

World Nutrition

This pdf is currently a free service offered by the Association
Please access our website at: www.wphna.org, renewed every month, for:
All our world news, information, discussion and services
Complete monthly issues of *World Nutrition*
Details of how to join the Association and to contribute to our work

Volume 3, Number 10, October 2012

Journal of the World Public Health Nutrition Association

Published monthly at www.wphna.org

The Association is an affiliated body of the International Union of Nutritional Sciences

For membership and for other contributions, news, columns and services, go to: www.wphna.org

Commentaries. Infant and young child feeding

Breastfeeding must be protected



Editor's note. Some months ago we thought to publish a special issue of *World Nutrition* containing a series of commentaries with the general title that you see here. We have decided not to do this, simply because breastfeeding and what it tells us, with all the implications, is much more important than that. Instead, we will be publishing fairly regular commentaries and other contributions on aspects of breastfeeding, indefinitely. This month we publish two short commentaries. The first is a statement from the health authorities of New York City on the general benefits of breastfeeding. Like other initiatives in the period when Michael Bloomberg is Mayor, this is a beacon for national and municipal governments throughout the world.

Breastfeeding **The New York City Latch On campaign**



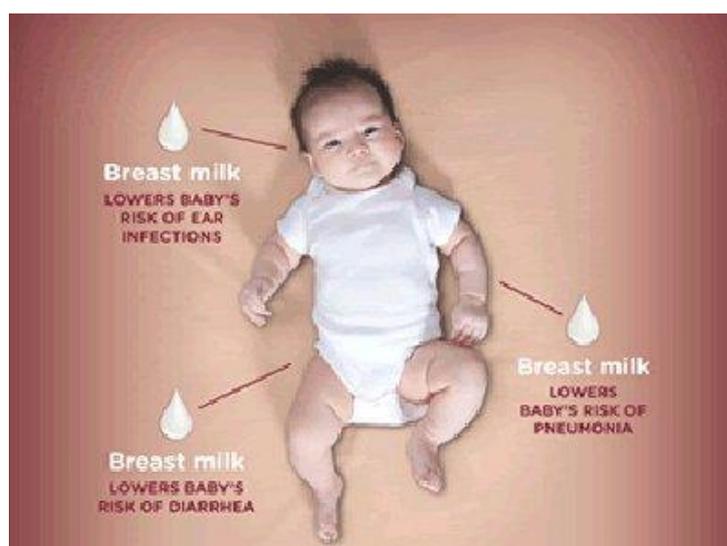
Thomas Farley

New York City Health Commissioner

<http://www.nyc.gov/html/doh/html/commish/combio.shtml>

43 (i) Promote, protect and support breastfeeding, including exclusive breastfeeding, for about six months from birth, as appropriate, as breastfeeding reduces susceptibility to infections and the risk of undernutrition, promotes infant and young children's growth and development, and helps to reduce the risk of developing conditions such as obesity and non-communicable diseases later in life; and, in this regard, strengthen the implementation of the *International Code of Marketing of Breast Milk Substitutes* and subsequent relevant World Health Assembly resolutions.

*UN High-Level Meeting on prevention and control of NCDs
Political Declaration, September 2011*



This is a subway and hospital poster promoting the Latch On New York City campaign against formula, which emphasises unique benefits of breastmilk

Editor's note. This piece outlines the policy of New York City for which Thomas Farley has direct responsibility, working to City mayor Michael Bloomberg.

'Latch On NYC' is the citywide initiative to support mothers who breastfeed their infants. It asks New York City maternity hospitals to sign on to support a mother's choice to breastfeed and to limit the promotion of infant formula in their facilities which can interfere with that decision.

Earlier this year twelve private City hospitals made the commitment, and all eleven public hospitals run by the City Health and Hospitals Corporation also joined 'Latch On NYC', going beyond the steps they previously took to support breastfeeding when they banned formula from gift bags and promotional materials in 2007.

Additionally, a new Health Department subway and hospital poster campaign an example of which pictured above, showing the benefits of breastmilk, such as reducing the risk of ear infections, diarrhoea, and pneumonia, has been launched. Thomas Farley made the announcement at Harlem Hospital, the city's first Baby Friendly Hospital, joined by executives representing more than half of all the maternity hospitals in New York City.

