

ACCESS TO NUTRITION INDEX

BMS CHAPTER
2016



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Marketing of breast-milk substitutes (BMS)

The following section sets out the results of the BMS pilot assessment using the newly developed methodology, including key findings and recommendations. It summarizes the results of two elements of the assessment: BMS 1 and BMS 2. BMS 1 assesses the quality of companies' BMS marketing policies and management systems, and their level of transparency. BMS 2 is based on two assessments of marketing practices in Vietnam and Indonesia carried out on behalf of ATNI by independent research organization Westat.

Marketing of breast-milk substitutes

The WHO recommends that to achieve optimal growth, development and health, babies everywhere are breastfed exclusively for the first six months, at which point safe, appropriate complementary foods should be introduced to meet their evolving nutritional requirements. It notes that complementary foods should not be used as breast-milk substitutes (BMS), and infants and young children should continue to be breastfed until they are two or older.¹

The International Code of Marketing of Breast-milk Substitutes (The Code) was adopted in 1981. It is a non-binding instrument that sets out 'a recommended basis for action' for Member States to regulate and monitor the marketing of breast-milk substitutes. Several WHO Member Health Assembly (WHA) resolutions have subsequently been passed that augment The Code, clarifying and/or extending its scope and application. The Code's articles relate in some cases to governments, in some cases to BMS manufacturers and in some cases to healthcare systems, workers and others. To give legal effect to The Code, countries need to enact laws and regulations.

Six companies have been assessed using the BMS methodology developed for the 2016 Index following extensive consultation with many stakeholders, including the WHO. These include four food and beverage companies – Nestlé, Danone, FrieslandCampina and Heinz, and two pharmaceutical companies – Abbott and Mead Johnson. The latter two companies are not included in the 2016 Global Index, but they were assessed to provide a more complete comparison of the world's major baby-food producers.

The assessment, carried out on a pilot basis, comprises:

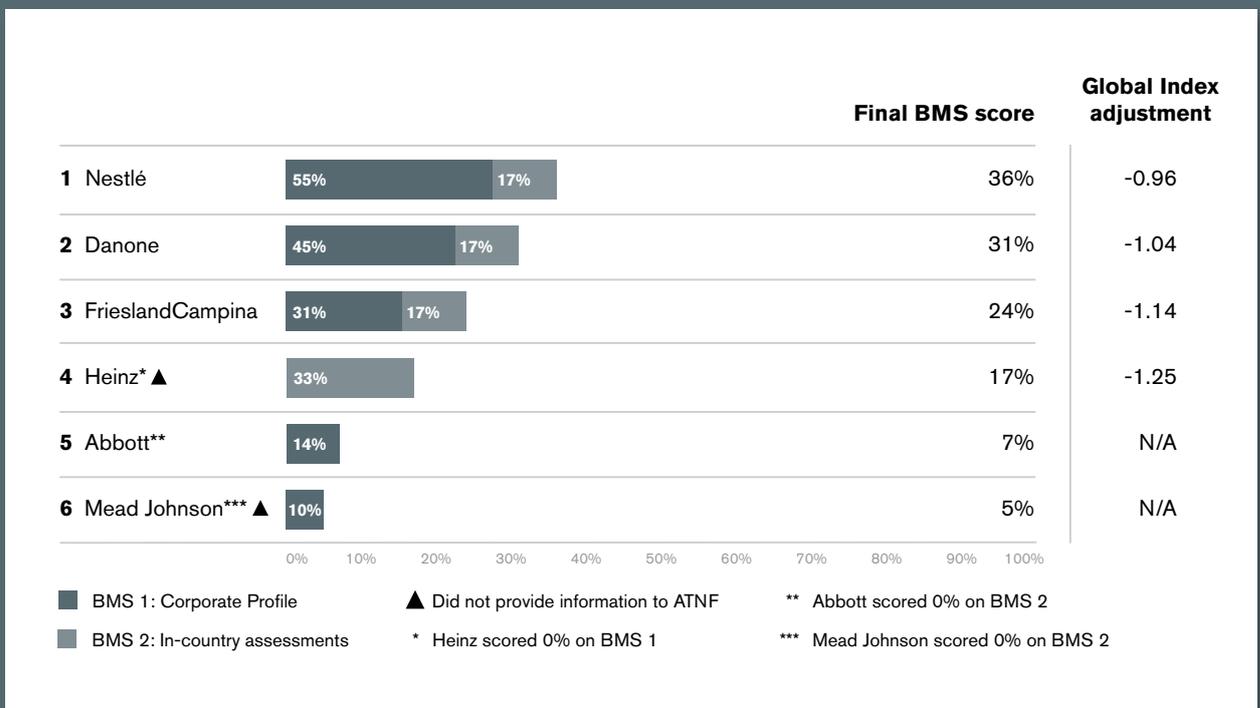
BMS 1 Policy commitments, management systems and disclosure relating to BMS marketing

BMS 2 In-country studies of marketing practices in Vietnam and Indonesia

To perform well in these two areas, companies should:

- Adopt a comprehensive BMS Marketing Policy, fully aligned to The Code and subsequent relevant WHA resolutions.
- Apply that policy globally, to all subsidiaries and joint ventures, and to all formula products designed for infants up to two years of age and complementary foods for infants up to six months of age.
- Commit to upholding their own policy in all markets and going beyond compliance with local regulations where the company's policy is more fully aligned to The Code and subsequent WHA resolutions than those regulations (while not contravening any local laws and standards).
- Put in place comprehensive best practice governance and management systems to ensure full implementation of their commitments across the whole business i.e. consistently in all markets, higher-risk and lower-risk.
- Adopt clear policies and management systems outlining their approach to lobbying on BMS matters.
- Publish their policies, information about its governance and management systems, auditors' reports, position statements and other relevant documentation.
- Ensure that their policies and procedures are followed in all markets, such that there are no incidences of non-compliance with the recommendations of The Code, subsequent WHA resolutions or local regulations in the two countries where assessments of marketing were undertaken.

Results



How the BMS score is calculated and links to the overall Global Index score: The total BMS score is an average of the BMS Corporate Profile assessment score (BMS1) and the 'in-country' assessments of marketing practices (BMS2), carried out in Vietnam and Indonesia on a pilot basis by Westat, a research organization contracted by ATNF – explained in full later. The total possible BMS score is 100%. The higher this score the closer the company has come to achieving full compliance with the ATNI methodology, which reflects the recommendations of The Code, WHA resolutions and local regulatory requirements. The total possible score for each of the two elements (BMS1 and BMS2) is also 100%. An adjustment to the four F&B companies' final Global Index score is then made, proportionate to the BMS score, up to a maximum of 1.5. Had Abbott and Mead Johnson been included in the Global Index, their score would also have been adjusted. A full explanation of the methodology, including the scoring system, is set out in the BMS Annex, available at www.accessstonutrition.org.

Key findings

Overall

- The BMS marketing policies and practices of the six companies assessed, which in FY2014 accounted for global baby food sales of \$33.7 bn, fall well short of the recommendations set out in The Code (as measured by the ATNI methodology) as being necessary to protect and encourage breastfeeding and contribute to the optimal health of babies and infants worldwide.
- While in relative terms, Nestlé has the highest overall score on the BMS assessment, in absolute terms its aggregate score was low at 36%. Abbott and Mead Johnson rank lowest, with scores of 7% and 5% respectively, on aggregate. Danone ranked second, with an aggregate score of 31% and FrieslandCampina ranked third, with an aggregate score of 24%. Heinz ranked fourth with an aggregate score of 17%. These outcomes, based on the Corporate Profile analysis of their BMS marketing policies, management systems and disclosure, and on two pilot studies in Vietnam and Indonesia illustrate – if these two studies are indicative of a wider pattern – that all six companies have a great deal more to do in other countries to improve their BMS marketing policies and practices.
- There is a large degree of variation in the companies' Corporate Profile assessment scores, which range from Nestlé at 55% to Heinz at 0%. This is also the case in the two pilot studies conducted in Vietnam and Indonesia, where scores ranged from 33% for Heinz to 0% for Abbott and Mead Johnson. This illustrates the substantial differences in companies' policies and how effectively – or otherwise – they control marketing in these markets. With the exception of Heinz, the results appear to show that the companies with the stronger policies and management systems control their marketing in Vietnam and Indonesia slightly more effectively than those with weaker policies and management systems.

BMS 1: Corporate Profile

- While the language of Nestlé's policy aligns most closely with The Code, none of the companies' policies align fully with The Code and cover all BMS products (per the WHO's clarification of the definition of BMS products covered by the scope of The Code published in July 2013²), including infant formula for infants from birth to six months of age, follow-on formula for infants from six months of age, growing-up milks for infants from 12 to 24 months of age and complementary foods indicated as suitable for introduction before six months of age.
- Four of the six companies pledge not to market complementary foods as suitable for infants less than six months of age in higher-risk countries³; Danone extends that commitment to all countries. However, all except Nestlé caveat their statements by indicating that they will do so if local regulations allow.
- No companies apply their policies in all markets as recommended by The Code; rather, they apply them differentially in higher-risk and lower-risk countries, to some products but not others.
- All five companies other than Nestlé state that in all countries they will follow local regulations even if they are weaker than their own policies (which are all weaker than The Code). This finding gives rise to particular concern, given the number of countries in which local regulations do not align to The Code, as documented by the research of WHO, Helen Keller International (HKI), International Baby Food Action Network (IBFAN), Alive & Thrive and others.⁴
- Nestlé appears to have robust, globally applied management systems to implement its BMS marketing policy (though with some gaps). However, the other companies' management tools, such as formal procedures, detailed instructions to staff, guidelines and training are weak or lacking in relation to some Articles of The Code. Some companies' procedures do not appear to be consistent in all markets.
- Danone and Nestlé make some policy commitments related to BMS lobbying and state some objectives. The other four companies do not.
- Companies' disclosure varies a great deal. While Nestlé discloses a great deal, and scores very well in this area, the transparency of the other companies ranges greatly, with Abbott and Mead Johnson publishing very little of their management systems documentation, and Heinz nothing. Mead Johnson, Danone, FrieslandCampina and Abbott adhere to self-regulatory industry code of the International Association of Infant Food Manufacturers (IFM) called the Rules of Responsible Conduct, which are publicly available.

