



Section IV

Corporate Role in Food and Agriculture

Special Issue: Mapping the Global Food Landscape

Big Food corporations and the nutritional marketing and regulation of processed foods

Gyorgy Scrinis

Lecturer in Food Politics and Policy, Faculty of Veterinary and Agricultural Sciences, University of Melbourne

“Big Food” refers to the transnational food manufacturing corporations that dominate the production and marketing of highly processed foods and beverages, with the ten largest corporations comprised of Nestlé, Pepsico, Associated British Foods (ABF), Coca-Cola, Danone, General Mills, Kellogg, Mars, Mondelez International (previously Kraft Foods), and Unilever (Oxfam, 2013). The types of foods that make up the majority of the sales of these firms include snack foods, confectionary, sweetened milk and yoghurt products, ice cream, breakfast cereals, biscuits, sugar-sweetened beverages, and fruit juice.

Global sales of packaged foods have grown by over 90 percent in the past decade, and now total over US\$2.2 trillion (Anon, 2012). Nestlé, for example, achieved sales of just under US\$100 billion in 2013 (Nestlé, 2014). According to some research groups, the ten largest food corporations control around one quarter of global packaged food sales, with the top 100 corporations controlling three quarters of the global market (ETC, 2008, 2011; Lang, Barling & Caraher, 2009). This level of corporate concentration is considerably lower than in other sectors of the food system, such as the grain trading sector (ETC, 2011). Nevertheless these packaged food and beverage companies are some of the world’s largest food and agricultural corporations, and their market size enables them to exercise enormous power and influence over food producers, food consumers, and government policy makers (Winson, 2013).

In terms of their influence over consumers, Big Food corporations are actively involved in transforming dietary patterns through the displacement of minimally processed foods with their more highly processed, packaged, and convenience foods (Monteiro & Cannon, 2012b). Having largely saturated the market for ready to eat and convenience foods in the North, much of

the growth in sales of transnational food corporations has come from low and middle-income countries (LMIC) in the global South (Baker & Friel, 2014; Stuckler, McKee, Ebrahim, & Basu, 2012). For example, the annual growth rate in the per capita consumption of soft drinks from 1997 to 2009 in LMICs was 5.2 percent compared with 2.4 percent in high-income countries (HICs); and of packaged foods 1.9 percent in LMICs compared with 0.4 percent in HICs (Moodie et al., 2013).

This market growth in highly processed foods and beverages has been achieved through a range of corporate strategies, including the production of extremely palatable convenience foods, often achieved through the addition of sugars and sweeteners, salt, fats, and refined grains; the ubiquitous availability of these products; and very large advertising budgets to market their products (Christian & Gereffi, 2010; Moss, 2012). However the goal of transforming dietary choices and increasing sales of these products in the global South has also led some food corporations to develop more targeted and grassroots interventions to create new markets. Nestlé, for example, has launched a floating supermarket named ‘Nestlé Até Você a Bordo’—or *Nestlé Takes You Onboard*—that sails up the Amazon River in Brazil in order to make their products available to 800,000 riverside inhabitants who otherwise find it difficult to access supermarkets. This complements Nestlé’s door-to-door sales system, which includes 7,500 re-sellers and 220 micro-distributors across Brazil (Nestlé, 2013).

The increased consumption of highly processed foods—which is deemed a part of the ‘nutrition transition’—has paralleled the increase in rates of obesity and the rise in incidence of diabetes and other chronic diseases in the South (Friel & Lichacz, 2010; Moodie et al., 2013). The growing concern—on the part of governments, nutrition and health experts, and the wider public—over the diet-related health problems associated with the over-consumption of highly-processed foods and beverages has in turn posed a number of challenges and threats to these corporations.

One of main challenges is the prospect of direct government regulation that would restrict the types of foods and beverages that corporations produce, or how they market and sell their products. Over the past decade, many governments and policy makers have demonstrated a new resolve to more directly regulate processed foods and their marketing. This includes regulations setting limits on *trans*-fat content in Denmark; voluntary schemes to reduce the salt content across entire food categories in the U.K. and Australia; food labeling initiatives such as the voluntary traffic light labels in the U.K.; calorie and *trans*-fat labeling in the U.S.; and taxes on sugary drinks in Mexico and Hungary (Capacci et al., 2012; Downs et al., 2013; Mytton, Eyles & Ogilvie, 2014).