'Human breastmilk is best for babies and mothers' he says. 'When babies receive supplementary formula in the hospital, or mothers receive promotional baby formula on hospital discharge, it can impede the establishment of an adequate milk supply and can undermine women's confidence in breastfeeding. With this initiative the New York City health community is joining together to support mothers who choose to breastfeed'

'Harlem Hospital has banned formula from gift bags and promotional materials from our labour and delivery units since 2007' says hospital president Alan Aviles. 'We are proud to have been a leader in supporting and educating mothers on the benefits of breastfeeding. We are committed to doing all we can to improve the health of the littlest New Yorkers and encourage the use of mother's milk for the 22,000 babies born in our hospitals each year'.

The healthy choice

'Mothers who choose to breastfeed their baby are making a healthy choice for their child and themselves,' says State Health Commissioner Nirav Shah. 'We commend Dr. Farley and the City health department for launching this new initiative and partnering with health care facilities to encourage breastfeeding, beginning when a new mother is still in the hospital. Medical evidence shows that breastfeeding leads to better health outcomes and is a great way to protect the health of your child from day 1'. Greater New York Hospital Association president Kenneth Raske says: 'We strongly support the efforts of its member hospitals to assist and encourage breastfeeding to improve the health and long term well-being of newborns'.

A total of 90 per cent of New York City mothers start breastfeeding. But by the time the baby reaches 2 months, only 31 per cent are still exclusively breastfeeding. The American Academy of Pediatrics recommends exclusive breastfeeding for the first 6 months of a baby's life. Breastfed babies are much less likely than formula-fed babies to get ear, respiratory and gastrointestinal infections, and are also less likely to develop asthma. Breastfeeding is also beneficial to mothers. Women who breastfeed have a reduced risk of ovarian and breast cancers.

The promotion and marketing of infant formula often interferes with breastfeeding. Breastfeeding mothers report that receiving free formula at hospital discharge can make them feel like their breastmilk is not enough to satisfy their babies. In NYC, the most common reasons women stop breastfeeding are due to concerns about milk supply; 47 per cent of women report they stopped breastfeeding because they thought they weren't producing enough milk and 44 per cent because they thought the infant wasn't satisfied with breastmilk alone. These concerns, although common, are largely unfounded because most mothers do produce enough milk to meet their babies needs if they exclusively breastfeed. These concerns can be addressed while the mother is still in the hospital. However, without the support and education these mothers need, many of them turn to formula.

Beginning to breastfeed from the start is also important for planning a baby's diet for the first year of life. If the baby is not given anything but breast milk, especially in the first month after the baby is born, almost every mother will make enough milk for her baby. Using baby formula during this time can decrease the production of milk, and consequently make the mother reliant on formula.

The City-wide agreement

By joining this initiative for maternity hospitals to support mother's decision to breastfeed, participating City hospitals have agreed to:

- Enforce the regulation to not supplement breastfeeding infants with formula unless medically indicated and documented on the infant's medical chart.
- Restrict access to infant formula by hospital staff, tracking infant formula distribution and sharing data on formula distribution with the City Health Department.
- Discontinue the distribution of promotional or free infant formula'
- Prohibit the display and distribution of infant formula promotional materials in any hospital location.

Latch On NYC' has been formally endorsed by the New York State Department of Health, the Greater New York Hospital Association, the Academy of Family Physicians, the New York County Chapter, the American Academy of Pediatrics, District II, New York State. and the Society for Adolescent Health and Medicine, New York State Chapter.

Editor's note. So that's the good news, from a great US city. Unfortunately the news from the US as a whole is bad, as George Kent now shows. Moreover, baby formula is booming business in the global South.

Ultra-processed products

The trouble starts with baby formula



George Kent

Department of Political Science, University of Hawai'i

Email: kent@hawaii.edu



This picture advertises the US government nutrition programme for infants and children, a mass distributor of free formula to low-income families

World Nutrition recently published two commentaries, one on the nature of ultra-processed products, one on government responsibilities relating to obesity (1,2). Neither makes any explicit reference to infant formula, which is the longest-established mass-marketed ultra-processed product. It is also the starting point for many people's lifelong consumption of ultra-processed products.

In her letter published in the subsequent issue (3), Elisabeth Sterken points out that infant formula is soon followed with commercial complementary foods for older infants and young children. These expensive products are promoted on the basis of questionable nutritional claims, when mashed fresh foods would do just as well. The habit of using commercial branded ultra-processed products is likely to start with formula, and then continue with complementary foods, and continue on from there.