BMS 2: In-country assessments

- A cause for significant concern identified by Westat (the research organization sub-contracted by ATNF to carry out pilot studies of BMS companies' marketing in Vietnam and Indonesia) is that companies' management systems are clearly not fully effective. In total 1,096 incidences of non-compliance with the methodology were found for the six ATNI ranked companies in both Vietnam and Indonesia and 1,630 incidences overall, across all 112 companies included in the studies. This finding is in line with several other organizations' research conclusions. For the six companies in the ATNI sub-ranking, more than seven times more incidences of non-compliance were found in Indonesia than Vietnam. In Vietnam, 31% of these related to growing-up milks and in Indonesia, 85% also related to those products.
- The companies found to have the highest total number of incidences of non-compliance in Vietnam were Abbott (27) and in Indonesia Danone (354) and Nestlé (353). Once these figures were normalised to take into account the number of products each company sells in each city, Mead Johnson had the highest level of non-compliance in Vietnam (2.9) while FrieslandCampina had the highest level in Indonesia (16.8).
- Aggregating the results from both countries, most incidences of non-compliance related to point-of-sale promotions (533), advertising (443) and labels (89) among the six companies being assessed in the ATNI BMS sub-ranking. The least incidences related to informational and education materials in healthcare facilities or retailers (31).
- The Westat studies also revealed 264 incidences of non-compliance among the non-ATNI rated companies assessed in Vietnam and 270 in Indonesia. These companies included other large international and local players. In Vietnam, the other 90 companies accounted for 69% of total number of incidences of non-compliance. In Indonesia, the 16 non-ATNI ranked companies accounted for 22% of the total.

Wider findings

- The lack of clear definitions of a few key terms in The Code, and relating to its application, made it difficult to make decisions about whether some apparent incidences of non-compliance were in fact such; for example, there is no explanation available as to which type of images 'idealise' the use of BMS products. Due to this lack of clarity, the companies' scores do not include any incidences of pictures of baby animals or infant-like cartoon characters, but only images of human infants.
- The industry's self-regulatory code, the 'Rules of Responsible Conduct (RRC)', developed in 2013 for members by IFM fall significantly short of the recommendations of The Code, subsequent WHA resolutions and the WHO's recent clarification of products covered by The Code. A full analysis of the RRC, identifying its weaknesses, is available at www.accessstonutrition.org

Key recommendations

- All companies assessed need to improve their marketing practices so as to protect and encourage exclusive breastfeeding for the first six months and continued breastfeeding up to two years of age and beyond by marketing their products responsibly, in line with the recommendations of the WHO and UNICEF. This includes the six companies being evaluated by ATNI as well as the other 106 companies assessed in Vietnam and Indonesia.

The six multinationals rated here should:

- Revise their policies where required in order to ensure full alignment with The Code, using the definition of BMS products clarified by WHO in its statement of 17 July 2013. This would include filling gaps in alignment with The Code and relevant WHA resolutions, and committing to applying their policy to all markets and to all types of BMS products.
- Adopt the industry best practice of going beyond compliance with local regulation and following their own policies (strengthened to align fully with The Code) where local regulations are weaker than The Code, while meeting all local legal requirements.
- Plug gaps in, and strengthen their management systems where they are weak, and make greater efforts to ensure they are applied consistently in all markets. Were these systems to be working effectively, they would ensure, for example, that informational and educational materials and samples are not distributed to health care facilities and retailers, that company representatives do not make contact with women, that all BMS product advertising ceases (including on new media, not just traditional media), that no point-of-sale promotions are found and that all labels comply with recommendations of The Code and local requirements.
- Publish their non-proprietary BMS marketing policies in full and publish much more about their management procedures to enable stakeholders to scrutinise them.

Wider recommendations:

- National governments should ensure that they fully implement The Code through local regulations to create a 'level playing field' between all companies selling products in their markets. Strong monitoring and enforcement is also essential to effectively control companies' BMS marketing activities.
- The WHO and other international organizations should continue to encourage and support countries to fully implement The Code and WHA resolutions within national regulations, and to support their monitoring and enforcement activities. This would help to build a more comprehensive picture of manufacturers' marketing activities on which many stakeholders could draw.
- The WHO could also make a valuable contribution to this type of research by publishing additional guidance on its expectations relating to marketing of complementary foods. Another key need is greater clarification of key terms used in The Code that are currently interpreted differently by stakeholders, such as what types of image 'idealise' BMS.
- IFM should revise its Rules of Responsible Conduct to extend their geographic scope to all markets, to all products for infants up to 24 months of age, and remove the clause that companies will follow local regulations in any countries where they are weaker than the Rules.
- The Interagency Group on Breastfeeding Monitoring (IGBM) Protocol, first developed in 2007, which was used by Westat to conduct the studies, should be updated to address the gaps in its scope, including, for example, extending evaluation of companies' advertising to online media and specifying how retailers should be selected to evaluate point-of-sale promotions. It should also include new methodologies to assess other articles of The Code not currently included and extend the scope of products assessed to include all formula products intended for infants up to 24 months old.

The importance of breastfeeding

Global recommendations for infant and young child feeding are set out in WHO and UNICEF's joint 2003 Global Strategy for Infant and Young Child Feeding.⁵ The Strategy states that, 'Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutrition requirements infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond.' Particularly in the poorest countries, breastfeeding is vital to many children's survival and development. The Lives Saved Tool (LiST)⁶ developed by a consortium of academic and international organizations estimates that 823,000 annual deaths could have been saved in 75 high-mortality, low to middle income countries in 2015 if breastfeeding were scaled up to near universal levels.

Due to the sub-optimal rates of breastfeeding worldwide, and continuing poor infant mortality and health, the WHO has set global targets for 2025 of reducing wasting to less than 5%, a 40% reduction in children who are stunted, increasing the rate of exclusive breastfeeding in the first six months to at least 50% and seeing no increase in levels of overweight children.

Breastfeeding confers a range of health and other benefits to infants and children everywhere, in developed and developing countries, as extensive research has consistently demonstrated.

Babies that are breastfed are at a lower-risk of:

- Dying
- Gastroenteritis
- Respiratory infections
- Obesity
- Type 1 & 2 diabetes⁷

A recent systematic review and meta-analysis found that babies that continued to be breastfed after 12 months of age exhibited a two-fold less risk of mortality than those that weren't breastfed.⁸

Mothers also benefit from breastfeeding by deriving greater protection against breast and ovarian cancer and hip fractures in later life, for example. 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.⁹ By reducing the incidence of infants' and mothers' illness, extensive breastfeeding can therefore reduce the burden on health systems.

While the vast majority of women and infants can breastfeed, in low-income, middle-income and high-income countries, breastfeeding rates are falling and uptake of breast-milk substitutes (BMS) is increasing for many reasons. These include rising rates of female participation in the labor force in many developing markets, urbanization and increasing incomes and aspirations which have encouraged the adoption of convenience-oriented lifestyles, and making baby formula and prepared baby foods more desirable. In many countries, the caché of premium products is an important symbol of social status.¹⁰ The marketing of BMS products is also believed to contribute to the decreasing rates of breastfeeding.

The importance of responsible marketing of milk formulas and complementary foods

The global baby food market was estimated to be worth around \$50bn in 2014 and forecast to be the fastest growing packaged food category over the following five years, achieving growth in excess of 7% a year.¹¹ Although today 87% of global baby food and 66% of baby formula sales by value are generated in North America and Europe, developing markets are driving growth because population and income levels are growing more quickly there.¹² Companies generate significant revenues from these products, as illustrated by Table 9; they account for between 10% and 100% of their overall revenues. Companies included in the ATNI BMS sub-ranking are highlighted in bold.

TABLE 9 Market shares and revenues from baby food of the world's ten largest manufacturers

Rank	Company	2014 global market share	2014 baby food revenues (\$m)	Share of company's revenues FY2014
1	Nestlé SA	23.7%	13,370.6	14%
2	Groupe Danone	12.3%	6,913.1	26%
3	Mead Johnson Nutrition Co	10.6%	5,953.3	100%
4	Abbott Laboratories Inc	7.1%	4,012.0	18%
5	Royal FrieslandCampina NV	3.0%	1,686.3	10%
6	Hangzhou Beingmate Group Co Ltd	2.2%	1,222.3	-
7	Inner Mongolia Yili Industrial Group Co Ltd	1.8%	1,030.8	-
8	Biostime International Holdings Ltd	1.6%	910.5	-
9	Hipp GmbH & Co Vertrieb KG	1.4%	807.7	-
10	China Mengniu Dairy Co Ltd	1.2%	694.6	-
Total		64%	36,601.2	

Source: Euromonitor. Note that no figures are available for Kraft/Heinz for FY2014 due to the merger.

Euromonitor revenue projections for 2015 would place it sixth in this ranking.

Companies that make milk formulas, complementary foods, teats and bottles must market these products responsibly to ensure that they do not undermine breastfeeding or infant and child health. This requires that they adopt policies and practices that ensure full and consistent implementation of The Code and subsequent WHA resolutions across their whole business – in both higher and lower-risk countries.

Approach to assessment

The 2016 Global Index has significantly strengthened the approach it takes to assessing BMS manufacturers' compliance with The Code and subsequent WHA resolutions compared to that used in 2013. ATNF recognized that the previous approach was limited; it lacked an assessment of companies' policies, management systems and disclosure, and that a more extensive assessment of companies marketing within countries was needed. Many stakeholders also expressed this view.

The new approach, undertaken on a pilot basis, evaluates companies' performance in two ways:

BMS 1 Corporate Profile assessment: The ATNI BMS Corporate Profile methodology is designed to evaluate whether the six selected companies have robust BMS marketing policies and management systems, and their level of transparency. Only four food and beverage (F&B) companies that produce BMS from the 2016 Global Index cohort of 22 companies were selected for the BMS assessment because the criterion used for selection was that they should have generated more than 5% of total FY2014 retail revenues from baby food (as Euromonitor defines the product category). Arla, Lactalis, PepsiCo and Wahaha did not meet this criterion and were therefore not assessed.