Another potential threat to Big Food corporations is the prospect of litigation arising from health problems related to the consumption of their products, in some ways akin to tobacco litigation (Alderman & Daynard, 2006; Mello, Rimm & Studdert, 2003). There is also the potential for a decline in sales—or a reduced rate of growth in some markets—as health-conscious consumers grow wary of highly-processed foods and switch to more healthful food options.

Big Food's responses to health concerns

In response to these challenges, Big Food corporations have employed both negative and positive strategies. One type of response has been to deny any special responsibility for these health problems, as well as to actively undermine the introduction of mandatory government regulations (Wiist, 2011). This suite of negative responses includes funding counter-nutritional studies to undermine expert consensus; emphasizing the role of lack of exercise in weight gain, rather than the over-consumption of particular foods; emphasizing personal responsibility over corporate responsibility; the direct lobbying of governments and policy makers; the sponsorship of expert bodies; and the funding of front-groups that run public campaigns to discredit government interventions (Miller & Harkins, 2010). For example, the food industry is reported to have spent up to one billion dollars lobbying against the introduction of the U.K.'s traffic light labeling system in the European Union (Swinburn, Swinburn & Wood, 2013).

However Big Food companies have also recognized the need for—and the benefits of—more positive responses to these health concerns by presenting themselves as part of the solution to these dietary health problems (Acharya, Fuller, Mensah, & Yach, 2011; Feldman, 2010). This includes producing “healthier” food products, smaller portion sizes, new labeling initiatives, and nutrition education campaigns (IFBA, 2013). These initiatives form a part of the Corporate Social Responsibility (CSR) agendas of these companies (Dorfman, Cheyne, Friedman, Wadud, & Gottlieb, 2012; Simon, 2012). Savvy food corporations are in fact positioning themselves to benefit from these health concerns by producing products intended to appeal to health-conscious consumers. Indeed Nestlé has recently moved to rebrand itself as the “world’s leading nutrition, health and wellness company” (Nestlé, 2010).

Food corporations have also responded to increased public pressure to restrict the advertising of “junk” or poorer quality foods to children by introducing their own voluntary and self-regulated advertising standards. These include both single company and cross-industry initiatives. Pepsico, for example, has pledged to only advertise to children under 12 those products that meet the nutrition criteria developed by the Children’s Food and Beverage Advertising Initiative in the USA (PepsiCo, 2014).

A key feature of these corporate initiatives has been to present consumers with a greater range of product “choices” and options, and to thereby place the onus on consumers to achieve nutritional balance in their diets. Pepsico, for example, has divided its food products into three distinct “portfolios”: good-for-you products that they deem to be nutritious; better-for-you products that have typically had the fat or calories reduced; and fun-for you products, their more “indulgent” products (PepsiCo, 2013). Coca-Cola similarly advertise a range of calorie options within their beverages range, from full-calorie to reduced-calorie and no-calorie sweetened beverages (Coca Cola, 2014).

In terms of developing and marketing healthier products, I will distinguish between three types of corporate strategies: the *fortification* of foods with micronutrients; the product *reformulation* of foods primarily to reduce the quantity of harmful nutrients; and adding

beneficial or ‘functional’ nutrients for enhancing health, or what I’ll refer to as *functionalization*. These nutritional engineering and marketing practices address the health problems of both under-nutrition and over-nutrition, and are variously directed at rich or poor consumers across the North and South.

Product reformulation usually involves reducing the quantities of potentially harmful nutrients or food components in processed food products and the food supply, and may involve setting upper limits for these components (Buttriss, 2013). These so-called ‘bad’ nutrients and components—or “nutrients to limit”—typically include salt, sugar, saturated fat, total fat, *trans*-fats, and energy (i.e. calories or kilojoules). Salt reduction has been a key focus of many companies, with the aim of gradually reducing salt content over a period of time in order for consumers taste buds to slowly adapt to these changes (Moss, 2012).

A number of companies have made pledges to reformulate their products (IFBA, 2013). For example, Nestlé has developed its own nutrient profiling system which sets limits on a number of food components, with a specific set of criteria for each product category, including a pledge that all of their child-oriented products will have met their criteria by 2015 (Nestlé, 2013). Pepsico has also pledged to reduce the amount of added sugars and salt per serving in their key global food and beverage brands by 25 percent by 2020 against a 2006 baseline (PepsiCo, 2013). There are also multi-company or industry-wide commitments to reformulate products. This includes the Healthy Weight Commitment Foundation in the U.S., which in 2012 pledged to remove 1.5 trillion calories out of the US food supply (Ng, Slining, & Popkin, 2014).

