliances observed, by company

Company	Number of product labels assessed*	Total Number of Non-compliances**	Average Number of Non-compliances per product label	Number of product labels with at least one non-compliance
Abbott	15	27	1.8	15
Danone	39	81	2.1	39
Kraft Heinz	-	-	-	-
Nestlé	39	80	2.1	39
RB/Mead Johnson Nutrition	18	46	2.6	18
Other***	8	29	3.6	8
Total	**119**	**263**	**2.2**	**119**

Source: ATNF Thailand (2017)

* CF 6-36 products (105 products total) were not included in label analysis and are therefore not counted in this column.

** Counts of labeling non-compliances include Sub-articles 9.2 and 9.4 of The Code, as well as WHA 58.32, WHA 69.9, and relevant Thai regulations (those which exceed The Code). Each label included in the labeling analysis can have more than one non-compliance.

*** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, Organix, Hain Celestial Group Inc., Zantun & Victor, Namchow, Hanyang F&D Co. Ltd., Summer Sky Co. Ltd., Joe-Ry Family Co. Ltd., Aulion Co. Ltd., Buddy Fruits, and Yick Chi Confectionery Co. Ltd.

Sub-article 9.2. Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points:

(a) the words "Important Notice" or their equivalent;

Article 11.2.10 of Thai regulation Notification No. 157 (BE 2537) 1994 requires a statement reading "Important Message - Mother's milk is the best food for infant because it has full nutrition value" on the labels of all IFs **and** FOFs. In requiring FOFs to include this wording, the Thai regulations go beyond the Code. This provision of the Notification was understood to be how the Thai authorities had given effect to the Code, rather than considering it to 'go beyond' the Code. The labels of all 44 IFs and all 30 FOFs included this required statement.

(b) a statement of the superiority of breastfeeding;

The labels of all 44 IFs were compliant and included a statement of the superiority of breastfeeding. The Thai regulations did not require this statement, though a similar statement is required by Notification of the Ministry of Public Health No. 157 BE 2537 (1994) on all IF and FOF products,

"Mother's milk is the best food for infant because it has full nutrition value." All 44 IF and 30 FOF products complied with this requirement.

(c) a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use;

The article 11.2.10 of Thai regulations Notification No. 157 (BE 2537) 1994 requires a statement reading "…Should use this product under recommendation of a physician, nurse or nutritionist, and a statement showing directions or table of recommended daily use."

Approximately 60% of IFs and 63% of FOFs were missing a statement that the product only be used under recommendation of health worker. Abbott, RB/Mead Johnson Nutrition, Nestle and DG Smart Mom were the companies that had IF and FOF products with labels missing this required information. Again, in requiring FOFs to include this wording, the Thai regulations go beyond the Code.

(d) instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation.

The labels of all 44 IFs had information for appropriate preparation.

Sub-article 9.2 of the Code also specifies that neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula. The labels of all 44 IFs were found compliant with this requirement.

Data were also collected for CFs 6-36 months to understand the relative level of non-compliances of such products. A total of 331 non-compliances were found. Another Thai regulation, article 11.2.11 of Notification No. 157 (BE 2537) 1994, requires a statement on the labels of all CFs: "Do not use for feeding infants under 6 months old in red bold letters with height not less than 5 mm in a rectangular frame, white inside, and color of frame contrasted with the background." The label analysis showed that the labels of 40% of the CFs did not meet this requirement.

Sub-article 9.3. Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant.

The interpretation of this sub-article is not completely clear. Therefore, we are not reporting on this sub-article.

Sub-article 9.4. The label of food products within the scope of this Code should also state all the following points: (a) the ingredients used; (b) the composition/analysis of the product; (c) the storage conditions required; and (d) the batch number and the date before which the product is to be consumed, taking into account the climatic and storage conditions of the country concerned.

The Article 11.2.8 of Thai regulations also requires storage instructions specifically after opening. All products included information about ingredients (a), the composition (b), and the batch number (d).

Other Recommendations Relating to Labels Set Out in WHA Resolutions

According to the WHA58.32 Infant and young child nutrition, the nutrition and health claims are not permitted for BMS and CF except where specifically provided for in relevant Codex Alimentarius standards or national legislation. No such requirements were found in the Notification No. 157 (BE 2537) 1994. Of the 119 product labels analyzed, 59% (22% IFs, 12% FOFs, and 25% GUMs) had some language with nutrition and health claims. Table 5-20 includes examples of nutrition and health claims.

Table 5-20. Examples of nutrition and health claims observed on labels

Company/Brand	Examples of phrases and text on products labels considered as health claims
Abbott/Isomil	Soy Formula suitable for abnormal digestion, indigestion and cow's milk allergy, medical food.
Danone/Nutricia	Infant formula for infants with regurgitation, colic and help to soften stool.
Danone/Nutricia	Partially hydrolyzed whey protein concentrate and essential nutrition for baby growth development.
RB/Mead Johnson Nutrition/Enfa	Enfagrow 3 Smart+ Instant Powdered Milk Product claims to develop learning skills rapidly.
Sweet Pea Thailand	Practice development of grasping and chewing.

Source: ATNF Thailand (2017)

WHA 58.32 also requires the labels to provide information that powdered infant formula may contain pathogenic microorganisms. Interestingly, none of the labels of the powdered infant formula

(IFs, FOF, GUMs) included this information, and hence, 100% of the eligible products in the label analysis did not meet this requirement.

Data collected from the labels also allowed for the assessment of compliance with Recommendation 4 of WHA 69.9. The labels of all formula products met these requirements. Data from CFs 6-36 months showed that none of the 105 CF 6-36 month products included a statement on the importance of continued breastfeeding for up to two years or beyond, and 32% of the CFs did not include a statement on the importance of not introducing complementary feeding before 6 months of age. Only 5 products produced outside of Thailand did not include the importer name and address and country of producer, as required by the Thai label regulations. All 5 products were CFs manufactured by Hain Celestial Group, Inc.

Table 5-21, below shows the label analysis data disaggregated by product type. Supplementary Table B in Appendix N provides additional details regarding the most prominent types of non-compliances by company.

Table 5-21. Labeling non-compliances,* disaggregated by product type**

Company	Infant Formula (IF) < 6 mos	Follow-on Formula (FOF) 6-11 mos	Growing-up Milk (GUM) 12-36 mos	Complementary Food (CF) < 6 mos	Total no. of non-compliances
Abbott	14	4	9	-	27
Danone	23	16	42	-	81
Kraft Heinz	-	-	-	-	-
Nestlé	24	22	34	-	80
RB/Mead Johnson Nutrition	22	10	14	-	46
Other***	9	12	2	6	29
Total	**92**	**64**	**101**	**6**	**263**

Source: ATNF Thailand (2017)

* Counts of labeling non-compliances include Sub-articles 9.2 and 9.4 of The Code, as well as WHA 58.32 and relevant Thai regulations (those which exceed The Code). Each label included in the labeling analysis can have more than one non-compliance.

** CF 6-36 products (105 products total) were not included in label analysis and are not counted in this table.

*** "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, Organix, Hain Celestial Group Inc., Zantun & Victor, Namchow, Hanyang F&D Co. Ltd., Summer Sky Co. Ltd., Joe-Ry Family Co. Ltd., Aulion Co. Ltd., Buddy Fruits, and Yick Chi Confectionery Co. Ltd.

6 Conclusions and Recommendations

This report is based on a study carried out for ATNF using the NetCode protocol. It is the fourth ATNF study Westat has undertaken (following studies in Vietnam, Indonesia and India, all of which were undertaken using the 2007 IGBM protocol), but the first of these studies to use the NetCode protocol. While this study has some limitations (as discussed in Chapter 7), it provides valuable indicators and insight about baby food companies' compliance with the Code in Thailand, and it can serve as a model for similar studies in other countries or in other populations, for example, rural populations. More specifically, it should serve as a baseline against which the impact of the introduction of the new law restricting baby food marketing can be measured, which (for the most part) came into effect on September 8, 2017, immediately after the conclusion of the data collection for this study.[54] The methodology of the NetCode protocol can serve as a valuable complement to other approaches to monitoring compliance with the Code, such as the surveillance approach employed by IBFAN-GIFA.

A. Conclusions about Compliance with the Code and National Regulations

Point-of-Sale Promotions (Sub-article 5.3). The largest number of non-compliances found in Thailand were promotions in both physical ("brick and mortar") stores as well as online stores. A total of 2,673 online promotions were identified with 2,342 (~88%) of those being price-related promotions. Of the total number of promotions enumerated across the physical retailer and online retailer data collection (see Table 5-12), nearly all of them (~95%) were offered by online retailers, while only 5% were offered by traditional retailers. ATNF checked with the 5 ATNI-focus companies whether they had commercial contracts with each of the online retail sites on which promotions were found; only those where that was the case have been included in the results.

As discussed in Chapter 5 (Table 5-12), 154 promotions for the 4 eligible product types (IF, FOF, GUM, and CF < 6) were observed in the 43 physical retailers (33 small retailers and 10 large retailers) included in this study. Half of these (77 promotions) were price-related.

[54] The labeling provisions come into force on September 8, 2018.

Although our information does not allow us to identify the extent of the role of each manufacturer in these promotions, clearly the number of observed promotions, especially online, is an area of considerable concern. Companies should ensure that distributors and retailers are aware of their responsibilities under the Code.

Advertising and promotion (Sub-article 5.1). Although there was no restriction on advertising BMS products during the study period, the Code proscribes advertising and promotion of all formulas intended for use from birth to 36 months of age and of CFs intended for infants under 6 months of age. The media monitoring component of the study, which included direct observations of both traditional media sources (such as television, newspaper, radio, etc.) as well as online media sources (such as companies' websites, YouTube, Facebook etc. and various online parenting magazines and sites) revealed a lot of advertisements and promotions. As shown in Chapter 5 (Table 5-9), overall, 104 promotions were found on the companies' own media, with company/brand websites the most prevalent type of online media.

The traditional media monitoring by iSentia found that television advertising was the most common (relative to newspaper and magazine ads), with a total of 31 unique ads (covering 37 products) identified over the six-month monitoring period, with GUMs being the most commonly advertised products. These ads were repeated a total of 1,066 times during the six months these media (4 terrestrial television channels, 2 radio channels, 25 newspapers, 65 print magazines) were monitored.

It was surprising, given the rise of online media, that no promotions were found on the 19 parenting and child magazines monitored nor via the 13 website memberships created.

As noted in Chapter 5, the great majority of mothers (83% of the sample of mothers) reported seeing at least one baby food promotion in the past 6 months. Of the 797 reports of promotions by these mothers in the prior 6 months, the majority (521 reported observations) were television ads. Indeed, over 65% of mothers' reported promotions were television ads, as opposed to other forms of media. The next most common form of media reported by mothers was social media (over 19% of mothers' reported promotions).

It is important to note that it is possible that many mothers may be familiar with the names of the baby food manufacturers and their brands through advertisements for non-covered products (i.e., products for children 3+ years old which are not covered by the Code nor part of this study) that are the same brand or manufacturer as covered products. As noted in Chapter 5 with respect to both

the quantitative and qualitative findings, mothers often could not recall the specific company name, even when they reported an apparent instance of a Code non-compliance.

Labeling. This study included a product labeling component, in which eligible product labels (e.g., baby milk and CFs for children less than 6 months) were assessed for their compliance with the Code, as well as with WHA 58.32 and relevant Thai label regulations (i.e., those which exceed the Code). A total of 119 eligible product labels were included in this analysis, but it is important to note that for some products both a small and large product size was assessed, if available, as well as inserts, where found. Among the 119 labels assessed, 263 unique labeling non-compliances were observed, meaning that labels often had more than one non-compliance (on average, 2.2 non-compliances were observed per label).[55] All of the product labels included in the label analysis had at least one non-compliance.

Equipment donated to HCFs. As shown in Chapter 5, there were a total of 36 observations of equipment displaying brand names/logos at 14 of the 33 HCFs included in this study, although the data collection did not include any questions about the timing of the receipt of this equipment at HCFs. As per WHA 69.9, companies are no longer allowed to make any such donations.

Promotional materials in HCFs. In contrast to prior countries, the NetCode Form 3 included questions specifically about promotions observed at HCFs. Promotional materials were observed in 8 of the 33 HCFs, or ~24% of the sample of HCFs. Among the relatively few HCFs with promotional materials, 17 items showing brand names/logos were observed (and 19 total promotional materials). As per Sub-article 6.3 of the Code, any promotional material observed in a HCF constitutes a non-compliance with the Code.

Informational and Educational Materials. The results regarding Article 4 presented in Chapter 5 (Tables 5-2, 5-3, and 5-4) note that only 8 informational/educational materials were observed in the 33 HCFs and 43 retail outlets in this study. These 8 materials referenced 13 products (Table 5-3). While all 8 of these materials were assessed to be non-compliant as per the provisions of Article 4, a relatively small number of materials were observed compared to other forms of marketing. Based on these findings, which notably do not include many private HCFs (only 3 in the quantitative sample), relatively little printed informational or educational material appears to be distributed by manufacturers to HCFs or retail outlets.

[55] Note that 105 labels from CF 6-36 month products were also abstracted in the BMS label analysis, but this product category is not included in the results presented in this report.

Company Contact with Mothers. Although the NetCode forms do not have a question for mothers specifically asking about companies making direct or indirect contact with them, this area of non-compliance (Sub-article 5.5) was assessed via mothers' reports of company representatives or shop personnel recommending that they use BMS products. Only 10 mothers (about 3% of the sample) reported this occurrence, indicating that direct contact by companies to mothers appears to be relatively rare in in Bangkok.

A summary of observed non-compliance for the 5 focus companies regarding the covered BMS products in Bangkok is presented in Table 6-1, shown below. Since the number of points of non-compliance varies by Sub-article and their relative importance may differ, this is presented for descriptive purposes only.

B. Conclusions About the Code and the NetCode Protocol

As noted earlier, this is the fourth ATNF study on which we have reported, although we used the IGBM Protocol for the first three studies (in Vietnam, Indonesia, and India), and used the NetCode protocol (version 1) for this study. Most of our conclusions about the Code are the same as we described in our reports for Vietnam, for Indonesia, and for India. Therefore, we will not repeat the detailed conclusions, but refer the reader to the previous reports instead. A listing of the issues that should be addressed is provided below.

Definitions of Non-Compliance. The Code includes a complex set of recommendations, some of which can be challenging to interpret or measure.

The NetCode protocol is an improvement of the former IGBM protocol. The NetCode protocol was selected by ATNF to assess compliance by BMS manufacturers with the recommendations of the Code because this protocol is seen as the best existing rigorous research-oriented approach to conduct such an assessment.

With its six sources of data collection, the NetCode protocol addresses a great number of the sub-articles of Articles 4, 5, 6, 7, and 9 of the Code. However, as mentioned in Chapter 7, it does not cover all aspects of the Code (see also Appendix E regarding some of the specific Sub-articles not covered by the NetCode protocol's data collection forms).

Table 6-1. Summary of non-compliances, by Code sub-article and company

Company	Number of BMS product labels included in the study[1]	Total number of non-compliances	Non-compliances by relevant Code sub-article					
			4.2	4.3	5.1	5.3	6.3 & 6.8	9.2 & 9.4
			Products on informational/ educational materials at HCFs and retail outlets[2]	Observations of Equipment at HCFs	Products in media monitoring (traditional and online)	Promotions at retail outlets (including online stores)[2]	Promotional material at HCFs	Product Labels[3]
			Table 5-3	*Table 5-5*	*Tables 5-8 & 5-9*	*Tables 5-13 & 5-14*	*Table 5-17*	*Table 5-19*
Abbott	15	286	0	1	22	247	1	15
Danone	39	612	1	24	40	501	7	39
Kraft Heinz	0	0	0	0	0	0	0	0
Nestlé	39	902	3	2	27	829	2	39
RB/Mead John. Nutrition	18	1007	9	9	29	935	7	18
Other[4]	8	378	0	0	23	347	0	8
Total	**119**	**3,185**	**13**	**36**	**141**	**2,859**	**17**	**119**

Source: ATNF Thailand (2017)

[1] The total number of BMS/CF labels abstracted in the Thailand study was 224 (representing 182 unique products), however this column includes only the 119 BMS product labels (for the four product types of IF, FOF, GUM, and CF < 6 months). The 105 CF 6-36 month product labels (10 made by Kraft Heinz, 10 made by Nestle, and 85 made by 'Other' companies) are excluded from this report.

[2] Informational/educational materials observed at HCFs and retail outlets (Table 5-3), and promotions observed at physical retail outlets (Table 5-13) can have more than one product type. In such cases each product type referenced on a single informational/educational material or on a single promotional material, respectively, is counted here as a unique promotion.

[3] Counts of labeling non-compliances include Sub-articles 9.2 and 9.4 of The Code, as well as WHA 58.32 and relevant Thai regulations (those which exceed The Code). Each label included in the labeling analysis can have more than one non-compliance, however this column shows the counts at the unique label level (e.g., number of labels with at least one (i.e., one or more) non-compliance). Additionally, CF 6-36 products (105 products total) were not included in label analysis and are not counted in this column.

[4] "Other" companies include: Dutch Mill, DG Smart Mom, Healthy Foods Co. Ltd., Dozo, Peachy, Shia, Xongdur, Healthy Times, Hooray, Picnic Baby, Organix, Hain Celestial Group Inc., Zantun & Victor, Namchow, Hanyang F&D Co. Ltd., Summer Sky Co. Ltd., Joe-Ry Family Co. Ltd., Aulion Co. Ltd., Buddy Fruits, and Yick Chi Confectionery Co. Ltd.

However, a notable improvement with this study and the use of the NetCode protocol is the inclusion of an assessment of online media—advertisements for covered products appearing on online media sources such as the internet (companies' own media channels as well as those of online retailers), on YouTube, Facebook, Twitter, and Instagram.

C. Recommendations

For Companies with Respect to Product Marketing. Baby food manufacturers should work to strengthen corporate policies related to practices that are inconsistent with the intent of the Code and Thai regulations. They should do more to ensure that their labels comply with The Code and take steps to bring their marketing in line with the provisions of WHA 69.9, e.g. by ceasing all donations of equipment and materials to HCFs. Further, they should revisit their contracts with their distributors and any engagement directly with online retailers to make clear that they should not discount or promote BMS products. The manufacturers should also curtail their direct promotion of their products via their own online media channels, such as Facebook, Instagram, etc. Also, the use of sign-up portals that allow mothers to essentially join a "club" on a baby food website is a practice that might be considered direct marketing to mothers. The companies that run such sites should be made aware of their responsibilities under the Code.