BMS 2 In-country assessments: Two pilot assessments were undertaken in Vietnam and Indonesia to assess the compliance of all BMS companies in each country with The Code and national regulations. This research was carried out by specialist research organization Westat, appointed following a competitive bid process, using the IGBM Protocol. The Protocol was developed between 1998 and 2007 by The Interagency Group on Breastfeeding Monitoring (IGBM) which was a UK-based coalition of international non-government organizations, churches, academic institutions and interested individuals. Its use is now controlled by UNICEF New York. Permission was given by UNICEF to use the IGBM Protocol but UNICEF was not involved in the studies¹³.

The companies were not informed of the location or timing of these studies prior to their commencement, but only after they had been finished.

A detailed description of how the methodology for each element of the assessment was developed, how companies and countries were selected and how the research was undertaken is set out in the BMS Annex, available at www.accesstonutrition.org.

Basis for company assessment

As with all other aspects of the ATNI methodology, the assessment is based on key international guidelines and standards, in this area:

- The International Code of Marketing of Breast-milk Substitutes (The Code).
- Subsequent WHA resolutions that make significant additions or provide clarifications to the original Code, referred to throughout this document in appropriate sections.
- WHO's statement of 17 July 2013 entitled 'Information concerning the use and marketing of follow-up formula'.
- Codex Alimentarius Standards (Codex) for infant formula and formulas for special medical purposes intended for infants (Codex Standard 72 – 1981) and Codex standard for follow-up formula (Codex Standard 156-1987).

In addition, ATNF aimed to learn from and align its approach to the BMS criteria and research methods to those of FTSE4Good.¹⁴ The ATNF Expert Group and a wide range of external stakeholders provide extensive, constructive advice in developing the ATNI BMS methodology. These included HKI, WHO, UNICEF, Save The Children, Alive & Thrive, 1000 Days, the World Bank and others.

ATNF also occasionally updated the companies and IFM, the International Association of Infant Food Manufacturers, on the discussions. During the consultations, the companies and industry associations indicated that they do not accept the definition of BMS as used by ATNF, based on WHO's definitions.

Scope of assessment - products

In line with the WHO guidance set out in Box 24, ATNI assesses whether companies restrict marketing of the following products, considered to be breast-milk substitutes, in line with the recommendations of The Code and relevant WHA resolutions:

- Complementary foods and beverages identified as being suitable for infants up to six months of age.
- Any type of milk-based formula including infant formula (that can satisfy the normal nutritional requirements of infants up to six months of age); follow-on formula, also called follow-up formula (for infants from six months of age) and growing-up milk, also called toddler milk (for infants and young children up to 24 months of age.)
- Feeding bottles and teats (and any other products encompassed by country regulations, for the in-country assessments) and equipment and materials, as defined by The Code or local regulations.

Note also that The Code does not exclude products for special medical or dietary use; these products were therefore included in the ATNI analysis.



BOX 24**WHO guidance on the scope and definition of BMS products used by ATNI**

To determine which products to assess, ATNF uses the original definition of products covered by The Code as well as the subsequent clarifying language set out by WHO in the July 2013 statement, summarized here.

The Code defines a breast-milk substitute as any food being marketed or otherwise presented as a total or partial replacement for breastmilk, whether or not suitable for that purpose. Resolution 54.2 (May 2001) additionally states that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Mothers should continue to breastfeed their children beyond the age of six months, until they are two years of age or older, at the same time providing them with safe and appropriate complementary foods to meet their evolving nutritional requirements.

WHO makes clear that breastmilk remains the most appropriate liquid part of a progressively diversified diet for the vast majority of children

between six and 24 months of age, once complementary feeding has begun. For these children who, for various reasons, are not breastfed, or for whom breastfeeding will stop before the recommended duration of two years or beyond, acceptable non-formula milk sources exist.

Therefore, the WHO statement continues, the practice of providing infants and young children between six and 12 months with specially formulated milks (so-called 'follow-up milks', 'follow-on milks or follow-on formula') is not necessary and is not a suitable substitute for breastmilk, due to its content.

So-called 'growing-up milks', usually marketed as being suitable for young children between 12-24 months, are also unnecessary and unsuitable, as they also substitute for breastmilk.

The WHO also states that complementary food and beverages should not be introduced prior to six months (180 days) of age. Marketing these products as suitable for infants younger than six months of age contravenes The Code. From six months, local, nutritious foods should be introduced to infants' diets, while breastfeeding should continue for up to two years or beyond.

While follow-up formula or growing-up milks may not be explicitly promoted as a breast-milk substitute, documented marketing strategies, such as packaging, branding and

labeling may induce mothers to use follow-up formula in the first six months of life or later on, and/or to stop breastfeeding after this period.

Thus, 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 breastmilk, they are covered by The Code. In addition, where such products are marketed or otherwise represented in a manner which results in them being perceived or used as a partial or total replacement for breastmilk, they also fall within the scope of The Code.

This clarified definition was reiterated in reports published in August 2015 by the WHO's Scientific and Technical Advisory Group (STAG) on Inappropriate Promotion of Foods for Infants and Young Children summarizing the findings of a global consultation.¹⁵

When, as expected, WHO issues guidance about the appropriate marketing of complementary foods and beverages for infants and young children over six months, ATNF will consider how to extend its methodology to encompass those products.

Source: WHO statement of 17 July 2013, entitled 'Information concerning the use and marketing of follow-up formula'.

BMS 1 Corporate Profile analysis

Basis for company assesment

In respect of the product types outlined above, companies are assessed on whether they:

- Have a comprehensive marketing policy, fully in line with The Code and subsequent relevant WHA resolutions.
- Apply that policy equally globally (rather than only in higher-risk countries), and to all subsidiaries and joint ventures.
- Have robust governance and management systems to ensure the policy's proper implementation across the whole business i.e. consistently in all markets.
- Adopt clear policies, objectives and management systems outlining whether and how they lobby on BMS issues.
- Publish their policy, information about its governance and management systems, auditors' reports, position statements and other relevant documentation.

ATNF undertook the Corporate Profile research, following the steps outlined in the BMS Annex, available at www.accessstonutrition.org. This was based both on published information and additional confidential documentation that four of the companies provided under a non-disclosure agreement. Mead Johnson and Heinz declined to submit such information; their results and score are therefore based only on information in the public domain and therefore do not necessarily reflect these companies' actual policies and practices with respect to BMS marketing.

Overall results

The companies' overall Corporate Profile scores are calculated by taking into account all of the following factors and applying a series of related adjustments and weightings, as described in the summary of scoring under Table 11 and more fully in the BMS Annex:

- Which BMS products the company's policy applies to.
- In which types of countries the policy applies, i.e. all countries or higher-risk countries only.
- Whether the company complies with its own policies if they are stronger than local regulation, or instead defaults to local regulation in the countries even when it is weaker than their own policies.

The scores also take into account whether the company explicitly states support for the core principles of The Code and WHO's recommendations regarding breastfeeding and infant feeding, as shown in Table 10. Table 11 shows the results of this analysis.

TABLE 10 Commitments made by each company to key principles of The Code, and score of application of companies' policies

Company explicitly states support for:	Abbott	Danone	FrieslandCampina	Heinz	Mead Johnson	Nestlé
Exclusive breastfeeding for first six months	●	●	●		●	●
Continued breastfeeding up to two years or more						●
Introduction of appropriate complementary foods from the age of six months	●	●	●		●	●
The Code	●	●	●		●	●
All relevant WHA resolutions		●				●

Note that 'no dot' can indicate either that the commitment is not made or that no information was available

TABLE 11 Initial scores, scores by type of BMS product and final weighted scores

	Initial Corporate Profile score	Weighted scores				Final weighted Corporate Profile score
		Infant formula (35%)	Complementary foods (25%)	Follow-on formula (20%)	Growing-up milks (20%)	
		0-6 months	0-6 months	6-12 months	12-24 months	
Nestlé	92%	69%	69%	69%	0%	55%
Danone	67%	67%	50%	43%	0%	45%
FrieslandCampina	72%	62%	0%	46%	0%	31%
Abbott	25%	21%	16%	16%	0%	14%
Mead Johnson	19%	12%	12%	12%	0%	10%
Heinz	0%	0%	0%	0%	0%	0%

Summary of scoring Initial Corporate Profile score: This score is based on an initial analysis of the company's policy, management systems and disclosure as set out in the ATNI BMS methodology in the BMS Annex. It reflects the extent to which their policies are aligned with The Code and subsequent WHA resolutions, the strength of their management systems and extent of disclosure (but not yet taking into account the product scope). **Weighted scores:** The initial Corporate Profile score is adjusted according to which types of countries the policy applies to and whether companies commit only to comply with local regulations or to go beyond legal compliance. Ideally, companies should commit to applying their policies globally (i.e. in both higher and lower-risk countries) and upholding them where local regulations are weaker than their policies, in which case their score is not adjusted downwards. If companies apply their policies globally and commit only to comply with local regulations (rather than their own policies where stricter) their scores are reduced by 15%. If companies commit to applying their policies only in higher-risk countries, but go beyond legal compliance where their policies are stronger than local regulation, their scores are reduced by 25% (because the policy is not applied also in lower-risk countries). If companies apply their policies only in higher-risk countries and commit only to comply with local regulations rather than their own policies where stricter) their scores are reduced by 25% and another 15%, i.e. 40% in total. The scores under each product type show the level of compliance each company achieves for that product type. If the company does not apply its policy to any product category it scores zero. This is also the case if it does not disclose its policy. **Final Corporate Profile score:** This is the final score weighted according to whether the companies' policy applies to each type of BMS product being assessed by ATNI. The weightings for each product type were agreed with the Expert Group.

BMS 1 Corporate Profile analysis

Detailed results

How do the companies perform overall on the Corporate Profile assessment? To which products and countries do their policies apply?