These product reformulation strategies are also endorsed by some governments in the form of voluntary public-private partnerships. For example, the U.K. government’s Responsibility Deal, which is based on its “nudge” political philosophy, allows companies to set their own reformulation targets; and the Australian government’s Food Health Dialogue collaboration with the food industry has so far focused on voluntary salt reduction (Elliott et al., 2014; Marotta, Simeone & Nazzaro, 2014). However, while we may welcome the reduction of some of these single components already found in extreme quantities in some foods, such as sugar and salt, it is arguable whether many of these reformulated products are “healthy” or are any less processed and nutritionally degraded than the original products, particularly when these components are simply replaced with other cheap and refined or chemically reconstituted ingredients (Monteiro & Cannon, 2012a; Scrinis, 2013).

Micronutrient fortification involves fortifying foods with micronutrients to address real or perceived micronutrient deficiencies in populations or individuals. While the basic vitamin and mineral fortification of common foods such as breakfast cereals has long been a marketing strategy of food manufacturers in the North, food corporations have increasingly adopted this strategy to guide the engineering and marketing of highly processed foods targeting poorer consumers in the South. The nutrients added to foods are advertised on the packaging, and are thereby intended to address the real or perceived scarcity of these micronutrients amongst the target market. For example, many of Nestlé’s range of “Popularly Positioned Products”—which

they target at low income consumers around the world—are fortified with iron, zinc or vitamin A, such as their affordable and popular Maggi range of stock cubes (Nestlé, 2011).

These micronutrient fortification strategies can be contrasted with the addition of supposedly beneficial or health enhancing nutrients and food components to foods. This latter approach is targeted at consumers seeking to improve their diets and attain specific health benefits, rather than just address basic nutrient deficiencies. These foods typically carry government-sanctioned nutrient-content or health claims that directly or indirectly suggest that these products target and enhance particular bodily functions or processes, or are able to reduce the risk of particular chronic diseases. These foods are sometimes referred to as “functional foods”, and include cholesterol-lowering margarine, probiotic yogurts, and omega-3 enriched orange juice (Lawrence & Germov, 2008). This “functionalization” strategy may be applied to poor quality, highly processed food products, but it is also applied to better quality, premium products that are intended to appeal to health and nutrition conscious and higher-income consumers.

These various commercial strategies for re-engineering foods are typically based on the assumption that adding or removing specific nutrients or food components can substantially improve the quality of a food. The nutrient-content and health claims that typically adorn the packaging of these products—and the scientific evidence which underpins them—often rely upon a reductive focus on and interpretation of the role of these nutrients in bodily health. I refer to this nutritionally reductive approach to food as the ideology of *nutritionism*—an ideology that has been dominant within the nutrition science discipline over the past century, and in recent decades has increasingly come to underpin dietary guidelines, food marketing strategies, and nutrition policies (Scrinis, 2013). The focus on specific nutrients within foods is also an effective marketing strategy for food companies, as it may be used to deflect attention from the quality of the ingredients in their products.

Regulating Big Food corporations

While national governments have shown a greater willingness to regulate the products and practices of processed and fast food corporations in recent years, there are a number of limitations with their policy responses to date. First, there is often a preference for industry self-regulation and voluntary public-private partnerships, rather than mandatory regulations (Stuckler & Nestle, 2012). Allowing corporations to set their own standards and to voluntarily apply these standards, and without legislative mechanisms to enforce the standards, has so far translated into only incremental and uneven improvements in the quality of food products.

Second, even while introducing some initiatives designed to improve product quality or to regulate front-of-pack labeling, government policies continue to enable food corporations to market their products with exaggerated or essentially misleading nutrient and health claims. For

example, food labeling regulations continue to allow nutrient-content claims on highly processed foods, with few restrictions on the types of foods upon which these claims may be placed (CSPI, 2010).

Big Food corporations are also continuing to grow the market for their highly processed food products in the yet-to-be-saturated markets of the global South. Any marginal improvements in their products are likely to be nullified as ever more populations shift their dietary patterns towards highly processed food consumption. In this sense, Big Food corporations continue to grow their proverbial pie even as they reformulate their pie.

Government policies that only regulate the quality of particular foods, or particular practices of food labeling and marketing, may be ill-equipped to challenge the power of these food corporations to shape and transform food consumption practices around the world.