Government handouts of formula

It is not only economic and social pressures that stimulate excessive use of infant formula. This is a political issue also. In the US, the federal government hands out infant formula, at no cost to the parents, through its Special Supplemental Nutrition Program for Women, Infants, and Children, commonly known as WIC. In the years from 2004 to 2006, between 57 and 68 per cent of all infant formula sold in the United States was purchased through WIC (4).

The unit cost to the US government is small. This is because the formula manufacturing companies give the government rebates of close to 90 per cent of the wholesale price (4). It might appear that the manufacturers are generously providing huge quantities of formula at little cost. The reality is that the manufacturers count on mothers being loyal to their brands after the free formula supply ends at the child's first birthday, and continue to purchase their products well beyond the first year. That loyalty tends to hold steady, for branded products aimed at people of all ages (5, 6).

Significantly, the rebates from the manufacturers to the US government are used to extend the reach of WIC to even more families. About a quarter of its caseload is based on funding from the rebates (4).

Nationally, WIC's multi-billion dollar budget is likely to be cut by a few million as a result of the finalisation of when the current budget negotiations. The cuts are likely to come from WIC'S highly effective programme of breastfeeding peer counsellors, and not from its formula distribution programme (7).

More than half of all infants and more than a quarter of all children up to age 5 in the US participate in the WIC programme (8). Many families are attracted by the prospect of obtaining free formula for their infants' first year, and drop out after the infant's first birthday, when free formula is no longer available to them. About 88 per cent of the infants in WIC receive some formula through the programme (4).

According to the US Centers for Disease Control, in 2011 the exclusive breastfeeding rate at 6 months in the US was only 14.8 per cent (9). On this and other dimensions, the low level of optimum breastfeeding in the US has raised alarms about the likely health consequences, including a broad variety of serious diseases and developmental deficiencies, many of which are more likely in overweight children (10). Questions have been raised specifically about WIC's role in contributing to formula-induced overweight (11).

While some branches of the US government hand out formula, others promote breastfeeding. The US Surgeon General's *Call to Action to Support Breastfeeding* says that children who have never been breastfed are 32 per cent more likely to be obese than children who have ever been breastfed (12). However, the document fails to mention that the US government's distributing so much free formula might undermine the breastfeeding promotion campaign.

It is not just a lack of communication between different government agencies. WIC itself promotes breastfeeding, but that compartment of its operations seems unconnected to the compartment that distributes huge quantities of infant formula. The California WIC Association, a non-governmental group closely associated with the US and California governments' WIC operations in California, has several publications about how increasing breastfeeding rates can reduce obesity, but they do not mention that their breastfeeding promotion efforts might be impeded by WIC's distributing free formula to about half of California's infants (13).

One study found no relationship between families' participation in WIC and the risk of their children's becoming overweight (14). However, it did not look specifically at whether those families participated in WIC's formula distribution programme. The report did not mention infant formula. It recognised that WIC's breastfeeding promotion programme might provide protection against obesity, but again did not acknowledge that WIC's distribution of infant formula might impede WIC's breastfeeding promotion efforts.

Outside the WIC context, a comprehensive review of the relationship between infant feeding methods and obesity concluded: 'Breastfeeding is protective against obesity, although the precise magnitude of the association remains unclear' (15). US government agencies such as WIC, the Surgeon General's office, and the Centers for Disease Control, have raised concerns about infant feeding and obesity. However, the issue has not been getting the attention it deserves. In its exhaustive analysis of the overweight and obesity crisis in the US, the Institute of Medicine of the National Academies of Science did not mention that infant formula might have a role (16). Large-scale government-funded projects on overweight, including those specifically on overweight in children, tend to ignore the possible role of infant formula. First Lady

Michelle Obama's campaign to end childhood obesity calls for support for breastfeeding, but does not mention the government's role in supplying free infant formula (17).

Formula is booming in Asia

Globally, production and consumption of infant formula and other processed infant foods is becoming far more widespread. According to Transparency Market Research (18): 'The global baby food and pediatric nutrition market in 2011 is estimated to be worth \$US 38,180.9 million growing with a compound annual growth rate of 7.97% during 2007-2011 from \$US 28,100.0 million in 2007. The market is estimated to be worth \$US 41,521.7 million in 2012 and is forecast to reach \$US 63,681.0 million in 2017'.