The scores described here refer to the level of compliance a company has achieved on the ATNI Corporate Profile methodology. More detailed analysis of the strengths and weaknesses of companies' individual policies, management systems and disclosure is provided in their BMS scorecards, available at www.accessstonutrition.org, along with recommendations of how they could be improved.

It is important to note that all companies commit at a minimum to uphold local regulations in all countries. However, their commitments vary considerably in terms of the products to which their policies apply, whether they apply globally or in higher-risk countries only and whether they go beyond compliance where their policies more closely adhere to The Code than prevailing local regulations.

1. Nestlé had the highest score among the group of six companies assessed, achieving 55% compliance with the ATNI methodology. While the language of its policy aligns very closely to The Code, as indicated by its initial Corporate Profile score of 92% (further explained below), the policy does not apply to growing-up milks, nor does it apply globally, only in higher-risk countries. Nestlé is, however, the only company to state that in these countries, "Operating companies must follow the national code/ measures in addition to the WHO Code and Nestlé Instructions, whichever is stricter." In other words, it goes beyond compliance with local regulations: this is a commendable position to take.

Nestlé was also the only company to explicitly state support for The Code and subsequent WHA resolutions, and all of the infant feeding practices recommended by WHO as shown in Table 10. (However, as noted in Box 25, Nestlé does not incorporate the specific wording required by WHA 58.32 into its policy and related procedures).

2. Danone achieved 45% compliance with the ATNI BMS methodology. Its policy commitments (made in what it calls its Green Book and via its support for the IFM RRC) aligns reasonably closely to the Code in some areas, as indicated by its initial Corporate Profile score of 67%, further explained below.

For infant formula, its policy applies worldwide (i.e. in higher and lower-risk countries) and Danone follows its own policy if it is stricter than local regulations, i.e. it goes beyond compliance with local regulations. However, this is not the case with other products. For complementary foods for infants up to six months of age, its policy applies only in higher-risk countries. In this case, it also commits to go beyond compliance with local regulations if they are weaker than The Code. With respect to follow-on formula, its policy only applies in higher-risk countries, and with respect to these products it states that, "If there is a conflict, the local laws and regulations prevail" and elsewhere, "The policy applies... unless local laws and regulations specifically allow for the promotion and advertising of such formula from the age of six months". Moreover, Danone's policy commitments do not apply to growing-up milks.

While Danone acknowledges the importance of The Code and subsequent WHA resolutions and states support for exclusive breastfeeding up to six months, it does not state support for continued breastfeeding for up to two years or beyond, nor does it apply its policy to joint ventures where it has a minority holding.

3. FrieslandCampina achieved 31% compliance with the ATNI methodology. Its policy commitments (made in its own policy documents and via its support for the IFM RRC) aligns reasonably closely to the Code in some areas, as indicated by its initial Corporate Profile score of 72%, further explained below. FrieslandCampina does not apply its policy to growing-up milks, nor, contrary to all other companies except Heinz, to marketing of complementary foods for infants under six months of age¹⁶. Its policy applies to infant formulas and follow-on formula in all countries; however, this is undermined by the fact that it does not pledge to follow its own commitments in countries where regulations are weaker than those commitments.

FrieslandCampina states a policy commitment (via its support for IFM RRC) that acknowledges the importance of The Code but not subsequent WHA resolutions. It states support for exclusive breastfeeding up to six months and for introduction of appropriate complementary foods from six months of age, but not for continued breastfeeding for two years or beyond. It does apply its policy to all joint ventures, whether the company has a minority or majority holding.

4. Abbott achieved 14% compliance with the ATNI BMS methodology. This is in part because its own policy does not align closely to The Code and nor does the IFM RRC to which it subscribes. Its policy applies globally to infant formula but only in higher-risk countries to follow-on formula and complementary foods. Its policy does not apply to growing-up milks. It also does not pledge to follow its own commitments in countries where regulations are weaker than those commitments. Abbott states a policy commitment (via its support for IFM RRC) that acknowledges the importance of The Code but not subsequent WHA resolutions. It states support for exclusive breastfeeding up to six months and for introduction of appropriate complementary foods from six months of age, but not for continued breastfeeding for two years or beyond. The company does not currently have any joint ventures.

5. Mead Johnson achieved 10% compliance with the ATNI BMS methodology. Similar to Abbott, this is in part because its policy does not align closely to The Code nor does the IFM RRC to which it subscribes and in part because it does not apply to growing-up milks, and to other products only in higher-risk countries. It also does not pledge to follow its own commitments in countries where regulations are weaker than those commitments.

Mead Johnson states a policy commitment (via its support for IFM RRC) that acknowledges the importance of The Code but not to subsequent WHA resolutions. It states support for exclusive breastfeeding up to six months and for introduction of appropriate complementary foods from six months of age, but not for continued breastfeeding for two years or beyond. It also does not state that its commitments apply to joint ventures.

6. Heinz scored zero. It does not publish any policy commitments or other information and does not subscribe to the IFM RRC.¹⁷

To what extent do the companies' policies align fully with the Articles of The Code and WHA resolutions, and are their management systems robust enough to deliver full implementation of their policies?

This section provides an overall summary of companies' performance on the elements of the ATNI methodology that assess alignment of their policies with The Code, and their management systems that should ensure compliance with those policies across the whole company.

Table 12 illustrates the highly variable degree to which companies' policy wording aligns to the wording of the Articles of The Code and how relatively strong and weak their management systems are to ensure implementation of each Article. This table shows the company's 'initial score' only on each Article (see summary of scoring under Table 11) and does not factor in which product types the companies' policies apply nor to which types of countries (all countries or higher-risk countries only). This more detailed analysis is shown in Table 12.

- Nestlé's policy wording aligns most closely to the language of the Articles of The Code, only omitting full commitments on one topic – that relating to WHA resolution 58.32 relating to information and labeling regarding pathogenic micro-organisms (see Box 25). Its management systems are also strong in most areas. They comprise a suite of instructions and procedures for staff to follow relating to each Article of The Code. Its governance and managerial arrangements at the global level are also strong and appear to be consistent globally.
- The language of the policies of FrieslandCampina conform relatively closely to The Code, but some gaps need to be addressed. However, the company's management systems are generally strong and quite consistent.
- Danone's policy commitments conform relatively closely to the specific language of The Code, but exhibit some gaps. The company's management systems are generally good but need to be strengthened in some areas. The details are set out in the company's BMS scorecard, available at www.accesstonutrition.org.
- Abbott and Mead Johnson's policies lack many commitments required to align with The Code. Although they both subscribe to the IFM RRC, these standards omit support for many provisions of The Code, and therefore do not contribute to their score. Abbott's management systems are somewhat stronger than Mead Johnson's but both companies need to make significant efforts to ensure that those systems are equally effective in all business units. See these companies' BMS scorecards for more details.
- Heinz has not published any policy commitments and provided no evidence of any management systems to implement any commitments.

TABLE 12 Summary of companies' scores on policy commitments and management systems, by Article

Scores per article of the Code	Nestlé	Friesland Campina	Danone	Abbott	Mead Johnson	Heinz
Article 4: Information and education						
Policy commitment	83%	50%	33%	0%	17%	0%
Management systems	100%	100%	50%	17%	0%	0%
Total	92%	75%	42%	9%	9%	0%
Article 5: General public and mothers						
Policy commitment	100%	80%	100%	40%	60%	0%
Management systems	100%	100%	83%	15%	0%	0%
Total	100%	90%	92%	28%	30%	0%
Article 6: Health care systems						
Policy commitment	100%	93%	64%	36%	21%	0%
Management systems	100%	100%	50%	19%	0%	0%
Total	100%	97%	57%	28%	11%	0%
Article 7: Health workers						
Policy commitment	100%	100%	50%	50%	50%	0%
Management systems	100%	100%	50%	17%	0%	0%
Total	100%	100%	50%	34%	25%	0%
Article 8: Employees						
Policy commitment	100%	100%	100%	0%	0%	0%
Management systems	100%	100%	50%	8%	0%	0%
Total	100%	100%	75%	4%	0%	0%
Article 9: Labeling						
Policy commitment	86%	71%	33%	0%	14%	0%
Management systems	55%	100%	50%	22%	0%	0%
Total	71%	86%	42%	11%	7%	0%
Article 10: Quality						
Policy commitment	100%	100%	100%	100%	100%	0%
Management systems	100%	100%	83%	8%	0%	0%
Total	100%	100%	92%	54%	50%	0%
Article 11: Implementation and monitoring¹⁸						
Policy commitment	67%	67%	67%	17%	50%	0%
Management systems	100%	69%	86%	40%	15%	0%
Total	93%	69%	82%	35%	22%	0%

BOX 25

Providing information and labeling products with warnings about pathogenic micro-organisms

The only policy commitment which no company makes is the requirement relating to WHA resolution 58.32 that health workers, parents and other caregivers are provided with information that powdered infant formula may contain pathogenic micro-organisms and must be prepared for use appropriately. In addition, the resolution requires companies to include this information on labels of powdered infant formula. The reason for this requirement, outlined in the resolution, is that powdered infant formula (PIF) has been associated with serious illness and death in infants due to infections with *Enterobacter sakazakii*.

However, the companies argue that many consumers are unlikely to understand the term ‘pathogenic micro-organisms’ and feel using such a term might unduly scare them about product composition. They therefore prefer to provide the wording about appropriate preparation and handling of products, and to stress how important this is.

In terms of the alignment of companies’ policies with different Articles of The Code, their scores are highest for Articles 10 on product quality, Article 5 on advertising to the general public and mothers and Article 7 on provision of information to, and contact with to health workers. In other words, on average, their policies align most closely to The Code in these areas. Conversely, the Articles where companies’ policies on aggregate deviate most from The Code are Article 4 on the content and distribution of information and educational materials, and Article 9 on labeling.

All five companies’ policies other than Nestlé’s are also weak with respect to making donations. Nestlé is the only company to explicitly state that donations of informational or educational equipment or materials are made only at the request and with the written approval of appropriate government authorities and that these materials will not refer to a proprietary product (Sub-article 4.3).