For WHO and the Thai Government. It is likely that in future there will be many fewer non-compliances with the Code given that Thai Government's adoption in early September 2017 of a comprehensive new law, strongly aligned to the Code. Rigorous continued monitoring will be necessary to determine whether this is the case and identify where enforcement effort should be focused. We would suggest that a particular areas of focus should be on restricting the use of digital media to promote products and contact mothers. These media have changed the face of advertising and promotion, and they also have global reach, since they can be accessed by women from many different countries, not just those in a single country. This is a problem that may be very difficult to control.

7 Limitations of the Study

As has been noted several times previously, this study followed the NetCode protocol and data collection forms. The NetCode protocol does a good job of addressing nearly all of the sub-articles in the Code that apply to manufacturers. Nonetheless, there were limitations to the study and how the results from it should be interpreted and acted on by users.

A. Sample of HCFs

The most significant limitation of this study was that the quantitative sample lacked representation from private HCFs. Of the 33 HCFs in the final sample, only 3 were private. Indeed, due to high refusals, especially among private HCFs, and the depletion of the original sample of HCFs, a second sample was drawn (see Table A in Appendix L). Twelve (12) HCFs from the second sample were included as replacement HCFs in the final sample of HCFs in Bangkok. Thus, the study will likely underreport marketing activities in private HCFs.

Additionally and uniquely for this Thai study, due to being refused entry to most private HCFs, IHPF also conducted six qualitative interviews with mothers of children under two years who were patients at private HCFs. While these six qualitative participants are not representative of any underlying population of mothers using private HCFs, this additional qualitative component did provide helpful contextual information about private HCFs, an important aspect given that anecdotal information in Bangkok indicates that baby food companies' presence may be more pronounced in private HCFs. In addition, it is important to note that the quantitative sample of HCFs as well as that of mothers and of health workers (both of which were convenience samples) is also not necessarily representative of the larger populations of those groups in Bangkok.

Lastly, it is important to note that the sample design for NetCode deviates from the prior sample design used by IGBM. Only 33 HCFs, 43 retail outlets, 330 mothers, and 99 health workers are include in the NetCode sample design; these are quite small samples compared to those required by IGBM.

B. Recall Bias

Another limitation of the study is that much of the information needed to assess compliance with the Code comes from interviews with mothers and with health workers. In any interview situation, self-reported events or information can be misreported because of incorrect recall, misunderstanding, reluctance to provide complete information, or a perception of what the respondent thinks the desired response should be. When a period of recall is involved, as was the case with both the mothers and the health workers, there can also be recall bias that may involve telescoping a remembered event into the recall period, even though it occurred outside of it, or of microscoping an event outside of the recall period when it actually occurred inside of it.

The NetCode questions were generally clear and objectively written, and did not include suggestions about what response was desired. The interviewers were trained not to use leading probes and not to assume an answer if the respondent did not give it completely. However, recall bias and incorrect memory are potential cautions when interpreting self-reported data, particularly in a situation, such as in this study, in which Thai translations of questions originally written in English were used.

Where the interviews identify only a very small number of possible incidents of non-compliance, the information should be interpreted with caution, since the data could contain recall errors. On the other hand, when many episodes are reported, one should generally be confident in accepting that a substantial amount of non-compliance did occur even if there are some recall errors.

C. Selection of Health Workers and Mothers

A third limitation of the study is that, per the NetCode protocol, a quota of three health workers were selected within each sampled HCF yet these respondents might not be the "best" respondents to interview with respect to facility-related issues. As shown in Table 5-1, most of the respondents for the health worker interviews (about 78%) were nurses. Relatively few more senior level staff were interviewed, such as directors, doctors, and department heads. Therefore, it is possible that this study may have under-reported certain things these categories of staff may be more knowledgeable about, such as equipment donations and visits by baby food company representatives.

Similarly, and as mentioned earlier in the report, the study included interviews only with women with infants and young children under 24 months of age, rather than under 36 months of age, the

scope of application of the Code and WHA 69.9. Mothers' reports of marketing of BMS products intended for children aged 24 – 36 months may therefore be under-reported.

D. Selection of Retail Outlets

A fourth limitation is related to the selection of retail outlets to observe point-of-sale promotions. This selection was purposive, not representative. The objective was to select 33 small stores proximate to the sampled HCF (in addition to the 10 large retailers) and which were deemed likely to sell commercially-produced food/drink products for children 0-36 months. Because of this design, the study results cannot be generalized to the universe of stores in Bangkok. Further, each store was visited on only one day, so it is possible that some stores would have had promotions if they had been visited over a period of time.

E. Other Limitations

Other limitations include a few aspects of the Code which were lacking precise questions (such as, for example, a question in Form 1 about baby food companies making direct contact with women [see Chapter 5], or Sub-article 4.2.e [a specific question for which appears to have been inadvertently omitted from the NetCode forms]). As mentioned earlier in the report, Appendix E details the specific NetCode questions used to operationalize non-compliance in this study; also shown in this Appendix are the elements of the Code which were not covered by NetCode questions.

In addition, the monitoring of traditional media covered only 4 terrestrial television channels and did not include cable or digital television channels. Thus, the number of advertisements reported is likely much lower than those being aired across the entire television network. Similarly, only 2 radio channels were monitored live for 2 months, and only 25 newspapers and 65 print magazines were monitored. Had all radio channels and all relevant print media been monitored, it is likely that many more advertisements would have been identified.

This study was a one-time cross-sectional survey that provides quantitative indicators for the point in time that it was conducted, although these indicators are not necessarily generalizable to a larger population in Bangkok, nor elsewhere in Thailand. These indicators are representative of the sample. At present, there is currently no ability to monitor changes over time, or to provide continuous

surveillance. However, follow-up studies in the same geographic area could make the results from this study a useful baseline to measure improvements or declines in compliance over time.

Finally, although we believe that promotion of baby food products is likely to be highest in an urban area such as Bangkok because of high population density and the ease of reaching women, we have no empirical evidence from other urban areas or rural areas of Thailand to confirm this belief. These study results should be interpreted with this in mind.

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38. Note that the original NetCode protocol stipulated an even distribution of mothers in these two groups, or five of each age group per HCF, but that requirement was relaxed for Thailand to allow for completion of the full sample of 330 interviews.

39. World Health Organization (WHO). 1981. *International Code of Marketing of Breast-milk Substitutes*. Geneva, Switzerland.

40. Sub-Article 4.3 of the Code allowed donations of equipment and materials as long as they did not make reference to a proprietary product within the scope of the Code. WHA 69.9 strengthened the original language by calling on companies to not make any donations of equipment of services.

41. The version of the NetCode protocol used for this study does not provide for assessment of the delivery of services.

42. Covered products are those for children 0-36 months of age, including all commercial baby milk products (i.e., infant formula [IF], follow-on formula [FOF], and growing up milk [GUM]) as well as complementary food products [CF] for children under three years.

43. Sub-Article 4.3 of the Code allowed donations of equipment and materials as long as they did not make reference to a proprietary product within the scope of the Code. WHA 69.9 strengthened the original language by calling on companies to not make any donations of equipment or services.

44. The version of the NetCode protocol used for this study does not provide for assessment of the delivery of services.

45. WHA 69.9 re-states this provision in Recommendation 6: 'Companies or their representatives should not … provide any information for health workers other than that which is scientific and factual'.

46. WHA 69.9 reiterates this provision in Recommendation 6: 'Companies or their representatives should not … give gifts or incentives to health care staff …' and Recommendation 7 notes that health workers should not accept gifts or incentives.'

47. Notification of the Ministry of Public Health No. 157 BE 2537 (1994) re: Food for Infant and Food of Uniform Formula for Infant and Small Children defines "food for infant" as, "…a food aimed for feeding infant of one day old till twelve months old in lieu of or in substitution of mother's milk," which relates to IF (intended for infants zero to six months of age) and FOF (intended for infants six to 12 months of age) products. The regulation also defines "food of uniform formula" as, "…a food aimed for feeding infant from six months old till twelve months old or children from one day old till three years old," which relates to complementary food products intended for infants six to 36 months of age.

48. The labeling provisions come into force on September 8, 2018.

Appendix A

International Code of Marketing of Breast-milk Substitutes (1981)

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International Code of Marketing of Breast-milk Substitutes (1981)

International Code of Marketing of Breast-milk Substitutes

World Health Organization
Geneva
1981

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Contents

Introduction

THE WORLD HEALTH ORGANIZATION (WHO) and the United Nations Children's Fund (UNICEF) have for many years emphasized the importance of maintaining the practice of breast-feeding—and of reviving the practice where it is in decline—as a way to improve the health and nutrition of infants and young children. Efforts to promote breast-feeding and to overcome problems that might discourage it are a part of the overall nutrition and maternal and child health programmes of both organizations and are a key element of primary health care as a means of achieving health for all by the year 2000.

A variety of factors influence the prevalence and duration of breast-feeding. The Twenty-seventh World Health Assembly, in 1974, noted the general decline in breast-feeding in many parts of the world, related to sociocultural and other factors including the promotion of manufactured breast-milk substitutes, and urged "Member countries to review sales promotion activities on baby foods to introduce appropriate remedial measures, including advertisement codes and legislation where necessary".[1]

The issue was taken up again by the Thirty-first World Health Assembly in May 1978. Among its recommendations were that Member States should give priority to preventing malnutrition in infants and young children by, *inter alia*, supporting and promoting breast-feeding, taking legislative and social action to facilitate breast-feeding by working mothers, and "regulating inappropriate sales promotion of infant foods that can be used to replace breast milk".[2]

Interest in the problems connected with infant and young child feeding and emphasis on the importance of breast-feeding in helping to overcome them have, of course, extended well beyond WHO and UNICEF. Governments, nongovernmental organizations, professional associations, scientists, and manufacturers of infant foods have also called for action to be taken on a world scale as one step towards improving the health of infants and young children.

In the latter part of 1978,WHO and UNICEF announced their intention of organizing jointly a meeting on infant and young child feeding, within their existing programmes, to try to make the most effective use of this groundswell of opinion. After thorough consideration on how to ensure the fullest participation, the meeting was convened in Geneva from 9 to 12 October 1979 and was attended by some 150 representatives of governments, organizations of the United Nations system and other intergovernmental bodies, nongovernmental organizations, the infant-food industry, and experts in related disciplines. The discussions were organized on five main themes: the encouragement and support of breast-feeding; the promotion and support of appropriate and timely complementary feeding (weaning) practices with the use of

[1] Resolution WHA27.43 (Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board, Volume II, 4th ed., Geneva, 1981, p.58).

[2] Resolution WHA31.47 (Handbook of Resolutions and Decisions…. Volume II, 4th ed., p.62).

local food resources; the strengthening of education, training and information on infant and young child feeding; the promotion of the health and social status of women in relation to infant and young child health and feeding; and the appropriate marketing and distribution of breast-milk substitutes.

The Thirty-third World Health Assembly, in May 1980, endorsed in their entirety the statement and recommendations agreed by consensus at this joint WHO/UNICEF meeting and made particular mention of the recommendation that "there should be an international code of marketing of infant formula and other products used as breast-milk substitutes", requesting the Director-General to prepare such a code "in close consultation with Member States and with all other parties concerned".[3]

To develop an international code of marketing of breast-milk substitutes in accordance with the Health Assembly's request, numerous and lengthy consultations were held with all interested parties. Member States of the World Health Organization and groups and individuals who had been represented at the October 1979 meeting were requested to comment on successive drafts of the code, and further meetings were held in February and March and again in August and September in 1980. WHO and UNICEF placed themselves at the disposal of all groups in an effort to foster a continuing dialogue on both the form and the content of the draft code and to maintain as a basic minimum content those points which had been agreed upon by consensus at the meeting in October 1979.

In January 1981, the Executive Board of the World Health Organization at its sixty-seventh session, considered the fourth draft of the code, endorsed it, and unanimously recommended[4] to the Thirty-fourth World Health Assembly the text of a resolution by which it would adopt the code in the form of a recommendation rather than as a regulation.[5] In May 1981, the Health Assembly debated the issue after it had been introduced by the representative of the Executive Board.[6] It adopted the code, as proposed, on 21 May by 118 votes in favour to 1 against, with 3 abstentions.[7]

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[3] See resolution WHA33.32, reproduced in Annex 2.

[4] See resolution EB67.R12, reproduced in Annex 1.

[5] The legal implications of the adoption of the code as a recommendation or as a regulation are discussed in a report on the code by the Director-General of WHO to the Thirty-fourth World Health Assembly; this report is contained in document WHA34/1981/REC/1, Annex 3.

[6] See Annex 3 for excerpts from the introductory statement by the representative of the Executive Board.

[7] See Annex 1 for the text of resolution WHA34.22, by which the code was adopted. For the verbatim record of the discussion at the fifteenth plenary meeting, on 21 May 1981, see document WHA34/1981/REC/2.

The Member States of the World Health Organization:

Affirming the right of every child and every pregnant and lactating woman to be adequately nourished, as a means of attaining and maintaining health;

Recognizing that infant malnutrition is part of the wider problems of lack of education, poverty, and social injustice;

Recognizing that the health of infants and young children cannot be isolated from the health and nutrition of women, their socioeconomic status and their roles as mothers;

Conscious that breast-feeding is an unequalled way of providing ideal food for the healthy growth and development of infants; that it forms a unique biological and emotional basis for the health of both mother and child; that the anti-infective properties of breast-milk help to protect infants against disease; and that there is an important relationship between breast-feeding and child-spacing;

Recognizing that the encouragement and protection of breast-feeding is an important part of the health, nutrition and other social measures required to promote healthy growth and development of infants and young children; and that breast-feeding is an important aspect of primary health care;

Considering that, when mothers do not breast-feed, or only do so partially, there is a legitimate market for infant formula and for suitable ingredients from which to prepare it; that all these products should accordingly be made accessible to those who need them through commercial or non-commercial distribution systems; and that they should not be marketed or distributed in ways that may interfere with the protection and promotion of breast-feeding;

Recognizing further that inappropriate feeding practices lead to infant malnutrition, morbidity and mortality in all countries, and that improper practices in the marketing of breast-milk substitutes and related products can contribute to these major public health problems;

Convinced that it is important for infants to receive appropriate complementary foods, usually when they reach four to six months of age, and that every effort should be made to use locally available foods; and convinced, nevertheless, that such complementary foods should not be used as breast-milk substitutes;

Appreciating that there are a number of social and economic factors affecting breast-feeding, and that, accordingly, governments should develop social support systems to protect, facilitate and encourage it, and that they should create an environment that fosters breast-feeding, provides appropriate family and community support, and protects mothers from factors that inhibit breast-feeding;

Affirming that health care systems, and the health professionals and other health workers serving in them, have an essential role to play in guiding infant

feeding practices, encouraging and facilitating breast-feeding, and providing objective and consistent advice to mothers and families about the superior value of breast-feeding, or, where needed, on the proper use of infant formula, whether manufactured industrially or home-prepared;

Affirming further that educational systems and other social services should be involved in the protection and promotion of breastfeeding, and in the appropriate use of complementary foods;

Aware that families, communities, women's organizations and other nongovernmental organizations have a special role to play in the protection and promotion of breast-feeding and in ensuring the support needed by pregnant women and mothers of infants and young children, whether breast-feeding or not;

Affirming the need for governments, organizations of the United Nations system, nongovernmental organizations, experts in various related disciplines, consumer groups and industry to cooperate in activities aimed at the improvement of maternal, infant and young child health and nutrition;

Recognizing that governments should undertake a variety of health, nutrition and other social measures to promote healthy growth and development of infants and young children, and that this Code concerns only one aspect of these measures;

Considering that manufacturers and distributors of breast-milk substitutes have an important and constructive role to play in relation to infant feeding, and in the promotion of the aim of this Code and its proper implementation;

Affirming that governments are called upon to take action appropriate to their social and legislative framework and their overall development objectives to give effect to the principles and aim of this Code, including the enactment of legislation, regulations or other suitable measures;

Believing that, in the light of the foregoing considerations, and in view of the vulnerability of infants in the early months of life and the risks involved in inappropriate feeding practices, including the unnecessary and improper use of breast-milk substitutes, the marketing of breast-milk substitutes requires special treatment, which makes usual marketing practices unsuitable for these products;

THEREFORE:

The Member States hereby agree the following articles which are recommended as a basis for action.

Article 1. Aim of the Code

The aim of this Code is to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breast-feeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution.

Article 2. Scope of the Code

The Code applies to the marketing, and practices related thereto, of the following products: breast-milk substitutes, including infant formula; other milk products, foods and beverages, including bottlefed complementary foods, when marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement of breast milk; feeding bottles and teasts. It also applies to their quality and availability, and to information concerning their use.

Article 3. Definitions

For the purposes of this Code:

"Breast-milk substitute"	means	any food being marketed or otherwise presented as a partial or total replacement for breast milk, whether or not suitable for that purpose.
"Complementary food"	means	any food whether manufactured or locally prepared, suitable as a complement to breast milk or to infant formula, when either become insufficient to satisfy the nutritional requirements of the infant. Such food is also commonly called "weaning food" or breast-milk supplement".
"Container"	means	any form of packaging of products for sale as a normal retail unit, including wrappers.
"Distributor"	means	a person, corporation or any other entity in the public or private sector engaged in the business (whether directly or indirectly) of marketing at the wholesale or retail level a product within the scope of this Code. A "primary distributor" is a manufacturer's sales agent, representative, national distributor or broker.

"Health care system"	means	governmental, nongovernmental or private institutions or organizations engaged, directly or indirectly, in health care for mothers, infants and pregnant women; and nurseries or child-care institutions. It also includes health workers in private practice. For the purposes of this Code, the health care system does not include pharmacies or other established sales outlets.
"Health worker"	means	a person working in a component of such a health care system, whether professional or non-professional, including voluntary unpaid workers.
"Infant formula"	means	a breast-milk substitute formulated industrially in accordance with applicable Codex Alimentarius standards, to satisfy the normal nutritional requirements of infants up to between four and six months of age, and adapted to their physiological characteristics. Infant formula may also be prepared at home, in which case it is described as "home-prepared".
"Label"	means	any tag, brand, marks, pictorial or other descriptive matter, written, printed, stencilled, marked, embossed or impressed on, or attached to, a container (see above) of any products within the scope of this Code.
"Manufacturer"	means	a corporation of other entity in the public or private sector engaged in the business or function (whether directly or through an agent or through an entity controlled by or under contract with it) of manufacturing a product within the scope of this Code.
"Marketing"	means	product promotion, distribution, selling, advertising, product public relations, and information services.
"Marketing personnel"	means	any persons whose functions involve the marketing of a product or products coming within the scope of this Code.