The biggest new markets are in Asia. The report (18) continues: 'Asia Pacific is expected to account for the largest share of revenue – 40.20 per cent of global baby food & pediatric nutrition market revenue at \$US 16,692.5 million in 2012. The segment is further expected to reach \$US 30,149.1 million in 2017 with a compound annual growth rate of 12.55% during 2012-2017. The region is also expected to account for the largest share of volume – 37.82% – of global baby food & pediatric nutrition market volume at 1,223.9 thousand tonnes in 2012. The segment is expected to reach 1,846.3 thousand tonnes in 2017 with a compound annual growth rate of 8.57% during 2012-2017. The segment is also expected to have the highest growth rate during the same period'.

Similarly, the UBIC US marketing consultancy firm states: 'In 2011 the infant formula market is still growing rapidly, with the development of markets like Asia, particularly China, with a growth rate close to 20% per year, Eastern Europe, and to a lesser extent Middle East and Latin America. The development of the market is linked with the economic growth of those countries and its corollary the growing number of working women' (19). Thus, there is a tsunami of infant formula coming to Asia and other parts of the world. Few warnings have been posted.

There have been thorough analyses of the likely economic impacts, but not the likely health impacts. The consumption of infant formula can lead not only to increasing obesity but also to a wide variety of health problems, in high-income as well as low-income countries (20).

Boyd Swinburn has examined the responsibilities of governments in dealing with the problem of overweight in young children (2). Surely this must include attention to the role that infant formula might play, in the governments' own countries, and also in the countries in which they promote the use of infant formula. The issues demand attention not only from national governments but also by the international community as a whole.

There is an International Code of Marketing of Breast-milk Substitutes already in place, but its scope is limited, and it is not binding. There are governmental agencies at the global level that deal with food issues, such as the Food and Agriculture Organization of the United Nations (FAO), the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), and the World Trade Organization (WTO). Codex Alimentarius, an international body operated jointly by FAO and WHO, recommends regulations for foods, especially those that enter into international trade. However, national governments have given these agencies little real power, and when they do act, they often serve the interests of food producers more than the interests of food consumers.

The linkage between ultra-processed children's foods and overweight in children and the adults they will become, is only one of a broad spectrum of issues relating to children's nutrition. Malnutrition still leads to millions of child deaths every year, and a huge burden of disease and impaired development.

The nutritional needs of young children demand attention at every level of governance, including local communities, local governments, national governments, and globally. At the global level, these issues could be addressed through the human rights framework, with a new Optional Protocol to the Convention on the Rights of the Child.

The Convention on the Rights of the Child already has two Optional Protocols associated with it, one on the involvement of children in armed conflict, and another on the sale of children, child prostitution, and child pornography. A new *Optional Protocol on Children's Nutrition* could codify a set of widely agreed principles regarding the nutrition of children (5).

Working under the auspices of the United Nations General Assembly, the nations of the world could negotiate a draft. They could draw from the many documents that already propose sound principles relating to children's nutrition, such as the World Health Organization's Global Strategy for Infant and Young Child Feeding, and the International Code of Marketing of Breast-milk Substitutes.

After it was adopted by the UN's General Assembly, the national governments of the world would be invited to sign and ratify the Optional Protocol. In time, these new commitments would help to establish coherent national and global regulations for ensuring that infants and young children everywhere are well nourished. There is a need for urgent action, especially as the business of infant nutrition is now globalised.

In 2008 there was a huge scandal in China over melamine contamination of infant formula, which resulted in hundreds of thousands becoming seriously ill. It was not until 2010 that the Codex Alimentarius Commission issued non-binding

recommendations for acceptable levels of melamine in powdered infant formula, and not until 2012, four years after the disaster, that the Commission set a limit for liquid infant formula. Surely the international community can do better than that (21).