Do companies make clear their policy, objectives and management systems relating to lobbying on BMS?

This element of the methodology aligns closely to that used by FTSE4Good¹⁹, but is not an aspect of company behaviour to which The Code pertains. While governments often solicit the views of industry on proposed legislation and regulations relating to BMS marketing, as in other areas of policy development, companies should have clear, openly stated objectives and policies that guide their engagement with governments, and effective management systems to ensure that employees abide by them. Above all, they should commit to not undermine the development of any national or international policies and regulation designed to give effect to The Code.

TABLE 13 Companies’ scores on lobbying commitments and management systems

Score	Nestlé	Friesland Campina	Danone	Abbott	Mead Johnson	Heinz
Policy commitments	50%	0%	75%	0%	0%	0%
Management systems	100%	0%	100%	0%	0%	0%
Total	75%	0%	88%	0%	0%	0%

As illustrated by Table 13, no company has a clear policy outlining the circumstances in which and how it will lobby governments and policymakers on BMS issues. Danone does however outline its objectives with respect to lobbying and engaging policymakers on BMS issues and commits to support national governments' efforts to implement regulations. It also explicitly states that it will seek to ensure that trade associations and industry policy groups to which it belongs operate to the same standards. Danone also confirmed which executives within the company are responsible for compliance with its policy and standards. Nestlé also sets objectives and makes a commitment to support efforts by governments to implement The Code through legislation, regulation or other appropriate measures. Nestlé also names the executive responsible for compliance with their commitments.

How extensive is companies' disclosure of BMS marketing policies and practices?

It is important for companies to be highly transparent about their policies and management practices to help stakeholders to scrutinise their policy and management arrangements and hold them to account. This section of the methodology evaluates companies' public disclosure of documentation, not whether they submitted documentation to ATNF.

As shown by Table 14:

- Nestlé scores most highly, disclosing much more information than any other company.
- Danone discloses its 'Green Book' and 'Blue Book', its policy and a summary of the management systems it has in place to guide BMS marketing.
- Mead Johnson discloses some information about the application of its policy to different products but very little else.
- FrieslandCampina and Abbott publish very little of their own material; their score reflects its support for the publically available IFM RRC.
- Heinz publishes no information at all.

There is one disclosure indicator on which no companies score: none publish a declaration each year that employees' bonuses have not been based on the volume of sales of BMS products or that it has not set quotas for sales of these products – despite some having a commitment to this practice.

TABLE 14 Companies' disclosure of policy commitments and management systems

Nestlé	Friesland Campina	Danone	Abbott	Mead Johnson	Heinz
82%	13%	40%	13%	13%	0%

To which BMS products and in which countries do companies' commitments apply?

It is also important to look at which types of products companies apply their policies to or in which countries. Although The Code was designed to apply equally in all countries, all companies assessed distinguish between higher-risk and lower-risk countries, and typically only apply their policies in the former – with some exceptions and caveats.

The results shown in Table 15 indicate that companies' policy commitments vary considerably.

Infant formula (for infants 0-6 months of age): These products have always been understood to be included within the definition of BMS from the time when The Code was published in 1981. The IFM RRC also cover infant formula, but only in higher-risk countries. All companies include infant formula within their scope; whether Heinz does is not known. Most apply this commitment only in higher-risk countries, although Danone, Abbott and FrieslandCampina extend this commitment globally, i.e. to lower-risk countries too. However, as noted, FrieslandCampina and Abbott will market these products in line with local laws and regulations if they allow it, whereas Danone will uphold its own policy in such markets.

Complementary foods (marketed as suitable for infants 0-6 months of age): These products have always been understood to be included within the definition of BMS since The Code was published in 1981. FrieslandCampina excludes complementary foods from its policy because it sells them mainly in Greece where EU regulations apply which allow these products to be marketed as suitable for infants from four months old. No information is available for Heinz. The other four companies commit not to market complementary foods as suitable for infants under six months old in higher-risk countries only, but only Nestlé and Danone commit not to market those products as suitable for younger infants even when local regulations allow. The other two companies follow the IFM RRC commitment for higher-risk countries, which includes the caveat that member companies can market those products if local regulations allow.

Follow-on formula (for infants from 6 months of age): Nestlé is the only company to include follow-on formula within its policy scope AND to uphold its own policy even in countries where local regulations are weaker than its policy or The Code, though again this commitment applies only in higher-risk countries. The four IFM members follow the RRC which extends to these products in higher-risk countries, but again it states that if local regulations allow, then they will be marketed. WHO clarified in its statement of July 2013 (subsequently reiterated in the summer of 2015 in documents relating to the development of marketing guidance for complementary foods) that these products fall within the scope of The Code. Again, no information was available for Heinz.

Growing-up milks (for infants from 12 months of age): No companies include growing-up milks within the scope of their policy commitments. WHO clarified in July 2013 that these products fall within the scope of The Code (subsequently reiterated in documents noted above relating to the development of marketing guidance for complementary foods).

TABLE 15 Companies' application of policy commitments to products and types of country

	Abbott	Danone	Friesland Campina	Heinz	Mead Johnson	Nestlé*
Policy application						
Policy applies to joint ventures and subsidiaries where the holding is less than 50%			●			●
Company has its own policy?	●	●	●		●	●
Company also follows IFM RRC?	●	●	●		●	
Policy application to product type						
Infant formula						
Global	●	●	●			
Higher-risk countries only					●	●
Only follows local regulation even if weaker than its own policy	●		●		●	
Goes beyond legal compliance where local regulation is weaker than its own policy		●				●
CF 0-6 months						
Global						
Higher-risk countries only	●	●			●	●
Only follows local regulation even if weaker than its own policy	●				●	
Goes beyond legal compliance where local regulation is weaker than its own policy		●				●
Follow-on formula						
Global						
Higher-risk countries only	●	●	●		●	●
Only follows local regulation even if weaker than its own policy	●	●	●		●	
Goes beyond legal compliance where local regulation is weaker than its own policy						●
Growing-up milks						
Global						
Higher-risk countries only						
Only follows local regulation even if weaker than its own policy						
Goes beyond legal compliance where local regulation is weaker than its own policy						

Note that 'no dot' means either that the companies' policy does not apply or, in the case of Heinz, that its policy scope is unknown.

* Nestlé is not a member of IFM and so does not follow RRC, but rather its own policy which is stricter than the commitments of the RRC.

Challenges, limitations and opportunities for improvement of the BMS Corporate Profile assessment

While this assessment of the six companies is the first of its kind, ATNF encountered several challenges when undertaking it. A number of limitations have also been identified as well opportunities to improve the work in future.

Challenges

The challenges and limitations of developing and undertaking the pilot Corporate Profile assessment are set out in more detail in the BMS Annex. In summary, some of the main challenges faced related to the lack of similar prior assessments on which to draw. While ATNF aimed to align the methodology structure to the extent possible with that of the Global Index methodology, it also drew from the criteria set out by FTSE4Good. Developing indicators to assess companies' management systems was the most challenging; The Code does not offer any guidance in this area.

Challenges related to doing the research included time needed to analyse a large volume of detailed documentation that those companies that engaged provided. Establishing a scoring system also presented some difficulties, particularly with respect to assigning weightings to product types, as there does not appear to be any evidence on which to draw information about the health impacts of consumption of different types of products nor the relative effect of marketing of different types of products. The weightings were determined in consultation with stakeholders and the Expert Group, but ultimately, they are subjective, and many other weighting systems could be used.

Limitations of the analysis include the small cohort of companies assessed: only six multinational BMS manufacturers were included, whereas several other major companies account for significant sales globally (as illustrated in Table 9). Ideally, any future assessment would extend to at least these firms to give a more complete picture of industry performance. The Corporate Profile methodology does not cover some topics that are important but fall outside the scope of The Code.

Opportunities

Extending the Corporate Profile research: Some stakeholders have indicated that they would like to see the BMS Corporate Profile assessment extended to more multinational companies to give a more complete picture of industry performance. It could also be replicated in individual countries, assessing major companies operating in particular markets.

Extending the research to encompass the marketing of complementary foods for infants and children up to two years old: The methodology and research could also be extended to consider companies' policies and practices with respect to these products. Once WHO has published additional guidance in this area, ATNF would consider widening the scope of products assessed.

BMS 2 In-country pilot assessments of marketing practices

Basis for BMS assessment

ATNF undertook two in-country assessments on a pilot basis for the 2016 Global Index.

To be considered for selection, countries needed to meet two criteria:

- 1 Score as a higher-risk country on a risk rating system used by FTSE4Good, based on data from UNICEF and other organizations²⁰.
- 2 All six of the BMS companies to be assessed on the BMS Index had to be present in the market.

With guidance from the Expert Group, ATNF selected Vietnam (Hanoi) and Indonesia (Jakarta). Westat was contracted to undertake the two country pilot assessments using The Interagency Group on Breastfeeding Monitoring (IGBM) Protocol. Westat's reports on the methodology and results can be found at www.accesstonutrition.org

TABLE 16 Summary of scope of research

	Hanoi Vietnam	Jakarta Indonesia
No. of women interviewed	814	856
No. of health care workers interviewed	131	127
No. of health facilities visited	38	37
No. of retail outlets visited	114	111
No. of products assessed for all companies	334	172
No. of manufacturers assessed	96	22
No. that make BMS products	43	13
No. that make teats, bottles (and pacifiers) only	53	9

As Table 16 shows, twice as many products were found for sale in Hanoi (334) compared to Jakarta (172) and were sold by over four times as many companies in Hanoi than Jakarta. A very large number of companies sold teats and bottles in Hanoi, whereas very few did so in Jakarta.

It is important to note that the companies were not given notice of this research being undertaken; they were only informed of the locations when the studies were complete.