"Samples"	means	single or small quantities of a product provided without cost.
"Supplies"	means	quantities of a product provided for use over an extended period, free or at a low price, for social purposes, including those provided to families in need.

Article 4. Information and education

4.1 Governments should have the responsibility to ensure that objective and consistent information is provided on infant and young child feeding for use by families and those involved in the field of infant and young child nutrition. This responsibility should cover either the planning, provision, design and dissemination of information, or their control.

4.2 Informational and educational materials, whether written, audio, or visual, dealing with the feeding of infants and intended to reach pregnant women and mothers of infants and young children, should include clear information on all the following points: (a) the benefits and superiority of breast-feeding; (b) maternal nutrition, and the preparation for and maintenance of breast-feeding; (c) the negative effect on breast-feeding of introducing partial bottle-feeding; (d) the difficulty of reversing the decision not to breast-feed; and (e) where needed, the proper use of infant formula, whether manufactured industrially or home-prepared. When such materials contain information about the use of infant formula, they should include the social and financial implications of its use; the health hazards of inappropriate foods or feeding methods; and, in particular, the health hazards of unnecessary or improper use of infant formula and other breast-milk substitutes. Such materials should not use any pictures or text which may idealize the use of breast-milk substitutes.

4.3 Donations of informational or educational equipment or materials by manufacturers or distributors should be made only at the request and with the written approval of the appropriate government authority or within guidelines given by governments for this purpose. Such equipment or materials may bear the donating company's name or logo, but should not refer to a proprietary product that is within the scope of this Code, and should be distributed only through the health care system.

Article 5. The general public and mothers

5.1 There should be no advertising or other form of promotion to the general public of products within the scope of this Code.

5.2 Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.

5.3 In conformity with paragraphs 1 and 2 of this Article, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as special displays, discount coupons, premiums, special sales, loss-leaders and tie-in sales, for products within the scope of this Code. This provision should not restrict the establishment of pricing policies and practices intended to provide products at lower prices on a long-term basis.

5.4 Manufacturers and distributors should not distribute to pregnant women or mothers or infants and young children any gifts of articles or utensils which may promote the use of breast-milk substitutes or bottle-feeding.

5.5 Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

Article 6. Health care systems

6.1 The health authorities in Member States should take appropriate measures to encourage and protect breast-feeding and promote the principles of this Code, and should give appropriate information and advice to health workers in regard to their responsibilities, including the information specified in Article 4.2.

6.2 No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.

6.3 Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor other than that specific it Article 4.3.

6.4 The use by the health care system of "professional service representatives", "mothercraft nurses" or similar personnel, provided or paid for by manufacturers or distributors, should not be permitted.

6.5 Feeding with infant formula, whether manufactured or home-prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.

6.6 Donations or low-price sales to institutions or organizations of supplies of infant formula or other products within the scope of this Code, whether for use in the institutions or for distribution outside them, may be made. Such supplies should only be used or distributed for infants who have to be fed on breast-milk substitutes. If these supplies are distributed for use outside the institutions, this should be done only by the institutions or organizations concerned. Such donations or low-price sales should not be used by manufacturers or distributors as a sales inducement.

6.7 Where donated supplies of infant formula or other products within the scope of this Code are distributed outside an institution, the institution or organization should take steps to ensure that supplies can be continued as long as the infants concerned need them. Donors, as well as institutions or organizations concerned, should bear in mind this responsibility.

6.8 Equipment and materials, in addition to those referred to in Article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

Article 7. Health workers

7.1 Health workers should encourage and protect breast-feeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.

7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle-feeding is equivalent or superior to breast-feeding. It should also include the information specified in Article 4.2.

7.3. No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.

7.4 Samples of infant formula or other products within the scope of this Code, or of equipment or utensils for their preparation or use, should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level. Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.

7.5 Manufacturers and distributors of products within the scope of this Code should disclose to the institution to which a recipient health worker is affiliated any contribution made to him or on his behalf for fellowships, study tours, research grants, attendance at professional conferences, or the like. Similar disclosures should be made by the recipient.

Article 8. Persons employed by manufacturers and distributors

8.1 In systems of sales incentives for marketing personnel, the volume of sales of products within the scope of this Code should not be included in the calculation of bonuses, nor should quotas be set specifically for sales of these products. This should

not be understood to prevent the payment of bonuses based on the overall sales by a company of other products marketed by it.

8.2 Personnel employed in marketing products within the scope of this Code should not, as part of their job responsibilities, perform educational functions in relation to pregnant women or mothers of infants and young children. This should not be understood as preventing such personnel from being used for other functions by the health care system at the request and with the written approval of the appropriate authority of the government concerned.

Article 9. Labelling

9.1 Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breast-feeding.

9.2 Manufacturers and distributors of infant formula should ensure that each container as a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points: (a) the words "Important Notice" or their equivalent; (b) a statement of the superiority of breast-feeding; (c) a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use; (d) instructions for appropriate preparation, and a warning against the health hazards of inappropriate preparation. Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula. They may, however, have graphics for easy identification of the product as a breast-milk substitute and for illustrating methods of preparation. The terms "humanized", "materialized" or similar terms should not be used. Inserts giving additional information about the product and its proper use, subject to the above conditions, may be included in the package or retail unit. When labels give instructions for modifying a product into infant formula, the above should apply.

9.3 Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant. Since sweetened condensed milk is not suitable for infant feeding, nor for use as a main ingredient of infant formula, its label should not contain purported instructions on how to modify it for that purpose.

9.4 The label of food products within the scope of this Code should also state all the following points: (a) the ingredients used; (b) the composition/analysis of the product; (c) the storage conditions required; and (d) the batch number and the date before which the product is to be consumed, taking into account the climatic and storage conditions of the country concerned.

Article 10. Quality

10.1 The quality of products is an essential element for the protection of the health of infants and therefore should be of a high recognized standard.

10.2 Food products within the scope of this Code should, when sold or otherwise distributed, meet applicable standards recommended by the Codex Alimentarius Commission and also the Codex Code of Hygienic Practice for Foods for Infants and Children.

Article 11. Implementation and monitoring

11.1 Governments should take action to give effect to the principles and aim of this Code, as appropriate to their social and legislative framework, including the adoption of national legislation, regulations or other suitable measures. For this purpose, governments should seek, when necessary, the cooperation of WHO, UNICEF and other agencies of the United Nations system. National policies and measures, including laws and regulations, which are adopted to give effect to the principles and aim of this Code should be publicly stated, and should apply on the same basis to all those involved in the manufacture and marketing of products within the scope of this Code.

11.2 Monitoring the application of this Code lies with governments acting individually, and collectively through the World Health Organization as provided in paragraphs 6 and 7 of this Article. The manufacturers and distributors of products within the scope of this Code, and appropriate nongovernmental organizations, professional groups, and consumer organizations should collaborate with governments to this end.

11.3 Independently of any other measures taken for implementation of this Code, manufacturers and distributors of products within the scope of this Code should regard themselves as responsible for monitoring their marketing practices according to the principles and aim of this Code, and for taking steps to ensure that their conduct at every level conforms to them.

11.4 Nongovernmental organizations, professional groups, institutions and individuals concerned should have the responsibility of drawing the attention of manufacturers or distributors to activities which are incompatible with the principles and aim of this Code, so that appropriate action can be taken. The appropriate governmental authority should also be informed.

11.5 Manufacturers and primary distributors of products within the scope of this Code should apprise each member of their marketing personnel of the Code and of their responsibilities under it.

11.6 In accordance with Article 62 of the Constitution of the World Health Organization, Member States shall communicate annually to the Director-General information on action taken to give effect to the principles and aim of this Code.

11.7 The Director-General shall report in even years to the World Health Assembly on the status of implementation of the Code; and shall, on request, provide technical support to Member States preparing national legislation or regulations, or taking other appropriate measures in implementation and furtherance of the principles and aim of this Code.

Annex 1

Resolutions of the Executive Board at its Sixty-seventh Session and of the Thirty-fourth World Health Assembly on the International Code of Marketing of Breast-milk Substitutes

Resolution EB67.R12
Draft International Code of Marketing of Breast-milk Substitutes

The Executive Board,

Having considered the report by the Director-General on the Draft International Code of Marketing of Breast-milk Substitutes;

1. ENDORSES in its entirety the Draft International Code prepared by the Director-General;

2. FORWARDS the Draft International Code to the Thirty-fourth World Health Assembly;

3. RECOMMENDS to the Thirty-fourth World Health Assembly the adoption of the following resolution:

28 January 1981

[The text recommended by the Executive Board was adopted by the Thirty-fourth World Health Assembly, on 21 May 1981, as resolution WHA34.22, reproduced overleaf.]

Resolution WHA34.22
International Code of Marketing of Breast-milk Substitutes

The Thirty-fourth World Health Assembly,

Recognizing the importance of sound infant and young child nutrition for the future health and development of the child and adult;

Recalling that breast-feeding is the only natural method of infant feeding and that it must be actively protected and promoted in all countries;

Convinced that governments of Member States have important responsibilities and a prime role to play in the protection and promotion of breast-feeding as a means of improving infant and young child health;

Aware of the direct and indirect effects of marketing practices for breast-milk substitutes on infant feeding practices;

Convinced that the protection and promotion of infant feeding, including the regulation of the marketing of breast-milk substitutes, affect infant and young child health directly and profoundly, and are a problem of direct concern to WHO;

Having considered the draft International Code of Marketing of Breast-milk Substitutes prepared by the Director-general and forwarded to it by the Executive Board;

Expressing its gratitude to the Director-General and to the Executive Director of the United Nations Children's Fund for the steps they have taken in ensuring close consultation with Member States and with all other parties concerned in the process of preparing the draft International Code;

Having considered the recommendation made thereon by the Executive Board at its sixty-seventh session;

Confirming resolution WHA33.32, including the endorsement in their entirety of the statement and recommendations made by the joint WHO/UNICEF Meeting on Infant and Young Child Feeding held from 9 to 12 October 1979;

Stressing that the adoption of and adherence to the International Code of Marketing of Breast-milk Substitutes is a minimum requirement and only one of several important actions required in order to protect health practices of infant and young child feeding;

1. ADOPTS, in the sense of Article 23 of the Constitution, the International Code of Marketing of Breast-milk Substitutes annexed to the present resolution;

2. URGES all Member States:

(1) to give full and unanimous support to the implementation of the recommendations made by the joint WHO/UNICEF Meeting on Infant and Young Child Feeding and of the provisions of the International Code in its entirety as an expression of the collective will of the membership of the World Health Organization;

(2) to translate the International Code into national legislation, regulations or other suitable measures;

(3) to involve all concerned social and economic sectors and all other concerned parties in the implementation of the International Code and in the observance of the provisions thereof:

(4) to monitor the compliance with the Code;

3. DECIDES that the follow-up to and review of the implementation of this resolution shall be undertaken by regional committees, the Executive Board and the Health Assembly in the spirit of resolution WHA33.17.

4. REQUESTS the FAO/WHO Codex Alimentarius Commission to give full consideration, within the framework of its operational mandate, to action it might take to improve the quality standards of infant foods, and to support and promote the implementation of the International Code;

5. REQUESTS the Director-General:

(1) to give all possible support to Member States, as and when requested, for the implementation of the International Code, and in particular in the preparation of national legislation and other measures related thereto in accordance with operative subparagraph 6(6) of resolution WHA33.32;

(2) to use his good offices for the continued cooperation with all parties concerned in the implementation and monitoring of the International Code at country, regional and global levels;

(3) to report to the Thirty-sixth World health Assembly on the status of compliance with and implementation of the Code at country, regional and global levels;

(4) based on the conclusions of the status report, to make proposals, if necessary, for revision of the text of the Code and for the measures needed for its effective application.

21 May 1981

Annex 2

Resolution of the Thirty-third World Health Assembly on Infant and Young Child Feeding

Resolution WHA 33.32 Infant and young child feeding

The Thirty-third World Health Assembly,

Recalling resolutions WHA27.43 and WHA31.47 which in particular reaffirmed that breast-feeding is ideal for the harmonious physical and psychosocial development of the child, that urgent action is called for by governments and the Director-General in order to intensity activities for the promotion of breast-feeding and development of actions related to the preparation and use of weaning foods based on local products, and that there is an urgent need for countries to review sales promotion activities on baby foods and to introduce appropriate remedial measures, including advertisement codes and legislation, as well as to take appropriate supportive social measures for mothers working away from their homes during the lactation period;

Recalling further resolutions WHA31.55 and WHA32.42 which emphasized maternal and child health as an essential component of primary health care, vital to the attainment of health for all by the year 2000;

Recognizing that there is a close interrelationship between infant and young child feeding and social and economic development, and that urgent action by governments is required to promote the health and nutrition of infants, young children and mothers, *inter alia* through education, training and information in this field;

Noting that a joint WHO/UNICEF Meeting on Infant and Young Child Feeding was held from 9 to 12 October 1979, and was attended by representatives of governments, the United Nations system and technical agencies, nongovernmental organizations active in the area, the infant-food industry and other scientists working in this field;

1. ENDORSES in their entirety the statement and recommendations made by the joint WHO/UNICEF meeting, namely on the encouragement and support of breast-feeding; the promotion and support of appropriate weaning practices; the strengthening of education, training and information; the promotion of the health and social status of women in relation to infant and young child feeding; and the appropriate marketing and distribution of breast-milk substitutes. This statement and these recommendations also make clear the responsibility in this field incumbent on the health services, health personnel, national authorities, women's and other nongovernmental organizations, the United Nations agencies and the infant-food industry, and stress the importance for countries to have a coherent food and nutrition policy and the need for pregnant and lactacting women to be adequately nourished; the joint Meeting also recommended that "There should be an international code of marketing of infant formula and other products used as breast-milk substitutes. This should be supported by both exporting and importing countries and observed by all

manufacturers. WHO and UNICEF are requested to organize the process for its preparation, with the involvement of all concerned parties, in order to reach a conclusion as soon as possible";

2. RECOGNIZES the important work already carried out by the World Health Organization and UNICEF with a view to implementing these recommendations and the preparatory work done on the formulation of a draft international code of marketing of breast-milk substitutes;

3. URGES countries which have not already done so to review and implement resolutions WHA27.43 and WHA32.42;

4. URGES women's organizations to organize extensive information dissemination campaigns in support of breast-feeding and healthy habits;

5. REQUESTS the Director-General ;

(1) to cooperate with Member States on request in supervising or arranging for the supervision of the quality of infant foods during their production in the country concerned, as well as during their importation and marketing;

(2) to promote and support the exchange of information on laws, regulations, and other measures concerning marketing of breast-milk substitutes;

6. FURTHER REQUESTS the Director-General to intensity his activities for promoting the application of the recommendations of the joint WHO/UNICEF Meeting and, in particular:

(1) to continue efforts to promote breast-feeding as well as sound supplementary feeding and weaning practices as a prerequisite to healthy child growth and development;

(2) to intensify coordination with other international and bilateral agencies for the mobilization of the necessary resources for the promotion and support of activities related to the preparation of weaning foods based on local products in countries in need of such support and to collate and disseminate information on methods of supplementary feeding and weaning practices successfully used in different cultural settings;

(3) to intensify activities in the field of health education, training and information on infant and young child feeding, in particular through the preparation of training and other manuals for primary health care workers in different regions and countries;

(4) to prepare an international code on marketing of breast-milk substitutes in close consultation with Member States and with all other parties concerned including such scientific and other experts whose collaboration may be deemed appropriate, bearing in mind that:

(a) the marketing of breast-milk substitutes and weaning foods must be viewed within the framework of the problems of infant and young child feeding as a whole;

(b) the aim of the code should be to contribute to the provision of safe and adequate nutrition of infants and young children, and in particular to promote breast-feeding and ensure, on the basis of adequate information, the proper use of breast-milk substitutes, if necessary;

(c) the code should be based on existing knowledge of infant nutrition;

(d) the code should be governed *inter alia* by the following principles:

(i) the production, storage and distribution, as well as advertising, of infant feeding products should be subject to national legislation or regulations, or other measures as appropriate to the country concerned;

(ii) relevant information on infant feeding should be provided by the health care system of the country in which the product is consumed;

(iii) products should meet international standards of quality and presentation, in particular those developed by the Codex Alimentarius Commission, and their labels should clearly inform the public of the superiority of breast-feeding;

(5) to submit the code to the Executive Board for consideration at its sixty-seventh session and for forwarding with its recommendations to the Thirty-fourth World Health Assembly, together with proposals regarding its promotion and implementation, either as a regulation in the sense of Articles 21 and 22 of the Constitution of the World Health Organization or as a recommendation in the sense of Article 23, outlining the legal and other implications of each choice;

(6) to review the existing legislation in different countries for enabling and supporting breast-feeding, especially by working mothers, and to strengthen the Organization's capacity to cooperate on the request of Member States in developing such legislation;

(7) to submit to the Thirty-fourth World Health Assembly, in 1981, and thereafter in even years, a report on the steps taken by WHO to promote breast-feeding and to improve infant and young child feeding, together with an evaluation of the effect of all measures taken by WHO and its Member States.

23 May 1980

Annex 3

Excerpts from the Introductory Statement by the Representative of the Executive Board to the Thirty-fourth World Health Assembly on the Subject of the Draft International Code of Marketing of Breast-milk Substitutes[1]

The topic "infant and young child feeding" was extensively reviewed and discussed in May 1980 at the Thirty-third World Health Assembly, and it has also been extensively discussed this morning. Delegates will recall last year's Health Assembly's resolution WHA33.32 to this effect, which was adopted unanimously and which among other things requested the Director-General "to prepare an international code of marketing of breast-milk substitutes in close consultation with Member States and with other parties concerned". The need for such a code and the principles on which it should be developed were thus unanimously agreed upon at last year's Health Assembly.[2] It should therefore not be necessary in our deliberations today to repeat this review and these discussions.