References

- 1 Monteiro C, Cannon G. The big issue is ultra-processing. What are ultra-processed products? [Commentary] *World Nutrition*, June 2012, **3**, 6: 257-268. Obtainable at www.wphna.org
- 2 Swinburn B. Obesity: Why governments must act [Commentary]. *World Nutrition*, July 2012, **3**, 7, 307-325. Obtainable at www.wphna.org
- 3 Sterken E. The big issue is ultra-processing. Troublesome claims and descriptions. [Letter] *World Nutrition*, July 2012, **3**, 7: 326-327. Obtainable at www.wphna.org
- 4 Oliveira V, Frazão E, Smallwood D. *Rising Infant Formula Costs to the WIC Program: Recent Trends in Rebates and Wholesale Prices*. Washington DC: US Department of Agriculture. 2010. Obtainable at <http://www.ers.usda.gov/Publications/ERR93/>
- 5 Kent G. *Regulating Infant Formula*. Amarillo, Texas: Hale Publishing. 2011.
- 6 Kent G. Breastfeeding. The need for law and regulation to protect the health of babies. [Commentary] *World Nutrition*, October 2011, **2**, 9, 465-490. Obtainable at www.wphna.org
- 7 Hoffman, D. Time for WIC & breastfeeding advocates to take action! *California WIC Association*. 2 July 2012. Obtainable at <http://www.calwic.org/>
- 8 Martinez-Schiferl, M. Half of all infants receive WIC. *MetroTrends Blog*. Urban Institute. May 3, 2012. Obtainable at <http://blog.metrotrends.org/2012/05/infants-receive-wic/>
- 9 US Centers for Disease Control. *Breastfeeding report card 2011, United States: Outcome Indicators*. Obtainable at <http://www.cdc.gov/breastfeeding/data/reportcard2.htm>
- 10 McNeil M, Labbok M, Abrahams S. What are the risks associated with formula feeding? A re-analysis and review. March 2010. *Birth* **37**, 1:50-58.
- 11 Rose D, Bodor, JN, Chilton M. Has the WIC incentive to formula-feed led to an increase in overweight children? *Journal of Nutrition*. April 2006. **136**, 4. Obtainable at <http://jn.nutrition.org/content/136/4/1086.full?sid=229fee3d-a06b-4dbd-a445-b30a5a870d61>
- 12 US Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breastfeeding*. Washington DC: USDHHS. Office of the Surgeon General. 2011. Obtainable at <http://www.surgeongeneral.gov/topics/breastfeeding/index.html>

- 13 Higher breastfeeding rates can reduce obesity. *WIC Works*. California WIC Association. September 2011. Obtainable at http://www.calwic.org/storage/WIC_WORKS_Breastfeeding_Can_Reduce_Obesity.pdf
- 14 VerPloeg M. *WIC and the battle against childhood overweight*. Washington, DC: US Department of Agriculture. April 2009. Obtainable at <http://www.ers.usda.gov/media/147764/eb13.pdf>
- 15 Owen C, Martin R, Whincup P, Smith G, Cook D. Effect of infant feeding on the risk of obesity across the life course: A quantitative review of published evidence. *Pediatrics*. **115**, 5, May 1, 2005. Obtainable at <http://www.pediatricsdigest.mobi/content/115/5/1367.full>
- 16 Institute of Medicine. *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation*. Washington DC: National Academies Press, 2012. Obtainable at http://www.nap.edu/catalog.php?record_id=13275
- 17 Let's Move. Website. Obtainable at <http://www.letsmove.gov/>
- 18 Transparency Market Research 2012. *Asia Pacific Baby Food & Pediatric Nutrition Market: Analysis and Forecast (2007-2017)*. Obtainable at <http://www.transparencymarketresearch.com/asia-pacific-baby-food-market.html>
- 19 UBIC 2012. *Ingredients for the World Infant Formula Market*. UBIC Consulting. <http://www.ubic-consulting.com/template/fs/documents/Nutraceuticals/Ingredients-in-the-world-infant-formula-market.pdf>
- 20 Agency for Healthcare Research and Quality. *Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries*. Rockville, Maryland: AHRQ. 2007. Obtainable at <http://www.ncbi.nlm.nih.gov/books/NBK38337/>
- 21 Food and Agriculture Organization of the United Nations. *International Experts Limit Melamine Levels in Food*. July 6, 2010. Obtainable at <http://www.fao.org/news/story/en/item/43719/icode/>

Acknowledgement

Concept, drafting and final text approval: GK. Funding for this contribution: none. Conflicting or competing interests: none.

Readers may make use of the material in this commentary if acknowledgement is given to the Association, and *WN* is cited. Please cite as: Kent G, Ultra-processed products. The trouble starts with baby formula. [Commentary]. *World Nutrition*, October 2012, **3**,10, 445-455. Obtainable at www.wphna.org.

All contributions to *World Nutrition* are the responsibility of their authors. They should not be taken to be the view or policy of the World Public Health Nutrition Association (the Association) or of any of its affiliated or associated bodies, unless this is explicitly stated.