There is a need for more research to evaluate the overall impact of these corporate food strategies, and into the sorts of policies and strategies that might contain the spread of their products into new markets. Research is required to closely monitor and evaluate the practices and products of food and beverage manufacturing corporations (Brinsden et al., 2013). This includes evaluating the nutritional quality of their new and modified products, the types of marketing practices employed, and the sales of their products in countries in the North and South.

A second area is to research alternative approaches to understanding food quality that do not rely on a reductive focus on nutrients. This includes developing and testing a framework for understanding and categorizing foods in terms of levels and types of processing (Monteiro, Moubarac, Cannon, Ng, & Popkin, 2013; Scrinis, 2013). Such an approach has already been applied in the development of the new Brazilian Dietary Guidelines introduced in 2014 (MHB, 2014).

A third area is to explore and test policy and regulatory approaches that more directly challenge and restrict the production, promotion and sales of poor quality processed foods. Such policy approaches will themselves need to break free from the nutrient-focus of some existing regulatory approaches to food composition and labeling. Stronger policy and regulatory approaches are also required that move beyond the reliance on industry self-regulation, and that place direct and enforceable limits on the types of products that are permitted to be produced and marketed.

References

- Acharya, A., Fuller, A.C., Mensah, G.A., & Yach, D. (2011). The current and future role of the food industry in the prevention and control of chronic diseases: The case of PepsiCo. In D. Stuckler & K. Siegel (Eds.), *Sick societies: Responding to the global challenge of chronic disease* (pp. 187-203): Oxford University Press.

- Alderman, J., & Daynard, R.A. (2006). Applying lessons from tobacco litigation to obesity lawsuits. *American Journal of Preventive Medicine*, 30(1), 82-88.
- Anon. (2012, December 15). Food for thought. *The Economist*. Retrieved from <http://www.economist.com/news/special-report/21568064-food-companies-play-ambivalent-part-fight-against-flab-food-thought>
- Baker, P., & Friel, S. (2014). Processed foods and the nutrition transition: Evidence from Asia. *Obesity Reviews*, 15(7), 564-577.
- Brinsden, H., Lobstein, T., Landon, J., Kraak, V., Sacks, G., Kumanyika, S., . . . Walker, C. (2013). Monitoring policy and actions on food environments: Rationale and outline of the INFORMAS policy engagement and communication strategies. *Obesity Reviews*, 14 (S1), 13-23.
- Buttriss, J.L. (2013). Food reformulation: The challenges to the food industry. *Proceedings of The Nutrition Society*, 72(01), 61-69.
- Capacci, S., Mazzocchi, M., Shankar, B., Macias, J.B., Verbeke, W., Pérez-Cueto, F.J., . . . Traill, W.B. (2012). Policies to promote healthy eating in Europe: A structured review of policies and their effectiveness. *Nutrition Reviews*, 70(3), 188-200.
- Christian, M., & Gereffi, G. (2010). The marketing and distribution of fast food. In *Pediatric Obesity* (pp. 439-450). Springer.
- Coca Cola. (2014). *2013-2014 Sustainability report*. Retrieved from <http://assets.coca-colacompany.com/1a/e5/20840408404b9bc484ebc58d536c/2013-2014-coca-cola-sustainability-report-pdf.pdf>
- CSPI. (2010). *Food labelling chaos: The case for reform*. Washington, DC: Center for Science in the Public Interest.
- Dorfman, L., Cheyne, A., Friedman, L.C., Wadud, A., & Gottlieb, M. (2012). Soda and tobacco industry corporate social responsibility campaigns: how do they compare? *PLoS Medicine*, 9(6), e1001241.
- Downs, S.M., Thow, A.M., Ghosh-Jerath, S., McNab, J., Reddy, K.S. & Leeder, S.R. (2013). From Denmark to Delhi: The multisectoral challenge of regulating trans fats in India. *Public Health Nutrition*, 16(12), 2273-2280.