There are two issues before the Committee today: firstly, the content of the code; and secondly, the question of whether the code should be adopted as a regulation in the sense of Articles 21 and 22 of the WHO Constitution or as a recommendation in the sense of Article 23.

The proposal now before the Committee in document A34/8 is the fourth distinct draft of the code; it is the result of a long process of consultations carried out with Member States and other parties concerned, in close cooperation with UNICEF. Few, if any, issues before the Executive Board and the Health Assembly have been the object of such extensive consultations as has the draft code.

. . . . . .

During the Executive Board's discussion on this item at its sixty-seventh session, in January 1981, many members addressed themselves to the aim and the principles of the code and stressed that, as presently drafted, it constituted the minimum acceptable requirements concerning the marketing of breast-milk substitutes. Since even at this late date, as reflect in recent newspaper articles, some uncertainty persists with respect to the content of the code, particularly its scope, I believe it would be useful to make some remarks on this point. I hasten to remind delegates, however, that the scope of the code was not the source of difficulty during the Board's discussion.

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[1] This statement by Dr Torbjørn Mork (Director-General of Health Services, Norway), representative of the Executive Board, was delivered before Committee A on 20 May 1981. The summary records of the discussion of this topic at the thirteenth, fourteenth and fifteenth meetings of Committee A are contained in document WHA34/1981/REC/3.

[2] See document WHA33/1980/REC/1, Annex 6; document WHA33/1980/REC/2, page 327; and document WHA33/1980/REC/3, pages 67-95 and 200-204.

The scope of the draft code is defined in Article 2. During the first four to six months of life, breast milk alone is usually adequate to sustain the normal infant's nutritional requirements. Breast milk may be replaced (substituted for) during this period by bona fide breast-milk substitutes, including infant formula. Any other food, such as cow's milk, fruit juices, cereals, vegetables, or any other fluid, solid or semi-solid food intended for infants and given after this initial period, can no longer be considered as a replacement for breast milk (or as its *bona fide* substitute). Such foods only complement breast milk or breast-milk substitutes, and are thus referred to in the draft code as complementary foods. They are also commonly called weaning foods or breast-milk supplements.

Products other than *bona fide* breast-milk substitutes, including infant formula, are covered by the code only when they are "marketed or otherwise represented to be suitable . . . . for use as a partial or total replacement of breastmilk". Thus the code's references to products used as partial or total replacements for breast milk are not intended to apply to complementary foods unless these foods are actually marketed — as breast-milk substitutes, including infant formula, are marketed — as being suitable for the partial or total replacement of breast milk. So long as the manufacturers and distributors of the products do not promote them as being suitable for use as partial or total replacements for breast milk, the code's provisions concerning limitations on advertising and other promotional activities do not apply to these products.

The Executive Board examined the draft code very carefully.[3] Several Board members indicated that they considered introducing amendments in order to strengthen it and to make it still more precise. The Board considered, however, that the adoption of the code by the Thirty-fourth World Health Assembly was a matter of great urgency in view of the serious situation prevailing, particularly in developing countries, and that amendments introduced at the present stage might lead to a postponement of the adoption of the code. The Board therefore unanimously recommended to this Thirty-fourth World Health Assembly the adoption of the code as presently drafted, realizing that it might be desirable or even necessary to revise the code at an early date in the light of the experience obtained in the implementation of its various provisions. This is reflected in operative paragraph 5(4) of the recommended resolution contained in resolution EB67.R12.

The second mina questions before the Executive Board was whether it should recommend the adoption of the code as a recommendation or as a regulation. Some Board members expressed a clear preference for its adoption as a regulation in the sense of Articles 21 and 22 of the WHO Constitution. It became clear, however, that, although there had not been a single dissenting voice in the Board with regard either to the need for an international code or to its scope or content, opinion was divided on the question of a recommendation versus a regulation.

[3] The summary record of the Board's discussions is contained in document EB67/1981/REC/2, pages 306-322.

It was stressed that any decision concerning the form the code should take should be based on an appreciation of which alternative had the better chance of fulfilling the purpose of the code — that is, to contribute to improved infant and child nutrition and health. The Board agreed that the moral force of a unanimous recommendation could be such that it would be more persuasive than a regulation that had gained less then unanimous support from Member States. It was considered, however, that the implementation of the code should be closely monitored according to the existing WHO constitutional procedures; that future Assemblies should assess the situation in the light of reports from Member States; and that the Assembly should take any measures it judged necessary for its effective application

After carefully weighing the different points raised during its discussion, the Board unanimously adopted resolution EB67.R12, which contains the draft resolution recommended for adoption by the World Health Assembly. In this connexion I wish to draw the Committee's particular attention to the responsibilities outlined in the draft resolution: those of Member States, the regional committees, the Director-General, the Executive Board, and the Health Assembly itself for appropriate follow-up action once the code has been adopted.

In carrying out their responsibilities, Member States should make full use of their Organization — at global, regional and country levels — by requesting its technical support in the preparation of national legislation, regulations or other appropriate measures, and in the monitoring of the application of the code.

. . . . . .

I think that I can best reflect the sentiments of the Board by closing my introduction with a please for consensus on the resolution as it was unanimously recommended to the World Health Assembly by the Board. We are not today dealing with an economic issue of particular importance only to one or a few Member States. We are dealing with a health issue of essential importance to all Member States, and particularly to developing countries, and of importance to the children of the world and thus to all future generations.

Appendix B

Summary of Subsequent WHA Resolutions

Appendix B
Summary of Subsequent WHA Resolutions

Summary of WHA Resolutions Relevant to the Code[56,57]

Year	Number	Resolutions
1981	WHA34.22	• Code overwhelmingly adopted by WHA (118 in favour, 1 no, 3 abstentions). • Stresses that adoption and adherence to the Code is a minimum requirement. Member States are urged to implement the Code into national legislation, regulations and other suitable measures.
1982	WHA35.26	• Recognizes that commercial promotion of breastmilk substitutes contributes to an increase in artificial feeding and calls for renewed attention to implement and monitor the Code at national and international levels.
1984	WHA37.30	• Requests that the Director General work with Member States to implement and monitor the Code and to examine the promotion and use of foods unsuitable for infant and young child feeding
1986	WHA39.28	• Urges Member States to ensure that small amounts of breastmilk substitutes needed for the minority of infants are made available through normal procurement channels and not through free or subsidized supplies. • Directs attention of Member States to the following: ○ Any food or drink given before complementary feeding is nutritionally required may interfere with breastfeeding and therefore should neither be promoted nor encouraged for use by infants during this period. ○ Practice of providing infants with follow up milks is "not necessary".
1988	WHA41.11	• Request the Director General to provide legal and technical assistance to Member States in drafting or implementing the Code into national measures.

[56] http://www.infactcanada.ca/wha-resolutions.html

[57] http://www.who.int/nutrition/netcode/resolutions/en/

Year	Number	Resolutions
1990	WHA43.3	• Highlights the WHO/UNICEF statement on "protection, promoting and supporting breastfeeding: the special role of maternity services" which led to the Baby-Friendly Hospital Initiative in 1992. • Urges Member States to ensure that the principles and aim of the Code are given full expression in national health and nutrition policy and action.
1994	WHA47.5	• Reiterates earlier calls in 1986, 1990 and 1992 to end "free or low cost supplies" and extends the ban to all parts of the health care system; effectively superseding the provisions of Art.6.6 of the Code. • Provides guidelines on donation of breastmilk substitutes in emergencies.
1996	WHA49.15	• Calls on Member States to ensure that: 1. Complementary foods are not marketed for or used to undermine exclusive and sustained breastfeeding; 2. financial support to health professionals does not create conflicts of interests; 3. Code monitoring is carried out in an independent, transparent manner free from commercial interest.
2001	WHA54.2	• Sets global recommendation of "6 months" exclusive breastfeeding, with safe and appropriate complementary foods and continued breastfeeding for up to two years or beyond.
2002	WHA55.25	• Endorses the Global Strategy on Infant and Young Child Feeding which confines the baby food companies' role to 1. Ensure quality of their products and 2. Comply with the Code and subsequent WHA resolutions, as well as national measures. • Recognizes the role of optimal infant feeding to reduce the risk of obesity. • Alerts that micronutrient interventions should not undermine exclusive breastfeeding.
2005	WHA58.32	• Asks Member States to:

Year	Number	Resolutions
		1. Ensure that nutrition and health claims for breastmilk substitutes are not permitted unless national/.regional legislation allows; 2. Be aware of the risks of intrinsic contamination of powdered infant formulas and to ensure this information be conveyed through label warnings; 3. Ensure that financial support and other incentives for programmers and health professionals working in infant and young child health do not create conflicts of interest.
2006	WHA59.11	• Member States to make sure the response to the HIV pandemic does not include non-Code compliant donations of breastmilk substitutes or the promotion thereof.
2006	WHA59.21	• Commemorates the 25th anniversary of the adoption of the Code; welcomes the 2005 Innocenti Declaration and asks WHO to mobilize technical support for Code implementation and monitoring.
2008	WHA61.20	• Urges Member States to scale up efforts to monitor and enforce national measures and to avoid conflicts of interest. • Investigate the safe use of donor milk through human milk banks for vulnerable infants, mindful of national laws, cultural and religious beliefs.
2010	WHA63.23	• WHA urges Member States to develop and strengthen legislative and regulatory measures to control the marketing of breastmilk substitutes to give effect to the Code and resolutions. • To end inappropriate promotion of foods for infants and young children and to ensure that claims not be permitted for foods for infants and young children. • To ensure that required breastmilk substitutes in emergency responses are purchased and distributed according to strict criteria.
2012	WHA65.60	• WHA urges Member states to put into practice the comprehensive implementation plan on maternal, infant and young child nutrition, including:

Year	Number	Resolutions
		○ Developing or strengthening legislative, regulatory or other measures to control the marketing of breastmilk substitutes. ○ Establishing adequate mechanisms to safeguard against potential conflicts of interest in nutrition action. • The Director General of WHO is requested to: ○ Provide clarification and guidance on the inappropriate promotion of foods for infants and young children as mentioned in WHA 63.23. ○ Develop processes and tools to safeguard against possible conflicts of interest in policy development and implementation of nutrition programmes.
2014	WHA67(9)	• Director-General was requested to provide clarification and guidance by end of 2015 on the meaning of "ending inappropriate promotion of food for infants and young children" as cited in resolution WHA63.23 on infant and young child nutrition.

From: Code Essentials 3: Responsibilities of Health Workers under the International Code of Marketing of Breastmilk Substitutes and subsequent WHA resolutions. IFBAN Penang 2009, p 40. Updated by INFACT Canada, May 2013.

Year	Number	Resolutions
2016	WHA69.9	• WHA extends to scope of application of The Code to cover all types of formula from birth to 36 months of age. Amends certain original recommendations of the Code. Stipulates new recommendations for how complementary foods marketed as suitable for young children from 6 to 36 months of age should be marketed include.

Appendix C

Study Timeline

Appendix C
Study Timeline

		April				May				June				July				August				Sept				Oct			
	Time in weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	Sign Contract with ATNF																												
2	Sign Contract with IHPF																												
3	Compile BMS Product List																												
4	Adapt NetCode Forms for tablet																												
5	Compare the Code to Thai regulations																												
6	Collect list of HCFs																												
7	Develop Sampling Frame																												
8	Submit to Westat IRB/ Obtain approval																												
9	Submit to MOH/ BMA IRB																												
10	Obtain MOH and BMA IRB approval																												
11	Request approval to private and public clinics																												
12	Translate Forms																												
13	Training Preparations																												
14	In-person training in Bangkok																												
15	Label Abstraction																												
16	Data Collection (via tablet)																												
17	Qualitative interviews																												
18	Media Monitoring																												
19	Clean Data																												
20	Data Analysis/Report																												

	Westat		IHPF		Westat+IHPF		iSentia + IHPF

Appendix D

List of BMS and CF Products

Appendix D
List of BMS and CF Products

Table D-1. List of 182 BMS and CF products

	Company	Brand	Age indicated on package
1	Abbott	Isomil	0 - 1 Years
2	Abbott	Isomil	1+ Years
3	Abbott	Similac	0 - 1 Years
4	Abbott	Similac	0 - 1 Years
5	Abbott	Similac	0 - 12+ Months
6	Abbott	Similac	0 - 1 Years
7	Abbott	Similac	0 - 1 Years
8	Abbott	Similac	6 months - 3 years
9	Abbott	Similac	6 months - 3 years
10	Abbott	Similac	Not Specified
11	Abbott	Similac	1 - 3 Years
12	Dutch Mill	Dutch Mill	1 + Years
13	Danone/Nutricia	Dumex	0 - 1 Years
14	Danone/Nutricia	Dumex	6 months - 3 years
15	Danone/Nutricia	Dumex	6 months - 3 years
16	Danone/Nutricia	Dumex	0 - 1 Years
17	Danone/Nutricia	Dumex	1 + Years
18	Danone/Nutricia	Dumex	1 + Years
19	Danone/Nutricia	Dumex	1 + Years
20	Danone/Nutricia	Dumex	1 + Years
21	Danone/Nutricia	Dumex	1 + Years
22	Danone/Nutricia	Dumex	1 + Years
23	Danone/Nutricia	Nutricia	0 - 1 Years
24	Danone/Nutricia	Nutricia	0 - 1 Years
25	Danone/Nutricia	Nutricia	0 - 10 Months
26	Danone/Nutricia	Nutricia	0 - 1 Years
27	Danone/Nutricia	Nutricia	0 - 1 Years
28	Danone/Nutricia	Nutricia	0 - 1 Years
29	Danone/Nutricia	Nutricia	6 months - 3 years
30	Danone/Nutricia	Nutricia	6 months - 3 years
31	Danone/Nutricia	Nutricia	6 months - 3 years
32	Danone/Nutricia	Nutricia	1 + Years
33	Danone/Nutricia	Nutricia	1 + Years
34	Danone/Nutricia	Nutricia	1 + Years
35	Danone/Nutricia	Nutricia	1 + Years
36	Danone/Nutricia	Nutricia	1 + Years
37	Mead Johnson Nutrition	Enfa	0 - 1 Years
38	Mead Johnson Nutrition	Enfa	0 - 1 Years

Table D-1. List of 182 BMS and CF products (continued)

	Company	Brand	Age indicated on package
39	Mead Johnson Nutrition	Enfa	0 - 1 Years
40	Mead Johnson Nutrition	Enfa	6 months - 3 years
41	Mead Johnson Nutrition	Enfa	0 - 1 Years
42	Mead Johnson Nutrition	Enfa	1 + Years
43	Mead Johnson Nutrition	Enfa	1 + Years
44	Mead Johnson Nutrition	Nutramigen	Not Specified
45	Mead Johnson Nutrition	Enfa	0 - 1 Years
46	Mead Johnson Nutrition	Enfa	6 months - 3 years
47	Mead Johnson Nutrition	Enfa	1 + Years
48	Nestlé	Lactogen	0 - 1 Years
49	Nestlé	Lactogen	6 months - 3 years
50	Nestlé	Lactogen	1 + Years
51	Nestlé	Bear Brand	6 months - 3 years
52	Nestlé	Bear Brand	1 + Years
53	Nestlé	Bear Brand	1 + Years
54	Nestlé	BEBE	0 - 1 Years
55	Nestlé	Carnation	1 + Years
56	Nestlé	Carnation	1 + Years
57	Nestlé	Nan	0 - 1 Years
58	Nestlé	Nan	0 - 1 Years
59	Nestlé	Nan	6 months - 3 years
60	Nestlé	Nan	1 + Years
61	Nestlé	S26	0 - 1 Years
62	Nestlé	S26	0 - 1 Years
63	Nestlé	S26	6 months - 3 years
64	Nestlé	S26	6 months - 3 years
65	Nestlé	S26	1 + Years
66	Nestlé	S26	1 + Years
67	Nestlé	S26	1 + Years
68	Nestlé	CERELAC	6 - 12 Months
69	Nestlé	CERELAC	6 - 12 Months
70	Nestlé	CERELAC	6 - 12 Months
71	Nestlé	CERELAC	6 - 12 Months
72	Nestlé	CERELAC	8 - 12 Months
73	Nestlé	CERELAC	8 - 12 Months
74	Nestlé	CERELAC	12 - 36 Months
75	DG Smart Mom	Goat Milk	0-1 Years
76	DG Smart Mom	Goat Milk	6-12 Months
77	DG Smart Mom	Goat Milk	0-1 Years
78	DG Smart Mom	Goat Milk	6-12 Months
79	DG Smart Mom	Goat Milk	Not Specified
80	DG Smart Mom	Goat Milk	Not Specified
81	Healthy Foods Co. Ltd.	Baby Natura	6-36 Months

Table D-1. List of 182 BMS and CF products (continued)

	Company	Brand	Age indicated on package
82	Healthy Foods Co. Ltd.	Baby Natura	6-36 Months
83	Healthy Foods Co. Ltd.	Baby Natura	6-36 Months
84	Healthy Foods Co. Ltd.	Baby Natura	6-36 Months
85	Healthy Foods Co. Ltd.	Apple Monkey	12+ Months
86	Healthy Foods Co. Ltd.	Apple Monkey	12+ Months
87	Healthy Foods Co. Ltd.	Apple Monkey	12+ Months
88	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
89	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
90	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
91	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
92	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
93	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
94	Healthy Foods Co. Ltd.	Apple Monkey	Not Specified
95	DOZO	Baby Bite	6-36 Months
96	DOZO	Baby Bite	6-36 Months
97	DOZO	Baby Bite	6+ Months
98	Heinz	Heinz	6 months - 3 years
99	Heinz	Heinz	6 months - 3 years
100	Heinz	Heinz	6 months - 3 years
101	Heinz	Heinz	6 months - 3 years
102	Heinz	Heinz	6 months - 3 years
103	Heinz	Heinz	6 months - 3 years
104	Heinz	Heinz	8 months - 3 years
105	Heinz	Heinz	6 months - 3 years
106	Heinz	Heinz	7+ Months
107	Heinz	Heinz	7+ Months
108	Peachy	Peachy	6 months - 3 years
109	Peachy	Peachy	6 months - 3 years
110	Peachy	Peachy	6 months - 3 years
111	Peachy	Peachy	6 months - 3 years
112	Peachy	Peachy	6 months - 3 years
113	Peachy	Peachy	6 months - 3 years
114	Peachy	Peachy	6 months - 3 years
115	Peachy	Peachy	7 months - 3 years
116	Peachy	Peachy	7 months - 3 years
117	Peachy	Peachy	7 months - 3 years
118	Peachy	Peachy	7 months - 3 years
119	Peachy	Peachy	6 months - 3 years
120	Peachy	Peachy	1+ Years
121	Peachy	Peachy	1+ Years
122	Peachy	Peachy	1 - 3 Years
123	Peachy	Peachy	7 months - 3 years
124	Peachy	Peachy	6 months - 3 years