Overall results

TABLE 17 Initial scores, scores by type of BMS product and final weighted scores

		Level of compliance		
		Score based on both country ratings	Vietnam	Indonesia
		%	Rating	Rating
1	Heinz	33%	Low	High
2	Nestlé	17%	Med	Low
3	FrieslandCampina	17%	Med	Low
4	Danone	17%	Med	Low
5	Abbott	0%	Low	Low
6	Mead Johnson	0%	Low	Low

The companies' overall score on in-country marketing practices is calculated as follows, drawn from the figures presented throughout this section.

- Aggregating the total number of observations of non-compliance with the methodology in each country. (Note, however, that data based on mothers' and health care workers' recall are not included in these calculations for several reasons, outlined in the Westat reports. In short, this is because recall is subjective and can be biased in several ways; in addition, because objective information was collected in the studies, the recalled data could be used in conjunction with the actual data against which to corroborate those findings).
- Calculating the number of incidences of non-compliance, normalised by the total number of each company's products assessed in each country, to provide a relative measure of the scale of non-compliance. The number of products assessed was the number bought by the research teams across a wide range of retailers (the labels of which were then assessed for compliance with the methodology). However, this was not necessarily the total number of products for sale in each city; more could have been available in stores that the researchers did not visit. Note also that products made specifically for sale in Vietnam and Indonesia as well as products imported from other countries were included in this list and assessed. In some cases, this meant that two versions of the same product (in terms of ingredients and branding) were assessed, as consumers were able to buy both versions.
- Assigning a rating in each country to reflect the level of compliance: complete (0 incidences of non-compliance), high (less than 1 incidence of non-compliance, normalised), medium (between 1.1 & 2 incidences) or low (more than 2.1 incidences). The same ranges for high, medium and low are used for both countries.
- Each rating corresponds to a percentage score indicating the level of compliance with the methodology:
 - Complete compliance = 100%
 - High relative level of compliance = 66%
 - Medium relative level of compliance = 33%
 - Low relative level of compliance = 0%



Detailed results

TABLE 18 Summary of findings in Vietnam

	Level of compliance	Relative level of non-compliance ²²	No of products evaluated ²³	Total non-compliances identified	No of information and educational materials	No. of adverts found on assessed media	No. of point of sale promotions	No. of labels with at least one non-compliance ^{**}
					Article 4	Article 5	Article 5	Article 9
Abbott	Low	2.1	13	27	0	15	7	5
Danone	Med	1.8	12	21	0	2	9	10
FrieslandCampina	Med	1.4	9	13	0	3	4	6
Heinz	Low	2.4	5	12	0	9	0	3
Mead Johnson	Low	2.9	8	23	1	3*	16	4
Nestlé	Med	1.1	22	24	0	2	10	12
Sub-total			69	120	1	34	46	40
All others (90)			265	264	17	52	81	114
Total			334	384	18	86	127	154

* The Westat report shows a total of 12 incidences; this is because nine incidences were for a brand rather than a specific product, which were not included in the ATNF score.

** ATNF does not count when collating these figures images on labels of non-human infants (i.e. of animals or cartoon characters). Westat did include these types of images in the totals presented in its reports.

Vietnam: regulatory context²¹

Marketing and labeling of BMS and related products is controlled principally by two regulations in Vietnam: Decree 21 (2006) and Decree 100 (2015). Decree 100 superseded Decree 21 and became effective in March 2015 (except for provisions relating to product labeling). Decree 100 extended the scope of products covered to all products for infants from 0-24 months, including complementary foods for this age range, thus exceeding WHO's 2013 re-statement of the definition of BMS products (which extends only to complementary foods for infants of 0-6 months of age). However, different articles of the regulation apply differentially to various products. Companies have to submit proposed labels to the Government for approval.

Advertising of any form of BMS is prohibited: the prohibition extends to infants under 24 months, complementary foods for infants under six months old, and feeding bottles and teats. The advertising of

complementary foods for infants under 24 months old must contain certain language that promotes breastfeeding and make clear they should only be used as a supplement to breastmilk for infants over six months of age.

With respect to labeling requirements, there are minor differences between the two Decrees but the new Decree 100 requirements were not in force at the time of the study. (For example, Decree 100 exceeds The Code in one way only, by including pacifiers within their scope. They also add detail regarding the requirements for 'ease of reading' and define appropriate language as Vietnamese.) However, as stipulated by the IGBM Protocol, labels for all products were evaluated for compliance with The Code's recommendations.

The regulation of BMS and related products is therefore strongly aligned with The Code in Vietnam; Decree 100 aligns well with The Code and in fact exceeds it in some areas.

TABLE 19 Summary of findings in Indonesia

	Level of compliance	Relative level of non-compliance	No of products evaluated	Total non-compliances identified	No of information and educational materials	No. of adverts found on assessed media	No. of point of sale promotions	No. of labels with at least one non-compliance**
					Article 4	Article 5	Article 5	Article 9
Abbott	Low	5.3	8	42	1	20	18	3
Danone	Low	13.1	27	354	12	109	210	23
FrieslandCampina	Low	16.8	6	101	6	30	61	4
Heinz	High	0.4	8	3	0	0	0	3
Mead Johnson	Low	12.3	10	123	3	78	41	1
Nestlé	Low	15.3	23	353	8	173	157	15
Sub-total			82	976	30	410	487	49
All others (16)			90	270	8	85	165	12
Total			172	1246	38	495	652	61

** ATNF does not count when collating these figures images on labels of non-human infants (i.e. of animals or cartoon characters). Westat did include these types of images in the totals presented in its reports.

Indonesia: Regulatory context²⁴

Several regulations control labeling, advertising and the quality of formula products and promoting exclusive breastfeeding for the first six months (see Westat report for full details, available at www.accessstonutrition.org). Regulation 69 (1999) and Regulation 42 (2004) were in force at the time of the study; they address labeling but are not aligned with the recommendations of The Code. Companies have to submit proposed labels to the Government for approval. While advertising and promotion of infant formula and follow-on formula is restricted by Regulation 33, advertising and promotion of growing-up milks and complementary foods is not prohibited. A new regulation (Number 49 of 2014) is due to come into force in February 2017 that both introduces new quality and labeling requirements for growing-up milks and restricts the advertising of these products but only by preventing manufacturers from using the same trade name as the trade names of infant formula and follow-

on formula (and from irradiating some products). Thus, currently, there is no restriction on marketing any BMS products other than infant formula and follow-on formula.

Overview of findings

Among the six companies being assessed for this sub-ranking, eight times more incidences of non-compliance were identified in Indonesia (976) compared to Vietnam (120). Considering the normalized results (i.e. looking at the ratio of the number of non-compliances to products available on the market) also indicates a much higher level of non-compliance with the ATNI methodology in Indonesia by all companies other than Heinz. Overall, 80% of the incidences of non-compliance related to growing-up milks, whereas around 8% related to infant formula and 6% related to follow-on formula. Fewer than 2% related to complementary foods.

The much higher level of non-compliance in Indonesia compared to Vietnam and high level relating to growing-up milks is explained principally by two factors: i) Prevailing Indonesian regulations relating to advertising, promotion and labeling do not cover growing-up milks, whereas those in Vietnam do and; 2) the ATNI methodology assesses companies' marketing practices for products intended for infants up to 24 months of age. Further, none of the companies' policies extend to growing-up milks.

Summary findings for the six ranked companies

Full details of the companies' performance can be found in their individual BMS scorecards at www.accesstonutrition.org. For analysis of relative levels of compliance with different Articles of The Code, see the Westat reports, available at www.accesstonutrition.org.

Heinz achieved the highest score of the six companies for the in-country assessment with a score of 33%. This reflects a high level of compliance in Indonesia, but a low level of compliance in Vietnam. However, Heinz sells by far the smallest number of products in these markets – only 13, and all are complementary foods. It is therefore relatively easy for the company to achieve a higher level of compliance. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was significantly better in Indonesia than Vietnam, with a total of 15 incidences of non-compliance identified in the two countries.

In absolute terms, Heinz had the lowest number of incidences of non-compliance of any of the six companies. On a relative basis (normalized by the total number of products assessed in both markets) the incidences of non-compliance found was 2.4 in Vietnam and 0.4 in Indonesia.

In neither Vietnam nor Indonesia were any examples of non-compliance with Article 4 (informational and educational materials) found and no point-of-sale promotions were identified (Article 5.3). Three of the company's products in Indonesia had non-compliant labels, and three in Vietnam. In Indonesia no adverts were found (sub-Article 5.1) but nine were found in Vietnam, all for complementary foods and all on the company's Facebook page. (See Table 20). As the company does not publish its policy on BMS marketing it is not possible to determine whether these adverts would be considered a contravention of its own policy.

Danone was one of three companies to score only 17% in the in-country assessment. This score reflects a medium level of compliance in Vietnam but a low level of compliance in Indonesia. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was better in Vietnam than in Indonesia, but still poor, with a total of 375 non-compliances identified in the two countries.

Of these, 50% overall related to growing-up milks, which are not covered by Danone's own BMS marketing commitments. In Indonesia, they accounted for 84% of the total incidences identified. However, in Vietnam, they were spread across all products, with growing-up milks accounting for fewest incidences of non-compliance. Danone's policy on infant formula applies in both markets, apparently illustrating some lapses in implementation. With respect to follow-on formula, however, the company commits only to following local regulations.

Danone had the third highest number of relative non-compliances in Vietnam of the six companies assessed here (1.8 on average across all products), but the second highest relative figure in Indonesia (13.1). On aggregate, the fewest examples of non-compliance were found in respect of Article 4 (informational and educational materials) and Article 9 (labeling) whereas most were found in both countries relating to Article 5 (advertising and promotion) – although in both cases many fewer were found in Vietnam compared to Indonesia. The majority of the advertising in both countries was found for growing-up milks (80%) followed by infant formula (17%) – (see Table 20), and online, on the company's Facebook pages, Twitter feeds, its own website and third-party retailers' websites, though the company also placed a significant amount of TV and print advertising. (See Westat reports for breakdown).

FrieslandCampina was one of three companies to score only 17% in the in-country assessment. This score reflects a medium level of compliance in Vietnam but a low level of compliance in Indonesia. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was better in Vietnam than in Indonesia, but still poor, with a total of 114 incidences of non-compliance identified in the two countries.