Table D-1. List of 182 BMS and CF products (continued)

	Company	Brand	Age indicated on package
125	Peachy	Peachy	6 months - 3 years
126	Peachy	Peachy	1+ Years
127	Peachy	Peachy	1+ Years
128	Shia	Shia	6 months - 3 years
129	Xongdur	Xongdur Baby	6-36 Months
130	Xongdur	Xongdur Baby	6-36 Months
131	Xongdur	Xongdur Baby	10-36 Months
132	Xongdur	Xongdur Baby	10-36 Months
133	Xongdur	Xongdur Baby	10-36 Months
134	Healthy Times	Healthy Times	Not Specified
135	Healthy Times	Healthy Times	Not Specified
136	Healthy Times	Healthy Times	Not Specified
137	Hooray	Hooray Puree	6 months - 3 years
138	Hooray	Hooray Puree	6 months - 3 years
139	Hooray	Hooray Puree	10 months - 3 years
140	Hooray	Hooray Puree	10 months - 3 years
141	Hooray	Hooray Puree	10 months - 3 years
142	Hooray	Hooray Puree	10 months - 3 years
143	Picnicbaby Baby	Picnicbaby	6-36 Months
144	Picnicbaby Baby	Picnicbaby	6-36 Months
145	Picnicbaby Baby	Picnicbaby	6-36 Months
146	Organix	Organix	7+ Months
147	Organix	Organix	12+ Months
148	Organix	Organix	7+ Months
149	Organix	Organix	7+ Months
150	Organix	Organix	7+ Months
151	Organix	Organix	7+ Months
152	Organix	Organix	7+ Months
153	Organix	Organix	7+ Months
154	Hain Celestial Group, Inc.	Earth's Best	9+ Months
155	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
156	Hain Celestial Group, Inc.	Earth's Best	6+ Months
157	Hain Celestial Group, Inc.	Earth's Best	6+ Months
158	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
159	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
160	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
161	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
162	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
163	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
164	Hain Celestial Group, Inc.	Earth's Best	6+ Months
165	Hain Celestial Group, Inc.	Earth's Best	6+ Months
166	Hain Celestial Group, Inc.	Earth's Best	4+ Months
167	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years

Table D-1. List of 182 BMS and CF products (continued)

	Company	Brand	Age indicated on package
168	Hain Celestial Group, Inc.	Earth's Best	6-36 Months
169	Hain Celestial Group, Inc.	Earth's Best	6 months - 3 years
170	Zantun & Victor	Siam Organic Food Products	6-24 Months
171	Namchow	Happy Bites	Not specified
172	Hanyang F&D Co. Ltd.	Bebe Food	15+ Months
173	Summer Sky Co. Ltd.	Sweet Pea Thailand	1+ Years
174	Summer Sky Co. Ltd.	Sweet Pea Thailand	10+ Months
175	Joe-Ry Family Co. Ltd.	Wel.B	12+ Months
176	Joe-Ry Family Co. Ltd.	Wel.B	12+ Months
177	Aulion Company Ltd.	Toto Mama	Not specified
178	Buddy Fruits	Buddy Fruits	Not specified
179	Buddy Fruits	Buddy Fruits	Not specified
180	Buddy Fruits	Buddy Fruits	Not specified
181	Buddy Fruits	Buddy Fruits	Not specified
182	Yick Chi Confectionery Company Ltd.	Peppa Pig	18+ Months

Appendix E

Non-Compliance Analysis by International Code Article

Appendix E
Non-Compliance Analysis by International Code Article

Article 4. Information and education

4.2 Informational and educational materials (whether written, audio, or visual) dealing with the feeding of infants, and intended to reach pregnant women and mothers of infants and young children should include clear information on the following points:

a. The benefits and superiority of breastfeeding;
For Health Care Facilities (HCFs): F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, or 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q12**=2 (no).
For Retail Outlets (ROs): F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q12**=2 (no).

b. Maternal nutrition, and the preparation for and maintenance of breastfeeding;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, or 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q13**=2 (no) AND F7/**Q14**=2 (no). (Two questions, both maternal nutrition (Q13) and preparation for and maintenance of BF (Q14).)
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q13**=2 (no) AND F7/**Q14**=2 (no). (Two questions, both maternal nutrition (Q13) and preparation for and maintenance of BF (Q14).

c. The negative effect on breastfeeding of introducing partial bottle-feeding;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, or 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q15**=2 (no).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q15**=2 (no).

d. The difficulty of reversing the decision not to breastfeed;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, or 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND F7/**Q17**=2 (no).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, 4, 5, 6 or 7 (all product types) AND F7/**Q17**=2 (no).

e. Where needed, the proper use of infant formula, whether manufactured industrially or home-prepared;
No data collected (this question was not in the NetCode Form 7 (Annex 19), and therefore not in ATNF/Thailand Form 7).

When such materials contain information about the use of infant formula, they should include:

f. The social and financial implications of its use;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q23**=2 (no).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q23**=2 (no).

g. The health hazards of inappropriate foods or feeding methods;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q24**=2 (no).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q24**=2 (no).

h. The health hazards of unnecessary or improper use of infant formula and other breastmilk substitutes;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q25**=2 (no).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND F7/**Q25**=2 (no).

i. Infant formula informational materials should not use any pictures or text which may idealize the use of breastmilk substitutes;
For HCFs: F3/Q2=3 (informational/educational materials) AND F3/Q5=1, 2, 3, 4, 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND (F7/**Q26**=1 (yes, text) OR F7/**Q27**=1 (yes, pictures)).
For ROs: F5/Q2=3 (promotion observed in RO is informational material) AND F7/Q5=1, 2, 3, or 4 (baby milk products only) AND (F7/**Q26**=1 (yes, text) OR F7/**Q27**=1 (yes, pictures)).

4.3 Donations of informational or educational equipment or materials by manufacturers or distributors should be made only at the request and with the written approval of the appropriate government authority or within guidelines given by governments for this purpose.

No data collected (not included in NetCode forms).

Such equipment or materials may bear the donating company's name or logo, but should not refer to a proprietary product that is within the scope of this Code,
F3/Q2=1 (equipment) AND F7/Q4=1 (yes, brand name shown).

and should be distributed only through the health care system.
No data collected (not included in NetCode forms).

Article 5. The general public and mothers

5.1 There should be no advertising or other form of promotion to the general public of products within the scope of this Code.
F1/Q37=1 (yes, mother saw promotion in media).

Media Monitoring, all.

5.2 Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.
F1/Q47=1 (yes, mother received free sample of baby food/drink product) AND F1/Q49=9 or 10 (given by shop personnel or company rep).

5.3 In conformity with paragraphs 1 and 2 of this Article, there should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as

- special displays,

- discount coupons,
- premiums,
- special sales,
- loss-leaders and
- tie-in sales,

for products within the scope of this Code.

F5/Q1=1 (yes, promotions found) AND F5/Q2=1, 2, 4, 5, 6 or 96 (all promotion types found, except code 3, informational materials).

From Media Monitoring data, promotions observed at online retailers.

This provision should not restrict the establishment of pricing policies and practices intended to provide products at lower prices on a long-term basis.

Not included in NetCode forms.

5.4 Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breastmilk substitutes or bottle-feeding.

F1/Q61=1 (yes, mother received a gift) AND F1/Q63=9 or 10 (given by shop personnel or company rep).

5.5 Marketing personnel, in their business capacity, should not seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children.

F1/Q12=1 (yes, someone told me to feed commercial baby food/drink to my baby) AND F1/Q14=9 or 10 (shop personnel or company rep).

Article 6. Health care systems

6.2 No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.

F1/Q12=1 (yes, someone told me to feed commercial baby food/drink to my baby) AND F1/Q14=1, 2, 3, 4, 5, 6, or 7 (family/general doctor, nurse, gynecologist, midwife, pediatrician, nutritionist, other health professionals).

F2/Q2=1 (BMS company personnel have contacted HCFs/HCF staff) AND F2/Q5=1 (yes, BMS company rep contacted HCF to provide [items] for distribution to mothers) AND (F2/Q6c=1 [samples of IFs 0-36 mos] OR F2/Q6d=1 [samples of CFs < 6 mos] OR F2/Q6e=1 [samples of CFs 6-36 mos])

6.3 Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor other than that specific to Article 4.3.

F3/Q2=2 (promotional material observed at the HCF) AND F7/Q4=1 (yes, brand name shown).

6.4 The use by the health care system of “professional service representatives”, “mothercraft nurses” or similar personnel, provided or paid for by manufacturers or distributors, should not be permitted.

Not included in NetCode forms.

6.5 Feeding with infant formula, whether manufactured or home-prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.

Not included in NetCode Forms.

6.8 Equipment and materials, in addition to those referred to in Article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

See sub-article 4.3, above, which uses: F3/Q2=1 (equipment) AND F7/**Q4**=1 (yes, brand name shown). (Note that the component of sub-article 6.8 regarding equipment has been superseded by WHA resolution 69.9, but the "materials" aspect of sub-article 6.8 is addressed by the specifications above for sub-article 6.3.)

Article 7. Health workers

7.1 Health workers should encourage and protect breastfeeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.

Not included in NetCode Forms.

7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle feeding is equivalent or superior to breastfeeding. It should also include the information specified in Article 4.2.*

*See sub-article 4.2, above, for specifications of non-compliance under this sub-article (data from HCFs only). This sub-article applies to the informational/educational materials intended for health professionals only (F3/Q6=1).

In addition to the criteria for sub-article 4.2 non-compliance, use: F3/Q2=3 (informational/educational materials at HCFs) AND F3/Q5=1, 2, 3, 4, or 96 (any type of material) AND F3/Q6=2 (only materials not intended for health workers) AND F7/Q5=1, 2, 3, 4, 5, 6, or 7 (all product types) AND (F7/Q18=1 (yes, material implies that breastmilk substitute products are equivalent or superior to breastmilk) AND F7/Q28=1 (yes, material contains non-scientific, non-factual matters)).

7.3. No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.

F2/Q7=1 (yes, company contacted HCF staff to provide [items]) AND F2/Q8c=1 (yes, personal gift items provided).

F2/Q11c=1 (yes, company made future offers to provide sponsored events or workshops for HCF staff) OR F2/Q11d=1 (yes, company made future offers to provide payment for or other support to staff to attend events or workshops outside the HCF). (Counted as a non-compliance for sub-article 7.3 if either condition is met.)

7.4 Samples of infant formula or other products within the scope of this Code, or of equipment or utensils for their preparation or use,

- should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level.
  This was covered under article 6.2, above, using data from Form 2 on health worker's reports of samples given to HCFs.

- Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.
  F1/Q47=1 (yes, mother received free sample of baby food/drink product) AND F1/Q49=1, 2, 3, 4, 5, 6, or 7 (sample was given by a health professional).

Article 9. Labeling

9.1 Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breastfeeding.

9.2 Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it, or on a label which cannot readily become separated from it, in an appropriate language, which includes all the following points:

F6/Q7 = 2 (No, product information is not printed on container or well-attached label) AND F6/Q6 = 2 (No, the language is not appropriate for sale in Thailand) AND F6/Q59 = 2 (No, the label does not include the statement in the specified format)

- the words “Important Notice” or their equivalent;

- a statement of the superiority of breastfeeding;
  F6/Q37 = 2 (No, the label does not include a statement on the superiority of breastfeeding) AND F6/Q36 = 2 (No, the label does not include the words “Mother’s milk is the best food for infants because it has full nutritional value.” This statement is a requirement of the Thai regulations that gives effect to this item of the code.

- a statement that the product should be used only on the advice of a health worker as to the need for its use and the proper method of use;
  F6/Q40 = 2 (No, the label does not include a statement that the product only be used under recommendation of a physician, nurse, or nutritionist)

- instructions for appropriate preparation;
  F6/Q29 = 2 (No, the label does not include preparation methods) AND F6/Q42 = 2 (No, the label does not include a directions for recommended daily use of the product)

- a warning against the health hazards of inappropriate preparation.
  F6/Q44 = 2 (No, the label does not include the warning)

- Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula. They may, however, have graphics for easy identification of the product as a breastmilk substitute and for illustrating methods of preparation.
  F6/Q30 = 1 (Yes, the label contains text that idealizes BMS and/or discourages/undermines breastfeeding)

- The terms “humanized”, “materialized” or similar terms should not be used.
  F6/Q38 = 1 (Yes, the label contains “humanized”, “materialized”, or similar terms)

- Inserts giving additional information about the product and its proper use, subject to the above conditions, may be included in the package or retail unit.

- When labels give instructions for modifying a product into infant formula, the above should apply.

9.3 Food products within the scope of this Code, marketed for infant feeding, which do not meet all the requirements of an infant formula, but which can be modified to do so, should carry on the label a warning that the unmodified product should not be the sole source of nourishment of an infant.

F6/Q63 = 2 (No, label does not include warning)

9.4 The label of food products within the scope of this Code should also state all the following points:

- the ingredients used;
  F6/Q12 = 2 (No, label does not include a list of ingredients)

- the composition/analysis of the product;
  F6/Q13 = 2 (No, label does not include the nutritional composition of the product)

- the storage conditions required;
  F6/Q14 = 2 (No, the label does not show storage instructions)

- the batch number;
  F6/Q15 = 2 (No, label does not state a batch number)

- the date before which the product is to be consumed, taking into account the climatic and storage conditions of the country concerned.
  F6/Q21 = 2 (No, the label does not include the day, month, and year of expiry with the word "expiry" printed on it) AND F6/Q20 = 2 (No, the label does not contain the month and year of manufacture) AND F6/Q23 = 2 (No, the label does not state the day, month, and year of expiration for consumption on foods cannot be stored for more than 90 days)

WHA 58.32 URGES Member States:

(2) to ensure that nutrition and health claims are not permitted for breastmilk substitutes, except where specifically provided for in national legislation;
F6/Q8 = 1 (Yes, the label contains nutrition and/or health claims)

(3) to ensure that clinicians and other health-care personnel, community health workers and families, parents and other caregivers, particularly of infants at high risk, are provided with enough information and training by health-care providers, in a timely manner on the preparation, use and handling of powdered infant formula in order to minimize health hazards; are informed that powdered infant formula may contain pathogenic microorganisms and must be prepared and used appropriately; and, where applicable, that this information is conveyed through an explicit warning on packaging;
F6/Q46 = 2 (No, the label does not contain a warning that powdered baby milk products may contain pathogenic microorganisms)

WHA 69.9 Recommendation 4. The messages used to promote foods for infants and young children should support optimal feeding and inappropriate messages should not be included. Messages about commercial products are conveyed in multiple forms, through advertisements, promotion and sponsorship, including brochures, online information and package labels. Irrespective of the form, messages should always:

• include a statement on the importance of continued breastfeeding for up to two years or beyond and the importance of not introducing complementary feeding before 6 months of age;
F6/Q65 = 2 (No, the label does not include a statement on the importance of continued breastfeeding for up to two years or beyond)
F6/Q66 = 2 (No, the label does not include a statement on the importance of not introducing complementary feeding before 6 months of age)

• include the appropriate age of introduction of the food (this must not be less than 6 months);
F6/Q9 = 2 (No, the appropriate age of introduction of the food is not included on the label)

• be easily understood by parents and other caregivers, with all required label information being visible and legible.

Messages should not:

• include any image, text or other representation that might suggest use for infants under the age of 6 months (including references to milestones and stages);
F6/Q32 = 1 (Yes, the label contains an image, text, or other representation that might suggest use for infants under the age of 6 months)
F6/Q67 = 1 (Yes, the label includes an image or other representation that might suggest use for infants under the age of 6 months)

• include any image, text or other representation that is likely to undermine or discourage breastfeeding, that makes a comparison to breastmilk, or that suggests that the product is nearly equivalent or superior to breastmilk;
F6/Q31 = 1 (Yes, the label contains information that implies or creates a belief that breastmilk substitute products are equivalent or superior to breastmilk)
F6/Q68 = 1 (Yes, the label includes an image, test, or other representation that is likely to undermine or discourage breastfeeding, that makes a comparison to breastmilk, or suggests that the product is nearly equivalent or superior to breastmilk)

• recommend or promote bottle feeding;
F6/Q33 = 1 (Yes, the label contains a message that recommends or promotes bottle feeding)
F6/Q69 = 1 (Yes, the label recommends or promotes bottlefeeding)

• convey an endorsement or anything that may be construed as an endorsement by a professional or other body, unless this has been specifically approved by relevant national, regional or international regulatory authorities.
F6/Q34 = 1 (Yes, the label conveys an endorsement or something that may be construed as an endorsement by a professional or other body)
F6/Q70 = 1 (Yes, the label conveys an endorsement or anything that may be construed as an endorsement by a professional or other body)

Thai Regulation (No. 157-37): "…and there shall at least contain the following details: …In case of imported food, the country of manufacture shall be shown."
F6/Q19 = 2 (No, the label does not include the name and address of the importer and the country of producer)

Thai Regulation (No. 194-2543): "And label must be expressed of the following declarations, except for the exception from the Food and Drug Administration: …Food serial number..."
F6/Q23 = 2 (No, the label does not include the food serial number [In this case, food serial number is referring to the unique set of numbers prescribed to each product by the Thai Food and Drug Administration. This identifier is commonly referred to as "FDA number")

Appendix F

Thailand Regulations that Implement or Go Beyond the Code of Marketing of Baby Foods

Appendix F
Thailand Regulations that Implement or Go Beyond the Code of Marketing of Baby Foods

The Thailand study provides a baseline measure of BMS and CF marketing prior to the enactment of the Control of Marketing of Infant and Young Child Food Act that the Thailand National Legislative Assembly passed on April 4, 2017. When this study began, the legislation was in draft form. We obtained and reviewed an unofficial English translation in July 2017.[58] The marketing elements of the legislation are due to come into force on September 8, 2017 and the labeling provisions on September 8, 2018.

The following are English translations of the Thai regulations relating to product labeling that differ from (and in some cases appear to exceed) the relevant Code recommendations.

Notification of the Ministry of Public Health No. 157 BE 2537 (1994) re: Food for Infant and Food of Uniform Formula for Infant and Small Children[59]:

3.1 Food for infant means a food aimed for feeding an infant of one day old until 12 months old in lieu of or in substitution of mother's milk.[60]

3.2 Food of uniform formula for infants and small children means a food aimed for feeding infants from six months to twelve months old or children from one year old until three years old.[61]

11.2 Statement shall be in Thai language, however, foreign language is allowed; and there shall at least contain the following details:

11.2.6 Date, month and year of manufacture, with the word "manufactured" printed thereon, or date, month, year of manufacture with the word "manufactured" printed, and date, month and year of repacking with the word "repacked" printed thereon, in case of manufacture by repacking, as the case may be.

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[58] http://www.searo.who.int/thailand/news/control-marketing-of-infant-and-young-child-food-act(2017).pdf?ua=1

[59] http://food.fda.moph.go.th/law/data/announ_moph/V.English/No.157-37%20Food%20for%20infant.pdf

[60] We understand that food for infants to mean infant formula or follow-on formula.

[61] We understand that food of uniform formula for infants and small children to mean follow-on formula or growing up milks.

11.2.7 Date, month and year of expiry, with the word "expired on" printed thereon.

11.7.8 Recommendation for storage, specifically after opening.

11.2.9 Preparation method (if any).

11.2.10 Food for infant shall contain the following statements:

(a) statement reading "Important Message:
- Mother's milk is the best food for infant because it has full nutrition value.
- Should use this product under recommendation of a physician, nurse or nutritionist.
- Incorrect preparation or mixture will be hazardous to infant."
- Statement showing directions or table recommended daily usage.

11.2.11 Food for uniform formula for infant and small children shall contain the following statement:

(a) Statement reading "Do not use to feed infant under 6 months old" in red bold characters of not less than 5 mm high in a rectangular frame with white background, and the colour of the frame must be in contrast with that of label background.
(b) Statement reading "natural odour added", "artificial odour added", "synthetic odour added", "natural flavor added" or "artificial flavor added", if so used, as the case may be.

Notification of the Ministry of Public Health No. 158 BE 2537 (1994) re: Supplementary Food for Infant and Small Children[62]:

Item 2 Supplementary Food for Infants and Young Children means a food intended to supplement nutrition value and to create familiarization in eating normal food for infants from the age of the 6 months up to 12 months or young children from the age of 1 year up to 3 years.[63]

Item 8 Labeling of Supplementary Food for Infants and Young Children shall follow the following prescriptions:

8.2 Shall be in Thai language, but foreign language may be addible display also. The label shall display the following matters:
8.2.6 Day, month, and year of the manufacturing accompanied with the word "Manufacturing" and day, month, and year of the repacking accompanied with the word "repacking" in case it is manufactured by repacking, if the case may be.

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[62] http://food.fda.moph.go.th/law/data/announ_moph/V.English/No.158-37%20Supplementary%20Food%20for%20Infants%20and%20Yong%20Children.pdf

[63] We understand this to mean complementary foods other than formula that is given to infants and children from 6 months up to 3 years of age.

8.2.7 Day, month, and year of expiry accompanied with the word "expiry".
8.2.8 Instruction for keeping, especially after opening for use.
8.2.11 A statement "Do not use for feeding infant whose age under 6 month" in the red bold letter with its height of not less than 5 mm filled in a rectangular frame which the inside area is white, colour of the frame shall be contrasted to the background.

Notification of the Ministry of Public Health No 194 BE 2543 (2000) re: Labels[64]:

Clause 3. Labels of foods to be sold to consumers must be expressed in Thai language alphabets, but may contain some foreign language alphabets which are acceptable. And label must be expressed of the following declarations, except for the exception from the Food and Drug Administration:

(2) Food serial number.

(3) Names and addresses of producers or re-packers of food which is produced within the country, names and addresses of importers and country of producers as the case may be.

(11) Declarations of date, month, and year of manufacture, or month and year of manufacture; date, month, and year of expiry for consumption or date, month, and year of which foods are in good qualities or standards by declaration of "produce" "expire" "consume before" as the applicable case.

11.1 Date month, and year of expiration for consumption for foods which cannot be stored more than 90 days.

11.2 Month and year of manufacture, or date, month, and year of expiration for consumption for foods which can be stored more than 90 days.

11.3 Date, month, and year of manufacture and date, month, and year of expiration for consumption as prescribed by the Food and Drug Administration.

[64] http://food.fda.moph.go.th/law/data/announ_moph/CANCEL/Cancel_%20(172).pdf

Appendix G

List of Questions to Form 6 – Label Abstraction Relevant to Code Recommendations and Thai FDA Regulations

Appendix G
List of Questions to Form 6 – Label Abstraction Relevant to Code Recommendations and Thai FDA Regulations

The following questions included in Form 6 for label abstraction give effect to the Code, therefore, they assess products' compliance with the Code.

Article 9.2:

Q7 - Is the product information printed on the container or a well-attached label?
Q29 - Does the label/insert include instructions for any preparation method?
Q30 - Does the label/insert contain text that may idealize the use of breastmilk substitutes, or discourage/undermine breastfeeding?
Q37 - Does the label/insert include a statement on the superiority of breastfeeding?
Q38 - Does the label/insert contain the terms, "humanized", "maternalized", or similar terms that should not be used?
Q40 - Does the label/insert contain a statement that the product only be used under recommendation of a physician, nurse, or nutritionist?
Q44 - Does the label/insert contain the warning that "Incorrect preparation or mixture will be hazardous to infant"?

Article 9.4:

Q12 - Does the label/insert include a list of ingredients?
Q13 - Does the label/insert display the nutritional composition of the product?
Q15 - Does the label or container state a batch number?

WHA 58.32:

Q8 - Does the label/insert contain any nutrition and/or health claims?
Q46 - Does the label/insert contain a warning that powdered baby milk products may contain pathogenic microorganisms?

WHA 69.9-R4:

Q9 - Is the recommended or appropriate age of introduction of the product printed on the label?
Q31 - Does the label/insert contain information that implies or creates a belief that breastmilk substitute products are equivalent or superior to breast milk?
Q32 - Does the label/insert contain any image, text, or other representation that might suggest use for infants under the age of 6 months (including references to milestones and stages)?

Q33 - Does the label contain a message that recommends or promotes bottle feeding?
Q34 - Does the label/insert convey an endorsement or anything that may be construed as an endorsement by a professional or other body, unless specifically approved by relevant national, regional or international regulatory bodies?
Q65 - Does the label include a statement on the importance of continued breastfeeding for up to two years or beyond?
Q66 - Does the label include a statement on importance of not introducing complementary feeding before 6 months of age?
Q67 - Does the label include any image, text or other representation that might suggest use for infants under the age of 6 months (including references to milestones and stages)?
Q68 - Does the label include any image, text or other representation that is likely to undermine or discourage breastfeeding, that makes a comparison to breastmilk, or that suggests that the product is nearly equivalent or superior to breastmilk?
Q69 - Does the label recommend or promote bottle feeding?
Q70 - Does the label convey an endorsement or anything that may be construed as an endorsement by a professional or other body, unless this has been specifically approved by relevant national, regional or international regulatory authorities?

The following questions in Form 6 for label abstraction give effect to the Thai FDA regulations associated with labeling, BMS products, and complementary foods, and these questions go beyond the requirements of the Code.

No.157-37:

Q6 - Is the language used on the product label appropriate for the country in which the product is sold?
Q19 - Does the label or container include the name and address of the importer and the country of producer?
Q21 - Does the label/insert include the day, month and year of expiry, with the word "expiry" printed on it?
Q36 - Does the label contain the words, "Mother's milk is the best food for infants because it has full nutritional value"?
Q42 - Does the label/insert include a statement showing directions of recommended daily use?
Q59 - Does the label/insert contain the statement, "Do not use for feeding infants under 6 months old," in red bold letters with height not less than 5 mm in a rectangular frame, white inside, and color of frame contrasted with the background?

No. 158-2537:

Q14 - Does the label contain storage instructions specifically after opening?
Q20 - Does the label contain both the month and year of manufacture?

No.-194-2543:

Q16 - Does the label or container include the food serial number?

Q23 - For foods that can be stored for more than 90 days, does the label or container state the day, month and year of expiration for consumption?

Appendix H

Study Definitions

Appendix H
Study Definitions

General Definitions

Breastmilk Substitute (BMS). The Code defines a breastmilk substitute as, "any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not suitable for that purpose" (WHO, 1981). If follow-up formula or growing up milks are marketed or otherwise represented to be suitable, with or without modification, for use as a partial or total replacement for breast milk, they are also covered by The Code. (WHO, 2013).

Infant Formula. Any formula that is labelled for infants less than 6 months of age. The age might be listed 0-6 months or 0-12 months. It may be labelled "Stage 1". (NetCode, page 105). These include "special" formulas such as soy formula, lactose-free formula, low-birth-weight/premature formula and therapeutic milks. (NETCODE TOOLKIT MONITORING THE MARKETING OF BREASTMILK SUBSTITUTES: PROTOCOL FOR PERIODIC ASSESSMENT)

Follow-on Formula (also called follow-on milk or follow-up formula). Any milk product that is labelled for infants less than 12 months of age but not less than 6 months of age. The age might be listed 6-12 months or 6+ months. It may be labelled "Stage 2". (NetCode, page 105).

Growing-up Milk (also called toddler milk). Any milk product that is labelled for children over 12 months of age. The age might be listed 12-36 months or 1 to 5 years. It may be labelled "Stage 3". (NetCode, page 105).

Any Other Milk for Children 0 to < 36 Months. The Guidance approved by WHA 69.9 clarifies that any other milk (or products that could be used to replace milk, such as fortified soy milk), in either liquid or powdered form, that may be available in the country and are specifically marketed for feeding infants and young children (0 to < 36 months) should be considered as breastmilk substitutes and will be covered by the Code. (NETCODE TOOLKIT MONITORING THE MARKETING OF BREASTMILK SUBSTITUTES: PROTOCOL FOR PERIODIC ASSESSMENT).

Any Other Food or Liquid Targeted for Infants under 6 Months of Age. Since resolution WHA 54.2, from 2001, recommends exclusive breastfeeding for 6 months followed by safe and

appropriate complementary foods with continued breastfeeding for up to 2 years or beyond, any food product represented as suitable for infants under 6 months necessarily replaces breast milk. This would include complementary foods marketed as suitable from 4 months. All such products are within the scope of the Code. (NETCODE TOOLKIT MONITORING THE MARKETING OF BREASTMILK SUBSTITUTES: PROTOCOL FOR PERIODIC ASSESSMENT).

Complementary Foods (CFs). Foods marketed for young children from 6 to 36 months of age. (WHA 69.9).

Combination of Products. Infant food products are often promoted as a group without reference to a specific age group. For the purposes of this study, the term "combination" refers to any group of foods that includes infant formula. (NetCode, page 105).

Cross-promotion. A type of marketing when one product in the combination of products is promoted, the others are indirectly promoted as well due to their similar names, colours, images, etc. (NetCode, page 105). Cross-promotion (also called brand crossover promotion or brand stretching) is a form of marketing promotion where customers of one product or service are targeted with promotion of a related product. This can include packaging, branding and labeling of a product to closely resemble that of another (brand extension). In this context, it can also refer to use of particular promotional activities for one product and/or promotion for that product in particular settings to promote another product. (WHA 69.9 http://www.who.int/nutrition/topics/guidance-inapproriate-food-promotion-iyc-backgroundprocess.pdf?ua=1).

Other Milks. Any milk product that is not explicitly labelled for children under 36 months but that might be consumed by young children. (NetCode, page 105).

Commercial Complementary Foods. Any food or drink other than baby milk that is labelled for children under 24 months of age. (NetCode, page 105).

Other Commercial Foods. Any processed food or drink that is not labelled for children under 24 months of age. (NetCode, page 105).

Natural Foods. Any food that is produced at home or sold without industrial processing. (NetCode, page 105).

Food for Infant and Food of Uniform Formula for Infant and Small Children. Foods other than modified milk for infant and modified milk of uniform formula for infant and small children that are manufactured to contain suitable food substances and in sufficient quantity for feeding infant and children and which can be divided as hereunder. (Thailand Notification of Ministry of Public Health No. 157 (B.E. 2537 (1994) Re: Food for Infant and Food of Uniform Formula for Infant and Small Children).

Food for Infant. A food aimed for feeing infant of one day old until twelve months old in lieu of or in substitution of mother's milk. (Thailand Notification of Ministry of Public Health No. 157 (B.E. 2537 (1994) Re: Food for Infant and Food of Uniform Formula for Infant and Small Children).

Food of Uniform Formula for Infant and Small Children. A food aimed for feeding infant from six months old till twelve months old or children from one day old till three years old. (Thailand Notification of Ministry of Public Health No. 157 (B.E. 2537 (1994) Re: Food for Infant and Food of Uniform Formula for Infant and Small Children).

Foods for Infants and Young Children. Defined as commercially produced food or beverage products that are specifically marketed as suitable for feeding children up to 36 months of age. (http://www.who.int/nutrition/topics/guidance-inapproriate-food-promotion-iyc-backgroundprocess.pdf?ua=1).

Parallel Import. Branded goods that are imported into a market and sold there without the consent of the owner of the trademark in that market. (http://www.inta.org/Advocacy/Pages/ParallelImportsGrayMarket.aspx)

Health Care Facilities (HCFs) [or Health Care System, per the Code] Public and private HCFs that provide well-baby care. HCFs that only care for sick children (e.g., hospitalized children, emergency rooms, or sick clinics) are not included. (NetCode, page 53).

Media. For this study, includes TV (government and private), radio, printed magazines, and social networks.

Media Advertisements. Any audio-visual material meant to promote relevant products using TV/radio/print as a mean of dissemination, including but not limited to:

- TV/radio commercials.
- Billboard, posters, banners, newsletters, flyers, pamphlets, books, magazines, journals, and newspaper promoting relevant products.
- Online promotions on internet, including Facebook, Twitter, or other social media (NetCode, page 29).

Social Media. May include Facebook, Twitter, Instagram, etc. (NetCode, page 70).

Online Promotions. Promotions on the internet may include banner adverts; viral marketing encouraging mothers to contact their peers about a specific product or brand; sweepstakes and promotions; club memberships, and incentives for product purchase. (NetCode, page 67).

Form 1

Commercial or Prepackaged Food and Drink Products. Items that are not breastmilk. For example, homemade products and drink that might be given to children such as infant formula products, follow-up and follow-on formulas, or growing up or toddler milks, or foods or drinks to supplement breastmilk, such as cereal, fruits, and vegetables, and juices. (NetCode protocol, Form 1).

Brand. A name or symbol that legally identifies a company, a single product, or a product line, to differentiate it from other companies and products in the marketplace (WHO, 2012).

Company [or Manufacturer, per the Code]. For the purposes of this study, any corporation that manufactures or markets (either directly or through an agent) food products intended for infants and young children. (ATNF definition).

Promotion. Advertising of products within the scope of the Code. (NetCode, page 10). Promotion is broadly interpreted to include the communication of messages that are designed to persuade or encourage the purchase or consumption of a product or raise awareness of a brand. Promotional messages may be communicated via traditional mass communication channels, the internet and other marketing media using a variety of promotional methods. In addition to promotional

techniques aimed directly at consumers, measures to promote products to health workers or to consumers through other intermediaries are included. Promotional methods or techniques include, but are not limited to, advergames, advertising, advertorials, ambush or attack marketing, automatic vending, brand, brand extension or brand stretching, below-the-line marketing, brand-equity characters, buzz marketing, cause-related marketing, clubs, company-owned websites, cross promotion, direct mail, emotional branding, fundraising schemes, gift packs or other giveaways, halo effect marketing, immersive marketing, ingame advertising, in-institution marketing, financial sponsorship, in-kind sponsorship, loyalty and voucher schemes, tasting schemes, integrated marketing, licensed characters, mobile marketing, multimedia messaging services, quick response (QR) codes, SMS marketing, outdoor advertising, packaging, peer-to-peer marketing, point-of-sale marketing, product placement, reward schemes, sales promotions, sampling, social media, sports sponsorship, tasting schemes, user-generated marketing, viral advertising, viral marketing, and word-of-mouth marketing. There does not have to be a reference to a brand name of a product for the activity to be considered as advertising or promotion. (WHA 69.9 http://www.who.int/nutrition/topics/guidance-inapproriate-food-promotion-iyc-backgroundprocess.pdf?ua=1).

Poster. A placard or bill posted in a public place as an advertisement. (http://www.collinsdictionary.com/dictionary/english/poster)

Flyer. A small printed notice which is used to advertise a particular company, service, or event. (https://www.collinsdictionary.com/dictionary/english/flyer)

Brochure. A brochure is a magazine or thin book with pictures that gives you information about a product or service. (https://www.collinsdictionary.com/dictionary/english/brochure)

Leaflet. A little book or a piece of paper containing information about a particular subject. (https://www.collinsdictionary.com/dictionary/english/leaflet)

Video. A film or television programme recorded on tape for people to watch on a television set. (https://www.collinsdictionary.com/dictionary/english/video).

Billboard. A very large board on which posters are displayed. (https://www.collinsdictionary.com/dictionary/english/billboard)

Coupon. (a) detachable part of a ticket or advertisement entitling the holder to a discount, free gift, etc.; (b) detachable slip usable as a commercial order form; (c) voucher given away with certain goods, a certain number of which are exchangeable for goods offered by the manufacturers. http://www.collinsdictionary.com/dictionary/english/coupon

Free Supplies. Any product covered by the Code provided to a HCF free or at low cost (at less than 80% of the retail price). (NetCode, page 11).

Gift. This refers to free items like bags, pens, calendars, posters, note-books, growth charts, toys, and other gifts etc. which may promote the use of a relevant product and are given to mothers, pregnant women, the general public and health workers (NetCode, page 29).

Online Social Groups. Online groups such as baby clubs or parenting groups organized or sponsored by a company that sells any baby food or drinks (NetCode, page 51).