Of these, 61% related to growing-up milks which are not covered by FrieslandCampina's own BMS marketing commitments, while 20% related to infant formula and follow-on formula, covered by its commitments in these markets, as they are designated higher-risk. However, the company commits only to following local regulations if they are weaker than its policy, which is the case in Indonesia.

FrieslandCampina had the second lowest level of number of relative non-compliances in Vietnam of the six companies assessed here (1.4 on average across all products), but was the worst performer in Indonesia based on the comparable figure (16.8).

On aggregate, as for the other five companies, the fewest examples of non-compliance were found in respect of Article 4 (informational and educational materials). FrieslandCampina also appeared to have relatively few products with non-compliant labels (Article 9). However, many examples of advertising and point-of-sale promotions (Article 5) were found (98) – the vast majority were in Indonesia (91). The bulk of the advertising in both countries was found for growing-up milks (82%) followed by 12% relating to infant formula (see Table 20). They were mostly found online, on the company's Facebook pages, Twitter feeds, YouTube, its own website and third-party retailers' websites. (See Westat reports for breakdown). However, although companies are not allowed to advertise infant formula in either Vietnam or Indonesia, advertising of growing-up milks is allowed in Indonesia but not in Vietnam.

Nestlé was one of three companies to score only 17% in the in-country assessment. This score reflects a medium level of compliance in Vietnam but a low level of compliance in Indonesia. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was better in Vietnam than in Indonesia, but still poor, with a total of 377 incidences identified in the two countries – the highest of all companies assessed.

A total of 69% of these related to growing-up milks which are not covered by Nestlé's

TABLE 20 Number of observations of non-compliance of all adverts, by product type, in Vietnam and Indonesia

	Abbott	Danone*	FrieslandCampina	Heinz	Mead Johnson**	Nestlé***
Infant formula 0-6 months						
Vietnam	6	1	0	0	3	0
Indonesia	3	18	4	0	8	6
Total	9	19	4	0	11	6
% of all ads	26%	17%	12%	0%	13%	3%
Complementary foods 0-6 months						
Vietnam	0	0	0	9	0	0
Indonesia	0	0	0	0	0	0
Total	0	0	0	9	0	0
% of all ads	0%	0%	0%	100%	0%	0%
Follow-on formula 6-12 months						
Vietnam	5	0	0	0	0	0
Indonesia	0	4	2	0	4	5
Total	5	4	2	0	4	5
% of all ads	14%	4%	6%	0%	5%	3%
Growing-up milks 12-36 months~						
Vietnam	4	1	3	0	0	2
Indonesia	17	87	24	0	66	162
Total	21	88	27	0	66	164
% of all ads	60%	80%	82%	0%	83%	94%
Total	35	111	33	9	81	175

~ Although the studies assessed only products for infants up to 24 months, if products were identified as being suitable for infants from 12 months up to any age, they were counted as adverts for growing-up milks.

* One commercial in Indonesia included products from 0-6, 6-12, 12-24 and in Vietnam one ad was for a product (Dumex) without an age specification

** Vietnam: Enfamil A+ age range not specified, 9 related to Enfa A+ Bran expo

*** One product had no age range indicated.

own BMS marketing policy while the other 31% relate to infant formula, follow-on formula and complementary foods that are covered by its policy in these markets which are designated higher-risk.

Nestlé had the lowest number of incidences of non-compliance in Vietnam of the six companies assessed here (1.1 on average across all products), but the second highest relative figure in Indonesia (15.3). On aggregate, the fewest examples of non-compliance were found in respect of Article 4 (informational and educational materials) and Article 9 (labeling) whereas most were found in both countries relating to Article 5 (advertising and promotion). The vast majority of the advertising in both countries was found for growing-up milks (94% of ads in Indonesia and 100% in Vietnam) and online – on the company's Facebook pages, Twitter feeds, YouTube, its own website and third-party retailers' websites. (See Table 20).

Abbott was one of two companies not to score in the in-country assessment due to its low levels of compliance in both cities. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was somewhat better in Vietnam than in Indonesia, but still poor, with a total of 69 incidences of non-compliance identified in the two countries.

On average, 67% of these related to growing-up milks, which are not covered by Abbott's own BMS marketing policy. The other 33% were found to relate equally to infant formula and follow-on formula, which are covered by Abbott's policy in these markets (designated as higher-risk). However, the company only follows local regulations if they are weaker than its policy, which is the case in Indonesia.

Abbott ranked fourth in its level of relative non-compliance among all companies in Vietnam of the six companies assessed here (2.1 on average across all products), but the second highest relative level of compliance among all companies in Indonesia (5.3). On aggregate, the fewest examples of non-compliance were found in respect of Article 4 (informational and educational materials) and Article 9 (labeling) whereas the most were found in both countries relating to Article 5 (advertising and promotion). The products for which most advertising in both countries was found was for growing-up milks (60%), (see Table 20), and online, on the company's own website and third-party retailers' websites (see Westat report).

Mead Johnson was the other one of two companies not to score on the in-country assessment due to its low levels of compliance in both cities. The company's level of compliance with the Articles assessed by the methodology (through observation rather than recall) was significantly better in Vietnam than in Indonesia, but still poor, with a total of 146 non-compliances identified in the two countries.

Of these, 53% on average related to growing-up milks that are not covered by Mead Johnson's own BMS marketing policy. Around 14% on average related to follow-on formula and infant formula which are covered by its policy in these markets (designated higher-risk). However, the company only commits to following local regulations if they are weaker than its policy, which is the case in Indonesia.

Mead Johnson had the highest level of incidences of non-compliance in Vietnam on a relative basis of the six companies assessed here (2.9 on average across all products), and the third highest relative figure in Indonesia (12.3).

On aggregate, as for the other five companies, the fewest examples of non-compliance

were found in respect of Article 4 (informational and educational materials) and Article 9 (labels). However, Mead Johnson was the only company among the six ATNI companies for which an informational material was found in a health facility. While relatively few adverts were found in Vietnam (2), a lot were found in Indonesia (78). The most point-of-sale promotions were found for Mead Johnson of any of the six companies in Vietnam (16).

The vast majority of the advertising in both countries was found for growing-up milks (83%) followed by 13% for infant formula (See Table 20). These were mostly found online, on the company's Facebook pages, Twitter feeds, YouTube, its own website and third-party retailers' websites. (See Westat reports for breakdown). However, although advertising of infant formula is forbidden in both Vietnam and Indonesia, advertising of growing-up milks is allowed in Indonesia but not in Vietnam. Mead Johnson is another company that follows only local regulations rather than its own policy in higher-risk countries, even when they are weaker than its own policy.

Overall conclusions on companies' performance: how effectively do companies' apply their management systems in these two cities?

The in-country assessments of marketing practice 'test' the extent to which companies' management systems are effective in ensuring that their marketing practices comply both with local regulatory requirements – which all companies commit to meet – and with their own policy commitments, to the extent that those commitments go beyond local regulation.

TABLE 21 Companies' final scores on both elements of the assessment

Company (ordered by CP score)	BMS 1: Corporate Profile score (Level of compliance with the methodology)	BMS 2: In-country assessment total score (Level of compliance, Vietnam and Indonesia combined)
Nestlé	55%	17%
Danone	45%	17%
FrieslandCampina	31%	17%
Abbott	14%	0%
Mead Johnson	10%	0%
Heinz	0%	33%

Some correlation can be identified between the companies' scores in the Corporate Profile assessment and the in-country assessments. Nestlé, Danone and FrieslandCampina have the highest scores on the Corporate Profile assessment and do slightly better in the in-country assessments than Abbott and Mead Johnson which score poorly on the Corporate Profile assessment.

This seems to indicate that the more extensive policies of Nestlé, Danone and FrieslandCampina, and their more robust management systems, mean that they are better able to curtail incidences of non-compliance. The differential effect of the scope of these companies' policies has already been noted. The limited policies and weak management systems of Abbott and Mead Johnson (as illustrated by their low Corporate Profile score) seem to result in a high level of incidences of non-compliance being found in Vietnam and Indonesia.

Heinz is an anomaly however. As already noted, it sells many fewer products than the other companies assessed, all of which are complementary foods. Although the company does not publish its policies and did not share any documentation of its management systems during the research process, it has the highest level of compliance with the methodology among the six companies assessed on average across both Vietnam (where only two incidences of non-compliant labels were found) and Indonesia. This seems to imply that the company does operate according to a BMS marketing policy and has procedures to guide its marketing practices. However, these do not seem to align to the recommendations of The Code, given that several examples of labeling non-compliance were identified.

BOX 26

Notable issues identified by the research

Role of online retailers: It is important to note that with respect to point-of-sales promotions, the IGBM Protocol does not enable monitors to determine the extent of the role of the manufacturers in point-of-sale promotions. Some of the online adverts and promotions may have been initiated by online retailers with which the manufacturers do not have contracts. In these cases, their ability to influence them is therefore more limited than where they do have contracts to provide products for sale. Nevertheless, The Code makes clear that companies 'have a duty to ensure that distributors of their products are aware of their responsibilities under The Code.'

Contact by companies (Articles 5 & 6): One area of concern was the continuing efforts reported through interviews by some company representatives to make contact with pregnant women and mothers of infants. Although these data were not included in the companies' scores, for reasons already set out, it indicates that companies need to desist from attempting to make such contact. Local monitoring of companies' activities also needs to be stepped up in this area. Six percent of the women reported that a company representative had spoken with them directly about using a BMS product, and for 34.2% of the 38 health facilities, at least one health care worker reported that a company representative had visited the facility to seek direct contact with women or to obtain contact information for them. Closely related to this is the reported provision of samples to pregnant women and women with young infants. Nearly 9% of the women interviewed reported having received a free sample of at least one product.