In-person Social Groups. In-person groups for others and other caregivers such as baby clubs or parenting groups organized or sponsored by a company that sells baby food or drinks for children (NetCode, page 51).

Online Events. Event of activities for mothers or other caregivers such as photo contests and promotional sales on e-commerce platforms organized or sponsored by a company that sells baby foods or drinks (NetCode, page 51).

Form 2

HCF Staff. May include HCF directors, physician, nurse or midwife, and/or nutritionist. For the purposes of this study, HCF staff did not include security personnel or receptionist. (NetCode, page 102).

Donations. Refers to free provision of goods and services including, but not limited to, informational or educational materials related to infant and young child feeding, materials, samples or regulated products, equipment, documents, and services (NetCode, page 29).

Medical Equipment. Items such as weighing scales, stethoscopes, thermometers, etc. (NetCode, Form 3).

Office Equipment. Items such as pens, notepads, growth charts, paperweights, etc. (NetCode, Form 3).

Free or Discounted Materials or Equipment. Material provided by a manufacturer or distributor, other than that specified in Art. 4.3.

Form 3

Information or Educational Materials. Materials for health workers produced by manufactures and distributors that are meant to provide scientific and factual information on relevant products. (NetCode protocol, page 28).

Promotional Materials. Promotion of relevant products in the HCFs, including the presence of printed materials, samples, gifts, branded materials, posters, placards or other materials that refer to such products. (NetCode protocol, page 28).

Form 5

Small Retailer. Small store or pharmacy in proximity to each of the 33 HCFs that sell products under the scope of the Code. Small stores would include corner/convenience stores and neighbourhood stores/kiosks. Pharmacies should not include those associated with the HCFs. (NetCode, page 58).

Large Retailer. Large stores that sell a high volume and variety of products under the scope of the Code. Large stores would include national chain grocery stores, supermarkets, and baby stores. (NetCode, page 58).

Price-related Promotion. A promotion that affects the price of an item, such as coupons, stamps, discounts, special discount sales.

Shelf Tag. A label that lists order code, description, and pack size of a product on a shelf, as well as its retail price. (http://bit.ly/1e3awBN)

Shelf Talker. Printed card or other sign attached to a store shelf to call buyers' attention to a particular product displayed in that shelf. Also called shelf screamer. http://www.businessdictionary.com/definition/shelf-talker.html

Displays. An arrangement of things put in a particular place, so that people can see them easily. https://www.collinsdictionary.com/dictionary/english/display)

Form 6

Labels. Product information that is printed on the container or is on a well-attached label. (NetCode, Form 6).

Insert. A manufacturer's printed guideline for the use and dosing of an infant formula; includes the pharmacokinetics, dosage forms, and other relevant information about a product. (http://bit.ly/1FAEfaU)

Ingredients. List of all the components used to make the infant formula (ATNF definition).

Composition. The parts of which something is composed or made up. (http://www.collinsdictionary.com/dictionary/english/composition)

Serial Number. A number on that object which identifies it. (https://www.collinsdictionary.com/dictionary/english/serial-number)

Batch Number. Any distinctive combination of letters, numbers, or symbols, or any combination of them, from which the complete history of the manufacture, processing, packing, holding, and distribution of a batch or lot of drug product or other material can be determined. (http://1.usa.gov/1LD1MwW)

Health Claim. Any representation that states, suggests or implies that a relationship exists between a food or a constituent of that food and health (e.g., contains words similar to "clinically proven",

links to growth, development, and health); or contains claims related to specific ingredients and nutrients. (NetCode, Form 6).

Invitation to Make Contact. Includes ways to attend company sponsored/organized events or social groups; links to company sponsored/ developed forums and websites; or ways to connect to company social media accounts. (NetCode, Form 6).

Promotional Messages, Images, or Devices to Induce Sales. Includes information about, or an image of, a free gift or toy; "extra 20% free"; a web link that offers free samples/gifts following the purchase of the products under the scope; vouchers for further product purchases. (NetCode, Form 6).

Idealise. For the purposes of this study, this relates to photographs, drawings, cartoons or other types of pictures of a human mother, caregiver and/or baby, or wording, that implies that feeding an infant or child with any type of formula is equivalent to or better than breastfeeding, on labels, packaging, materials or other information. (NetCode, Form 6).

Graphic or Text suggesting superiority of BMS. Any text stating/implying that the product is similar to or, comparable with breast milk or has similar benefits to breastfeeding e.g. "gold standard" "Closer to breast milk than any other formula"; "Even the baby' stools will be softer and similar to those of breastfed infants" or terms such as "humanised", maternalized" or similar. (NetCode, Form 6).

Images that Go Beyond Illustrating the Method of Preparation or Identifying Product as BMS. Pictures of any infant or young child, feeding bottles, mother feeding child or any representation of animals, toys, cartoon characters, brand mascots or images that idealise the product such as hearts, flowers/landscapes or endorsements from health professionals, images that imply a nutrition/health claim etc. (NetCode, Form 6).

Appendix I

Final Forms

Appendix I
Final Forms

FORM 1 – QUESTIONNAIRE FOR MOTHERS

PSU:

[Country specific drop down list - districts]

Healthcare Facility Name (Main):

[Insert PSU specific drop down list – HCFs: Main sample;

Include "Other (Reserve)" option in drop down list.]

Other (Reserve): [Insert PSU specific drop down list - HCFs: Reserve sample;

DISPLAY IF "Other" is selected in HCF Name]

Date:

Data Collector ID:

Respondent ID:

Instruction: Did you obtain consent from Mother? If not, stop and request mother's consent.

Thank you for agreeing to talk to me. I am interested in infant and young child feeding and, in particular, attempts to approach mothers made by companies that sell commercial or prepackaged food or drink products for infants and children up to 36 months (3 years) of age. I will not take your name nor repeat anything you say to me to anyone else. The information you provide will be anonymous and analyzed together with that provided by other mothers of infants and young children that we are interviewing in Bangkok. There will be a report but it will not be possible to identify you or anything about your children. The time you share with us and the information you provide is very valuable and will lead to improving maternal and child health.

Q1. Are you a mother of any children younger than 24 months (2 years) old?

1 – YES (GO TO Q2)
2 – NO (TERMINATE INTERVIEW: Thank you very much for your time, but we are only interviewing women who have a child younger than 24 months old.)

END

Q2. How many children do you have who are younger than 6 months old? ___
(Go to Q3)

Q3. How many children do you have who are 6 – 24 months old? _____

(If Q2 OR Q3 > 0, go to Q4; If Q2 AND Q3 = 0, go to - TERMINATE INTERVIEW: Thank you very much for your time, but you do not meet the criteria for this study.)

INSTRUCTION: CHECK WITH THE SUPERVISOR AS TO WHETHER THE INTERVIEW SHOULD PROCEED.

Q4. **INSTRUCTION: CONFIRM THE AGE OF THE CHILD THAT WAS SELECTED WITH SUPERVISOR.**

1 – CHILD IS < 6 MONTHS (GO TO Q5)
2 – CHILD IS 6-24 MONTHS (GO TO Q5)
3 – CHILD'S AGE RANGE HAS BEEN FILLED (TERMINATE INTERVIEW: Thank you very much for your time, but we have already completed enough interviews related to children in your child's age range.

END

Q5. **In some of the following questions, I want to ask you only about your [CHILD]. What is his or her first name?**

(DO NOT RECORD NAME IN QUESTIONNAIRE. WRITE IT ON A SEPARATE PIECE OF PAPER TO REFER TO, OR JUST REMEMBER NAME. IF NAME IS WRITTEN DOWN, GIVE PIECE OF PAPER TO MOTHER AT END OF INTERVIEW.)
(Go to Q6)

Q6. Have you been advised by a healthcare professional that you should not breastfeed?

1-YES
2-NO
99-DON'T KNOW
(Go to Q7)

Q7. Do you currently:

1-Breastfeed your baby exclusively. (Go to Q12)
2-Use formula exclusively. (Go to Q12)
3-Use a combination of breastfeeding and formula. (Go to Q8)

Q8. Who recommended that you choose that/those formulas?

1-FAMILY/GENERAL DOCTOR
2-NURSE
3-GYNAECOLOGIST
4-MIDWIFE
5-PEDIATRICIAN
6-NUTRITIONIST
7-OTHER HEALTH PROFESSIONALS
8-PARTNER/RELATIVE/FRIEND

9-SHOP/PHARMACY PERSONNEL
10-REP OF A COMPANY
97-CAN'T REMEMBER
96-OTHER (SPECIFY): _____
(Go to Q9)

Q9. How often do you use formula?

1-Every feed
2-Most feeds
3-Occasional feeds

(If child is <6 months, Go to Q10;
If child is >6 months, Go to Q12)

Q10. Do you give your [CHILD'S NAME] any other drinks?
1-Yes, specify.
2-No
(Go to Q11)

Q11. Do you give your [CHILD'S NAME] any solid or weaning foods?
1-YES
2-NO
(Go to Q12)

In the following questions, I am interested in talking to you about any commercial or prepackaged food and drink products, that is, not breastmilk and other homemade foods and drinks you might give to your children. For example, infant formula products, follow-up or follow-on formulas, or growing-up or toddler milks, or foods or drinks to supplement breastmilk, such as cereal, fruits and vegetables, and juices.

Q12. **In the past 6 months, did anyone tell you that you should feed any commercial or prepackaged food or drink products other than breastmilk to [CHILD'S NAME]?**

1 – YES (Go to Q13)
2 – NO (SKIP TO Q18 If child is 6-24 months; SKIP TO Q24 If child is 0-6 months)
99 – DON'T KNOW (SKIP TO Q18 If child is 6-24 months; SKIP TO Q24 If child is 0-6 months)

INSTRUCTIONS FOR QUAN: FOR THE FOLLOWING TABLE AND ALL OTHER TABLES, QUESTIONS CAN BE PRESENTED IN A VERTICAL FASHION ON THE TABLET FOR EACH ROW, WITH THE SEQUENCE REPEATING AS MANY TIMES AS IS NEEDED TO CAPTURE ALL RESPONSES. THUS, THERE ARE ONLY 5 QUESTIONS THAT NEEDED TO BE PRESENTED, AND THEN IT SHOULD LOOP BACK DEPENDING ON THE RESPONSE TO Q17. A SIMILAR PATTERN SHOULD BE FOLLOWED FOR EACH OF THE OTHER GRIDS IN THE QUESTIONNAIRE.

Q13. What type of product was recommended? (Go to Q14)	Q14. Who recommended it? (Go to Q15)	Q15. Which particular company was it from? (Go to Q16)	Q16. What was the brand name? (Go to Q17)	Q17. Were there any additional commercial or prepackaged food or drink products other than breastmilk recommended to you?
1-INFANT FORMULA (FOR INFANTS LESS THAN 6 MONTHS OF AGE) 2-FOLLOW-UP/FOLLOW-ON FORMULA (FOR INFANTS 6-11 MONTHS OF AGE) 3-GROWING UP MILK (FOR CHILDREN 12–36 MONTHS OF AGE) 4-INFANT FORMULA, DON'T KNOW TYPE 5-SOLID OR WEANING FOOD (LESS THAN 6 MONTHS OF AGE) 6-SOLID OR WEANING FOOD (6-36 MONTHS OF AGE) 7-DRINKS FOR BABIES AND YOUNG CHILDREN (6-36 MONTHS OF AGE) 96-OTHER (SPECIFY): _____ 99-DON'T KNOW	(Drop down menu) 1-FAMILY/GENERAL DOCTOR 2-NURSE 3-GYNAECOLOGIST 4-MIDWIFE 5-PEDIATRICIAN 6-NUTRITIONIST 7-OTHER HEALTH PROFESSIONALS 8-PARTNER/RELATIVE/FRIEND 9-SHOP/PHARMACY PERSONNEL 10-REP OF A COMPANY 97-CAN'T REMEMBER 96-OTHER (SPECIFY): _____	[INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	[INSERT COUNTRY SPECIFIC PRODUCT LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	If Q17 = ADD, Go to Q13; If Q17 = DO NOT ADD, Go to Q18 If child is 6-24 months, go to Q18. If child is < 6months, go to Q24.

Q18. Did anyone suggest that you start feeding [CHILD'S NAME] any commercial or prepackaged food or drink products when he/she was UNDER 6 MONTHS?

1 – YES (Go to Q19)
2 – NO (SKIP TO Q24)
99 – DON'T KNOW (SKIP TO Q24)

Q19. What type of product was recommended? (Go to Q20)	Q20. Who recommended it? (Go to Q21)	Q21. Which particular company was it from? (Go to Q22)	Q22. What was the brand name? (Go to Q23)	Q23. Were there any additional commercial or prepackaged food or drink products recommended to you?
1-INFANT FORMULA (FOR INFANTS LESS THAN 6 MONTHS OF AGE) 2-FOLLOW-UP/FOLLOW-ON FORMULA (FOR INFANTS 6-11 MONTHS OF AGE) 3-GROWING UP MILK (FOR CHILDREN 12– 36 MONTHS OF AGE) 4-INFANT FORMULA, DON'T KNOW TYPE 5-SOLID OR WEANING FOOD (LESS THAN 6 MONTHS OF AGE) 6-SOLID OR WEANING FOOD (6-36 MONTHS OF AGE)	(Drop down menu) 1-FAMILY/GENERAL DOCTOR 2-NURSE 3-GYNAECOLOGIST 4-MIDWIFE 5-PEDIATRICIAN 6-NUTRITIONIST 7-OTHER HEALTH PROFESSIONALS 8-PARTNER/RELATIVE/FRIEND 9-SHOP/PHARMACY PERSONNEL 10-REP OF A COMPANY 99-CAN'T REMEMBER 96-OTHER (SPECIFY): _____	[INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	[INSERT COUNTRY SPECIFIC BRAND LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	If Q23 = ADD, Go to Q19; If Q23 = DO NOT ADD, Go to Q24

7-DRINKS FOR BABIES AND YOUNG CHILDREN (6-36 MONTHS OF AGE) 96-OTHER (SPECIFY): _____ 99-DON'T KNOW				

Q24. In the past 6 months, have you (heard or seen) any promotion or messaging at this health facility about any commercial or prepackaged food or drink products for children 0-36 months old, or for companies that sell these products?

1 – YES (Go to Q25)
2 – NO (Go to Q30)
99 – DON'T KNOW (Go to Q30)

Q25. What kind of promotion or messaging did you see? (SELECT PROMOTION TYPE): (Go to Q26)	Q26. What type of commercial or prepackaged food or drink product was promoted? (Go to Q27)	Q27. Which particular company was promoted? (Go to Q28)	Q28. What was the brand name? (Go to Q29)	Q29. In the past 6 months, have you (heard or seen) any additional promotions or messaging at this health facility about any commercial or prepackaged products for children 0-36 months old, or for companies that sell these products?
1-POSTER 2-FLYER/BROCHURE/LEAFLET 3-VIDEO 4-OTHER PROMOTIONAL MESSAGING (SPECIFY): _____ 5-OTHER PROMOTIONAL MERCHANDISE (SPECIFY): _____	1-INFANT FORMULA (FOR INFANTS LESS THAN 6 MONTHS OF AGE) 2-FOLLOW-UP/FOLLOW-ON FORMULA (FOR INFANTS 6-11 MONTHS OF AGE) 3-GROWING UP MILK (FOR CHILDREN 12– 36 MONTHS OF AGE) 4-INFANT FORMULA, DON'T KNOW TYPE 5-SOLID OR WEANING FOOD (LESS THAN 6 MONTHS OF AGE) 6-SOLID OR WEANING FOOD (6-36 MONTHS OF AGE) 7-DRINKS FOR BABIES AND YOUNG CHILDREN (6-36 MONTHS OF AGE) 96-OTHER (SPECIFY): _____ 99-DON'T KNOW	[INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	[INSERT COUNTRY SPECIFIC BRAND LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	If Q29 = ADD, Go to Q25; If Q29 = DO NOT ADD, Go to Q30 REPEAT AS MANY TIMES AS NEEDED TO CAPTURE ALL PROMOTIONS MOTHER HAS SEEN.

Q30. Was (CHILD's NAME) born at a health facility other than the one we are at today?

1 – YES (Go to Q31)
2 – NO (SKIP TO Q37)
3 – NOT BORN IN A HEALTH FACILITY (SKIP TO Q37)

Q31. Did you hear or see any promotions or messaging at the health facility where [CHILD'S NAME] was born about any commercial or prepackaged food or drink products for children 0-36 months old, or for companies that sell these products?

1 – YES (Go to Q32)
2 – NO (Go to Q37)
99 – DON'T KNOW (Go to Q37)

Q32. What kind of promotion or messaging did you see? (SELECT PROMOTION TYPE): (Go to Q33)	Q33. What type of commercial or prepackaged food or drink product was promoted? (Go to Q34)	Q34. Which particular company was promoted? (Go to Q35)	Q35. What was the brand name? (Go to Q36)	Q36. Did you (hear or see) any additional promotions or messaging at the health facility where [CHILD'S NAME] was born about any commercial or prepackaged products for children 0-36 months old, or for companies that sell these products?
1-POSTER 2-FLYER/BROCHURE/LEAFLET 3-VIDEO 4-OTHER PROMOTIONAL MESSAGING (SPECIFY): _____ 5-OTHER PROMOTIONAL MERCHANDISE (SPECIFY): _____	1-INFANT FORMULA (FOR INFANTS LESS THAN 6 MONTHS OF AGE) 2-FOLLOW-UP/FOLLOW-ON FORMULA (FOR INFANTS 6-11 MONTHS OF AGE) 3-GROWING UP MILK (FOR CHILDREN 12– 36 MONTHS OF AGE) 4-INFANT FORMULA, DON'T KNOW TYPE	[INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	[INSERT COUNTRY SPECIFIC BRAND LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	If Q36 = ADD, Go to Q32; If Q36 = DO NOT ADD, Go to Q37 REPEAT AS MANY TIMES AS NEEDED TO CAPTURE ALL PROMOTIONS MOTHER HAS SEEN.

	5-SOLID OR WEANING FOOD (LESS THAN 6 MONTHS OF AGE) 6-SOLID OR WEANING FOOD (6-36 MONTHS OF AGE) 7-DRINKS FOR BABIES AND YOUNG CHILDREN (6-36 MONTHS OF AGE) 96-OTHER (SPECIFY): _____ 99-DON'T KNOW			

Q37. I now want to ask you about any adverts or promotions you have seen on media like TV or the internet in the past 6 months. Have you heard or seen any promotions or messages from companies that sell any commercial or prepackaged food or drink products for children 0-36 months old?

1 – YES (Go to Q38)
2 – NO (Go to Q43)
99 – DON'T KNOW (Go to Q43)

Q38. What kind of promotion or messaging did you see? (SELECT PROMOTION TYPE): (Go to Q39)	Q39. What type of commercial or prepackaged food or drink product was promoted? (Go to Q40)	Q40. Which particular company was promoted? (Go to Q41)	Q41. What was the brand name? (Go to Q42)	Q42. In the past 6 months, have you heard or seen any additional promotions or messaging from companies that sell any commercial or prepackaged products for children 0-36 months old?
(Drop down menu) 1-TELEVISION 2-RADIO 3-MAGAZINE	1-INFANT FORMULA (FOR INFANTS LESS THAN 6 MONTHS OF AGE) 2-FOLLOW-UP/FOLLOW-ON FORMULA (FOR INFANTS 6-11 MONTHS OF AGE)	[INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW	[INSERT COUNTRY SPECIFIC BRAND LIST] 96-OTHER (SPECIFY): _____	If Q42 = ADD, Go to Q38; If Q42 = DO NOT ADD, Go to Q43

4-SHOP OR PHARMACY 5-BILLBOARD 6-SOCIAL MEDIA (FACEBOOK, TWITTER, ETC.) 7-INTERNET BESIDES SOCIAL MEDIA, e.g .WEBSITES 8-COMMUNITY EVENT OR CONFERENCE 96-OTHER (SPECIFY): 99-DON'T KNOW	3-GROWING UP MILK (FOR CHILDREN 12– 36 MONTHS OF AGE) 4-INFANT FORMULA, DON'T KNOW TYPE 5-SOLID OR WEANING FOOD (LESS THAN 6 MONTHS OF AGE) 6-SOLID OR WEANING FOOD (6-36 MONTHS OF AGE) 7-DRINKS FOR BABIES AND YOUNG CHILDREN (6-36 MONTHS OF AGE) 96-OTHER (SPECIFY): _____ 99-DON'T KNOW	(Drop down menu)	99-DON'T KNOW (Drop down menu)	REPEAT AS MANY TIMES AS NEEDED TO CAPTURE ALL PROMOTIONS MOTHER HAS SEEN.

	(a) Was it sponsored or organized by a company that sells any commercial or prepackaged food or drinks for children 0-36 months of age?	(b) Which particular company sponsored or organized this?	(c) Was any commercial or prepackaged food or drink product promoted in this group?	(d) What was the brand name?
Q43. In the past six months, have you been a member of any online social group for mothers and other caregivers of infants and young children, such as baby clubs or parenting groups? 1 – YES (Go to Q43a) 2 – NO (Go to Q44) 9 – DON'T KNOW (Go to Q44)	1 – YES (Go to Q43b) 2 – NO (Go to Q43c) 99 – DON"T KNOW (Go to Q43c)	(Go to Q43c) [INSERT COUNTRY SPECIFIC COMPANY LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)	1 – YES (Go to Q43d) 2 – NO (Go to Q44) 99 – DON"T KNOW (Go to 44)	(Go to Q44) [INSERT COUNTRY SPECIFIC BRAND LIST] 96-OTHER (SPECIFY): _____ 99-DON'T KNOW (Drop down menu)

Appendix J

Population Data for Districts in Bangkok

Appendix J
Population Data for Districts in Bangkok

District	From 2010 census			From IHPP
	Total population	Female population	Female age 15-49	Number of HCFs
Bang bon	138,698	66,613	47,629	2
Bang kun tien	276,488	139,188	95,332	3
Thung khru	150,358	77,076	49,698	2
Taling chan	136,546	70,603	42,390	1
Thawi watthana	90,218	46,223	28,336	3
Nong khaem	192,489	99,518	64,702	5
Bang khae	290,911	150,589	98,294	4
Phasi (Pasri) charoen	197,426	102,160	62,554	5
Rad burana	110,391	57,047	36,428	7
Chom thong	197,409	101,456	61,486	6
Bangkok yai	89,508	46,450	27,966	1
Thon buri	155,583	82,292	49,162	5
Klong san	96,784	50,747	30,209	4
Bang plad	174,275	91,276	62,816	3
Bangkok noi	158,533	84,922	52,305	7
Dusit	102,656	52,017	33,190	4
Phra nakhon	56,715	29,406	16,632	2
Pom prap	42,262	22,673	12,852	3
Samphanthawong	20,765	10,355	5,885	1
Din daeng	158,288	84,029	55,727	2
Phaya (Paya) thai	127,799	65,240	41,957	6
Huai khwang	168,583	88,299	56,523	7
Bang sue	132,948	68,049	40,665	4
Chatuchak (Jatujak)	332,877	164,764	114,082	5
Ratchathervi	108,851	59,191	42,553	6
Bang rak	50,728	27,135	15,971	5
Sathorn	138,490	72,034	41,833	3
Patum wan	84,356	45,945	30,597	4
Vadhana (Watthana)	171,150	88,822	67,800	5
Bang na	181,625	93,014	63,979	5
Phra (Pra) kanong	142,859	73,787	48,214	2
Bang kho lam	130,138	67,291	41,240	4
Yan nawa	182,621	93,252	64,739	2
Klong toey	179,394	90,605	66,871	5
Klong sam wa	220,339	110,209	71,675	1

District	From 2010 census			From IHPP
	Total population	Female population	Female age 15-49	Number of HCFs
Min buri	225,452	114,234	76,421	4
Nong chokn	167,896	84,304	54,411	2
Lat Krabang	299,775	148,269	108,707	4
Prawet	220,197	111,698	78,057	3
Saphan sung	120,165	61,358	37,055	2
Bang kapi	355,591	193,581	155,022	6
Wang thonglang	224,013	116,688	81,279	1
Bung kum	135,671	69,493	45,676	4
Kan na yao	126,856	64,009	41,889	1
Suan luang	235,063	120,656	80,124	6
Bang khen	245,310	128,272	85,494	4
Don muang	214,970	107,298	66,554	1
Lak si	167,415	85,655	55,228	3
Lat Phrao	165,220	85,990	52,485	4
Sai mai	212,560	108,851	70,430	4
Total	8,305,215	4,272,633	2,831,124	183

Appendix K

Combined Districts

Appendix K
Combined Districts

Combined district ID	District name	District code	Total population	Female population	Female age 15-49	Number of HCFs
S01	Bang Bon/Bang Khun Thian/ Thung Khru	50/21/49	565,544	282,877	192,659	7
S02	Taling Chan/Thawi Watthana	19/48	226,764	116,826	70,726	4
S03	Nong Khaem	23	192,489	99,518	64,702	5
S04	Bang Khae	40	290,911	150,589	98,294	4
S05	Phasi Charoen	22	197,426	102,160	62,554	5
S06	Rat Burana	24	110,391	57,047	36,428	7
S07	Chom Thong	35	197,409	101,456	61,486	6
S08	Bangkok Yai/Thon Buri	16/15	245,091	128,742	77,128	6
S09	Khlong San	18	96,784	50,747	30,209	4
S10	Bang Phlat/Bangkok Noi	25/20	332,808	176,198	115,121	10
S11	Dusit/Phra Nakhon	2/1	159,371	81,423	49,822	6
S12	Pom Prap Sattru Phai/ Samphanthawong	8/13	63,027	33,028	18,737	4
S13	Din Daeng/Phaya Thai	26/14	286,087	149,269	97,684	8
S14	Huai Khwang	17	168,583	88,299	56,523	7
S15	Bang Sue	29	132,948	68,049	40,665	4
S16	Chatuchak	30	332,877	164,764	114,082	5
S17	Ratchathewi	37	108,851	59,191	42,553	6
S18	Bang Rak/Sathon	4/28	189,218	99,169	57,804	8
S19	Pathum Wan	7	84,356	45,945	30,597	4
S20	Vadhana	39	171,150	88,822	67,800	5
S21	Bang Na/Phra Khanong	47/9	324,484	166,801	112,193	7
S22	Bang Kho Laem/Yan Nawa	31/12	312,759	160,543	105,979	6
S23	Khlong Toei	33	179,394	90,605	66,871	5
S24	Khlong Sam Wa/Min Buri/ Nong Chok	46/10/3	613,687	308,747	202,507	7
S25	Lat Krabang	11	299,775	148,269	108,707	4
S26	Prawet/Saphan Sung	32/44	340,362	173,056	115,112	5
S27	Bang Kapi/Wang Thonglang	6/45	579,604	310,269	236,301	7
S28	Bueng Kum/Khan Na Yao	27/43	262,527	133,502	87,565	5
S29	Suan Luang	34	235,063	120,656	80,124	6
S30	Bang Khen	5	245,310	128,272	85,494	4
S31	Don Mueang/Lai Si	36/41	382,385	192,953	121,782	4
S32	Lat Phrao	38	165,220	85,990	52,485	4
S33	Sai Mai	42	212,560	108,851	70,430	4
Total			8,305,215	4,272,633	2,831,124	183

Appendix L

Supplementary Tables A and B

Appendix L
Supplementary Tables A and B

Supplementary Table A. Summary of data collection by Health Care Facility (HCF)

District ID	Health Care Facility (HCF) ID	No. of mothers' interviews			No. of HCF staff interviewed
		children <6 mos.	children 6-24 mos.	Total mothers	
33	40*	4	6	10	3
33	42*	7	3	10	3
15	43*	0	10	10	3
24	45*	4	6	10	3
38	18*	5	5	10	3
35	1	2	8	10	3
2	3*	3	7	10	3
35	4	5	5	10	3
2	6*	2	8	10	3
26	8	3	7	10	3
36	53	2	8	10	3
30	55*	8	2	10	3
11	31	6	4	10	3
11	33	2	8	10	3
10	25	6	4	10	3
10	30	5	5	10	3
3	26	3	7	10	3
14	9	2	8	10	3
22	13*	4	6	10	3
42	14*	4	6	10	3
17	35*	2	8	10	3
32	36	3	7	10	3
34	47	3	7	10	3
27	48*	6	4	10	3
29	15	5	5	10	3
29	17	1	9	10	3
26	7	1	9	10	3
46	24	1	9	10	3
41	54	4	6	10	3
11	32	4	6	10	3
3	27	2	8	10	3
44	37	2	8	10	3
39	19	4	6	10	3
No. observations	**33**	**115**	**215**	**330**	**99**
No. refused	35	n/a	n/a	36	1
Total	68	n/a	n/a	366	100
Participation rate	48.5%	n/a	n/a	90.2%	99.0%

Source: ATNF Thailand (2017)

* Indicates a replacement HCF from the second sample.

Supplementary Table B. Observations related to sub-article 5.9: The most frequent non-compliances* observed in the label abstraction data

	Q8	Q9	Q21	Q40	Q46
BMS Company	Does the label/insert contain any nutrition and/or health claims?	Is recommended age of introduction on label?	Does the label/insert include the day, month and year of expiry, with the word "expiry" printed on it?	Does the label/insert contain a statement that the product only be used under recommendation of a physician, nurse, or nutritionist?	Does the label/insert contain a warning that powdered baby milk products may contain pathogenic microorganisms?
Abbott	11	1	0	0	15
Danone	30	-	12	0	39
KraftHeinz	-	-	-	-	-
Nestlé	8	-	12	21	39
RB/Mead Johnson Nutrition	14	-	3	11	18
Other**	7	3	-	6	7

Source: ATNF Thailand (2017)

* Counts of labeling non-compliances include Sub-articles 9.2 and 9.4 of The Code, as well as WHA 58.32, WHA 69.9, and relevant Thai regulations (those which exceed The Code). Each label included in the labeling analysis can have more than one non-compliance.

** "Other" companies include: Dutch Mill, DG Smart Mom, Natural Health Foods Co. Ltd. (Baby Natura), DOZO, Peachy, Shia, Xongdur, Iherb (Healthy Time), Hooray, Picnic baby, and "other (specify)".

Appendix M

Training Agenda

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Training Agenda for Bangkok, Thailand, July 3 – 6, 2017[65]

July 3, 2017

9.30-9.45	Introduction
9.45-11.00	The International Code of Marketing of Breast-Milk Substitutes
	How to collect data by tablet
11.00-12.00	Review Form 1: Mothers
12.00-13.00	Lunch
13.00-14.00	Review Form 1: Mothers (cont)
14.00-16.00	Role play Form 1
	Q&A

July 4, 2017

9.30-12.00	Review Form 2: Health workers
	Role play Form 2
12.00-13.00	Lunch
13.00-16.00	Review Forms 3,5,7: observations in HCFs and retailers
14.00-16.00	Role play Forms 3,5,7
	Q&A

July 5, 2017 (Field trip)

7.30-9.00	Travel to health care centre 1 (Bangkok)
9.00-12.00	Pilot test Form 1 and 2
12.00-13.00	Lunch
13.00-14.00	Team A: A private hospital
	Team B: A retail shop
14.00-16.00	Team A: A retail shop
	Team B: A private hospital

[65] International Health Policy Foundation (IHPF)

Appendix N

List of Websites for Online Media Monitoring

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List of Websites for Online Media Monitoring

Company Websites and their Social Media Accounts
Abbott http://www.abbott.co.th/webpage/home/ https://www.facebook.com/people/Abbott-Thailand/100009486602501
Dutch Mill http://www.dutchmill.co.th/ https://facebook.com/profile.php?id=132526910148462&refid=46&sid=eyJzZWFyY2hfc2lkIjoiZWQ3OGZiNTc4MjdhYTA4NjY2NzJjMDk0ZGMyMTU0NmUiLCJxdWVyeSI6ImR1dGNoLW1pbGwgdGhhaWxhbmQiLCJzZWFyY2hfdHlwZSI6IlNlYXJjaCIsInNlcXVlbmNlX2lkIjoxOTY3MzIyMzY1LCJwYWdlX251bWJlciI6MSwiZmlsdGVyX3R5cGUiOiJTZWFyY2giLCJlbnRfaWQiOjEzMjUyNjkxMDE0ODQ2MiwicG9zaXRpb24iOjAsInJlc3VsdF90eXBlIjoyNzR9&ref=m_nux_wizard https://facebook.com/DutchMillKidsThailand/?refid=17&ref=m_nux_wizard https://www.facebook.com/genifamilyclub/ http://www.genifamilyclub.com/ https://www.youtube.com/genifamilyclub
Danone http://www.dumex.co.th/ http://www.dumex.co.th/Pages/th-english-page.aspx http://www.hiqkidsclub.com/ https://www.youtube.com/user/DumexThai https://www.youtube.com/channel/UCTtIQDP8dfh9RySiSZkOylg https://www.facebook.com/DumexHeartToHeartClub https://www.facebook.com/DanoneThailand/ https://dreamdiscovery.hiqkidsclub.com/hiq/home
RB/Mead Johnson https://www.enfababy.com/ https://www.youtube.com/user/EnfaBaby https://www.facebook.com/enfasmartclub
Nestle https://www.nestle.co.th/en https://www.mommybear.net/sq/ https://www.s-momclub.com/th/home https://www.youtube.com/user/NestleThailand https://www.instagram.com/explore/tags/mommybear/ https://www.facebook.com/goodfoodgoodlifebyNestleThailand https://twitter.com/nestle_thailand?lang=en https://www.facebook.com/mommybearnetwork/ https://www.facebook.com/Smomclub/

Company Websites and their Social Media Accounts
DG Smart Mom https://www.dgsmartmom.com/ https://www.youtube.com/channel/UCnL7bka-Wh9wXu23dhfjY0Q https://www.facebook.com/dgsmartclub/
Baby Natural/Apple Monkey http://www.babynaturafood.com/ https://www.facebook.com/BabyNaturaFood/ https://web.facebook.com/AppleMonkeySnack/ https://www.apple-monkey.com/
Dozo http://www.bjc.co.th/business/brand_detail/15 https://www.facebook.com/DOZOBabyBite/
KraftzHeinz http://www.wcf.co.th/heinzthailand/products/Baby_food/
Peachy http://www.peachy.co.th/ https://www.instagram.com/peachybabyfood/ https://www.facebook.com/peachybabyfood
Shia http://www.shiababy.com https://www.facebook.com/shiababyfood/
Xongdur http://www.xongdur.com/ https://www.instagram.com/xongdur/ https://www.facebook.com/Xongdur/
Healthy Times https://healthytimes.com/ https://www.facebook.com/healthytimesbabyfood/
Hooray https://www.instagram.com/explore/tags/hooraybabyfood/ https://www.facebook.com/HoorayBabyFood/
Picnic Baby https://www.facebook.com/Picnicbabyfood/
Earth's Best https://th.iherb.com/c/Earth-s-Best?gclid=CjwKCAjwzMbLBRBzEiwAfFz4gU_rhVtUHWsoOP8MXNcOuJXbHkEKwAyQ-JSvrN4wNaOduEjdpi70nBoCDbQQAvD_BwE

Online Retailers	Subscription
https://www.tescolotus.com	Yes (Email/Text)
http://www.bigc.co.th/	Yes (Email/Text)
http://www.tops.co.th/	Yes (Email/Text)
http://www.lazada.co.th/?spm=a2o4m.brand-5921.0.0.dxqzZH	Yes (Email/Text)
https://www.orami.co.th/	Yes (Email/Text)
http://www.central.co.th	Yes (Email/Text)
https://www.aeonthailand.co.th	

Parenting Sites	Subscription
http://smartparenting.com.ph/	Yes
http://www.parenting.com/	No
http://healthyway.com/	No
http://momjunction.com/	No
http://mumsnet.com/	Yes
http://momtastic.com/	Yes
http://www.mothering.com/	Yes
http://thebump.com/	Yes
http://women.kapook.com/	Yes (Kapook.com)
http://healthofchildren.com/	No
http://justmommies.com/	Yes
http://empowher.com/	Yes
http://pantip.com/	Yes
http://koume-umihara.com/	No
http://www.rakluke.com/	Yes
https://www.maerakluke.com/	Yes
http://www.bestmomclub.com/forums/index.php	Yes
https://women.mthai.com/momandchildren	Yes (Mthai.com)
http://www.motherandchild.in.th/	Yes