Women's familiarity with BMS brands – the apparent influence of cross-marketing (Article 5): The vast majority of the women interviewed reported hearing or seeing a relevant advertisement during pregnancy or since their baby was born. However, the media monitoring service, in Vietnam particularly, identified few relevant TV adverts. Westat was not able to reach a clear conclusion about the women's reports of television advertising because most of these advertisements were for products beyond the scope of The Code. Nonetheless, this is an area of concern, as it appears that many women may be familiar with the names of the BMS

manufacturers and their brands through these advertisements for products that are related to covered products, which could influence their decision-making about use of BMS products per se. This is especially probable since the design of packaging, use of fonts, colors, labels etc of the covered products is frequently nearly identical to that of the products for children who are two+ years old. It is interesting to note that Indonesia has passed a regulation that comes into force in early 2017 that prohibits manufacturers from using the same trade name as the trade names of infant formula and 'advanced milk' formula.

Levels of non-compliance among smaller BMS manufacturers: In both Vietnam and Indonesia, many small and large manufacturers were present in the market and were also found to have high levels of non-compliance. For example, Westat documented significant activity by two Vietnamese manufacturers, Vinamilk and Nuti Food. Nuti Food had a higher average number of labeling observations per product than most companies, and both companies showed up frequently in other areas, such as promotions. Likewise, some smaller manufacturers seem to have a worse rate of non-compliance with labeling requirements. This indicates that any monitoring exercises and enforcement activity needs to extend to all companies in any market rather than focusing solely on major multinationals.

Broad public education about the value of breastfeeding: Whether a woman chooses to breastfeed or to use a BMS product can be influenced by advice from family and friends. Many women interviewed said they had had recommendations to use a BMS product from those around them. Efforts to better educate the population as a whole, or to give more directed advice about exclusive breastfeeding to a pregnant woman, may also help to counter manufacturers' promotion of BMS products.

Changing maternity leave and working practices for lactating women: Some women mentioned anecdotally that they find it difficult to maintain breastfeeding because of a need to return to work before the child is six months of age. Requiring all employers to provide lengthy paid maternity leave and improving the means for women to continue breastfeeding while working, such as by providing breastmilk pumps, allowing breaks at work to express milk, providing fridges to store the milk and making more private, secure places available for breastfeeding could also support women to continue breastfeeding. Although not assessed in the Vietnam and Indonesia studies per se, these anecdotes underline the need for employers to provide good maternity policies, as assessed by ATNI within Category E of the Global Index methodology.

Challenges, limitations and opportunities for improvement of the in-country assessments of marketing

Challenges and limitations

The challenges and limitations of these studies are elucidated at length in the BMS Annex and the Westat reports. In summary, some of the main challenges faced related to the difficulty encountered in accessing sufficient data about healthcare facilities, the lack of clarity of some definitions in The Code, which made assessing certain aspects of product marketing difficult, for example, the use of pictures and text that 'idealise' breast-milk substitutes. ATNF also faced challenges in designing a scoring system, as there was no precedent to draw on.

Other limitations related to the narrow geographical coverage of these studies, the fact that they were carried out in two major urban areas, which means that the findings cannot be extrapolated to the rest of the country, and they are not likely to be representative of marketing activity in smaller urban or rural areas. They are also only one-time cross-sectional surveys providing only a limited insight into companies' ongoing marketing activities.

The sample of retail outlets was a purposive sample (as no guidance for their selection was provided by the IGBM Protocol) whereas a more formal approach to sampling would be preferable as this would provide a sounder basis on which to estimate prevalence. It is possible that not all products available for sale in each city were taken into account, as no 'master' list of products available on each market was identified. There may therefore be more incidences of non-compliance than identified and/or the relative numbers for each company may have been higher or lower had additional products been assessed.

Because the IGBM Protocol calls for interviews with (pregnant women and) mothers of children younger than six months old it therefore does not assess the promotion of BMS products for older infants and children by asking mothers of older children about their experiences with products designed for those age groups. Another significant limitation of the studies is that much of the information is collected through interviews with women and with health care workers, which are highly likely to be subject to recall bias. The many ways this kind of data can be inaccurate are outlined in the Westat reports. Also, while healthcare workers were randomly selected within each health facility, they might not have been the best employees to interview with respect to facility-related issues; some of the questions might have been better addressed to facility managers.

Opportunities to improve future studies

More regular and consistent monitoring is needed in more countries on a more regular basis: The only way for ATNF and other stakeholders to build a comprehensive picture of manufacturers' marketing activities worldwide is for governments and/or independent agencies to carry out monitoring studies in several countries at regular intervals, e.g. every two years, or on an ongoing basis using real-time data collection facilitated by apps on mobile devices, until such time as full compliance is achieved and sustained. ATNF and other organizations would then be able to draw on these studies; the ATNI BMS sub-ranking could then base the companies' scores on a more comprehensive picture of their compliance worldwide.

Updating the IGBM Protocol: The IGBM Protocol is seen by BMS experts as the best existing rigorous research-oriented approach to conduct such an assessment. It assesses compliance with most of the Articles of The Code that apply in some way to manufacturers and establishes a sophisticated approach to collecting six different sources of information captured using different methodologies. It addresses compliance with 16 sub-articles of The Code within Articles 4, 5, 6, 7, and 9.

Another element could be added to assess Article 8, which deals with prohibitions on outside activities by representatives of BMS manufacturers. This would however require contact with company representatives or some other source that could attest to the activities of these representatives. Additional modules could be added to assess several sub-Articles of 11.2 which call on companies to monitor their practices, to be sure that their conduct at every level conforms to the principles and aims of The Code and apprise each member of their marketing personnel of The Code and of their responsibilities under it. This would add a valuable corollary to ATNI's assessment of company's management systems through the Corporate Profile analysis. This too would require interviews to be conducted with company staff.

Another way in which the Protocol needs to be updated is to enable online advertising and promotion on companies' own Facebook, YouTube or Twitter feeds, or on third-party sites, such as online women's magazines and online retailers. These sources are not currently within the scope of the IGBM protocol because it was last updated in 2007.

As noted above, a better approach to selecting health care workers might be to direct facility-level questions to a facility manager or a financial manager.

Similarly, further guidance could be added to create a more objective approach to selecting retail outlets so that results could be extrapolated to the universe of stores in the area being studied.

It should be noted that WHO is currently coordinating a project called NetCode that aims to develop and pilot a Code-monitoring protocol based on the IGBM, also incorporating elements of other protocols.

Developing clear, agreed definitions: Monitoring studies would be more accurate if there was more clarity about what types of pictures 'idealize' the use of breast-milk substitutes. There is no definition in The Code or elsewhere at present, and there is debate among stakeholders and companies about whether this should apply only to pictures of humans or whether it also extends to animals or cartoons of robots for example. Another area that requires further discussion is how to address advertising and promotion by online retailers. The WHO could make a valuable contribution to such studies by clarifying this and other definitions.

NOTES

- ¹ http://www.who.int/nutrition/topics/infantfeeding_recommendation/en/
- ² It is important to note that during the consultation process companies expressed concern about this revised definition.
- ³ Defined using UNICEF data – see BMS Annex, available at www.accesstonutrition.org.
- ⁴ <http://ibfan.org/code-watch-reports>; <http://aliveandthrive.org/wp-content/uploads/2014/11/Code-of-Marketing-Brief-Breastmilk-Substitute-BMS-Code.pdf>; <https://extranet.who.int/nutrition/gina/>
- ⁵ http://www.who.int/maternal_child_adolescent/documents/9241562218/en/
- ⁶ <http://www.jhsph.edu/research/centers-and-institutes/institute-for-international-programs/current-projects/lives-saved-tool/>
- ⁷ <http://www.unicef.org.uk/BabyFriendly/News-and-Research/Research/Breastfeeding-research---An-overview/>
- ⁸ Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. Sankar MJ, Sinha B, Chowdhury R, Bhandari N, Taneja S, Martines J, Bahl R. *Acta Paediatr Suppl.* 2015 Dec;104(467):3-13. doi: 10.1111/apa.13147. <http://www.ncbi.nlm.nih.gov/pubmed/26249674>
- ⁹ *ibid*
- ¹⁰ <http://www.nielsen.com/sa/en/press-room/2015/oh-baby-global-baby-food-and-formula-sales-will-reach-nearly-35-billion.html>
- ¹¹ <http://www.zenithinternational.com/articles/135577%25+growth+for+%2450+Billion+global+infant+nutrition+market>.
- ¹² <http://www.nielsen.com/content/dam/niensenglobal/de/docs/Nielsen%20Global%20Baby%20Care%20Report%20-%20August%202015.pdf>
- ¹³ UNICEF's permission to use the IGBM protocol does not imply endorsement of the methodology used or the results of the survey.
- ¹⁴ http://www.ftse.com/products/downloads/F4G_BMS_Criteria.pdf and <http://www.ftse.com/products/indices/F4G-BMS>
- ¹⁵ <http://www.who.int/nutrition/events/inappropriate-food-promotion-consultation/en/>
- ¹⁶ This is because the company only sells CFs within the EU (mainly in Greece) and so follows EU regulations.
- ¹⁷ Heinz was a member of IFM when the RRC were published, but subsequently ceased its membership.
- ¹⁸ Note that the weighting in this section is 20% for policy indicators and 80% for management systems indicators as there are many more of the latter. The weighting in all other sections is 50%/50%.
- ¹⁹ The FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong environmental, social and governance (ESG) practices on which financial products can be based and which can be used in other ways. FTSE4Good Indexes exclude BMS manufacturers unless they meet the FTSE4Good BMS criteria. Currently Nestlé is the only company to do so.
- ²⁰ UNICEF data on mortality data, malnutrition, health outcomes, HIV/AIDs levels; TI Corruption Index ranking, Human Development Index ranking, Total and Urbanised Population Data; IBFAN data on number of allegations by company per country and state of The Code by country.
- ²¹ Based on analysis by Westat, in-country advisors and ATNF.
- ²² This is the total number of non-compliances identified divided by the total number of products evaluated, e.g. for Abbott, $27/13 = 2.1$.
- ²³ This is the total number of products bought and of which labels and inserts were analyzed.
- ²⁴ Based on analysis by Westat, in-country advisors and ATNF.

All links accessed November 2015.