- Elliott, T., Trevena, H., Sacks, G., Dunford, E., Martin, J., Webster, J., ... Neal, B. (2014). A systematic interim assessment of the Australian government's food and health dialogue. *Medical Journal of Australia*, 200(2), 92-95.
- ETC. (2008). *Who owns nature? Corporate power and the final frontier in the commodification of life* (Communiqué Issue #100). Retrieved from www.etcgroup.org/sites/www.etcgroup.org/files/publication/707/01/etc_won_report_final_color.pdf
- ETC. (2011). *Who will control the green economy?* (Communiqué Issue #107). Retrieved from www.etcgroup.org/files/publication/pdf_file/ETC_wwctge_4web_Dec2011.pdf
- Feldman, Z.A. (2010). Can the food industry help tackle the growing global burden of undernutrition? *American Journal of Public Health*, 100(6), 974.
- Friel, S., & Lichacz, W. (2010). Unequal food systems, unhealthy diets. In G. Lawrence, K. Lyons & T. Wallington (Eds.). *Food security, nutrition and sustainability* (pp. 115-129). London: Earthscan.
- International Food and Beverage Alliance (IFBA). (2013). *Progress report 2012*. Retrieved from <https://ifballiance.org/sites/default/files/IFBAPROGRESSREPORT2012.pdf>
- Lang, T., Barling, D., & Caraher, M. (2009). *Food policy: Integrating health, environment & society*. New York: Oxford.
- Lawrence, M., & Germov, J. (2008). Functional foods and public health nutrition policy. In J. Germov & L. Williams (Eds.). *A sociology of food & nutrition* (3rd ed., pp. 147-175). South Melbourne: Oxford University Press.
- Marotta, G., Simeone, M., & Nazzaro, C. (2014). Product reformulation in the food system to improve food safety: Evaluation of policy interventions. *Appetite*, 74, 107-115.
- Mello, M.M., Rimm, E.B., & Studdert, D.M. (2003). The McLawsuit: The fast-food industry and legal accountability for obesity. *Health Affairs*, 22(6), 207-216.
- MHB. (2014). *Dietary Guidelines for Brzail* (2nd ed.). Brasilia: Ministry of Health of Brazil.
- Miller, D., & Harkins, C. (2010). Corporate strategy, corporate capture: Food and alcohol industry lobbying and public health. *Critical Social Policy*, 30(4), 564-589.

- Monteiro, C.A., & Cannon, G. (2012a). The food system: Product reformulation will not improve public health. [Commentary]. *World Nutrition*, 3(9), 406-434.
- Monteiro, C.A., & Cannon, G. (2012b). The impact of transnational 'Big Food' companies on the South: A view from Brazil. *PLoS Medicine*, 9(7), e1001252.
- Moodie, R., Stuckler, D., Monteiro, C., Sheron, N., Neal, B., Thamarangsi, T., ... & Lancet NCD Action Group. (2013). Profits and pandemics: Prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *The Lancet*, 381(9867), 670-679.
- Moss, M. (2012). *Salt, sugar, fat: How the food giants hooked us*. New York: Random House.
- Mytton, O.T., Eyles, H., & Ogilvie, D. (2014). Evaluating the health impacts of food and beverage taxes. *Current Obesity Reports*, 3(4), 432-439.
- Nestlé. (2010). *Nestlé research: Vision, action, value creation*. Vevey: Nestlé S.A.
- Nestlé. (2011). *Popularly positioned products: Affordable and nutritious*. Vevey: Nestlé S.A.
- Nestlé. (2013). *Nestlé in society: Creating shared value and meeting our commitments 2012*. Vevey: Nestlé S.A.
- Nestlé. (2014). *The year in review 2013*. Vevey: Nestlé S.A.
- Ng, S.W., Slining, M.M., & Popkin, B.M. (2014). The healthy weight commitment foundation pledge: Calories sold from US consumer packaged goods, 2007–2012. *American Journal of Preventive Medicine*, 47(4), 508-519.
- Oxfam. (2013). Behind the brands: Food justice and the 'Big 10' food and beverage companies (*Oxfam Briefing Paper* Vol. 166). Oxfam.
- PepsiCo. (2013). *Sustainability report 2013*. Retrieved from http://www.pepsico.com/Assets/Download/PEP_2013_Sustainability_Report.pdf
- PepsiCo. (2014). Children's Food and Beverage Advertising Initiative: Amended Pledge of PepsiCo Inc.
- Scrinis, G. (2013). *Nutritionism: The science and politics of dietary advice*. New York: Columbia University Press.

- Simon, M. (2012). Pepsico and public health: Is the nation's largest food company a model of corporate responsibility or master of public relations? *CUNY Law Review*, 15(9), 9-26.
- Stuckler, D., & Nestle, M. (2012). Big food, food systems, and global health. *PLoS Medicine*, 9(6), 678.
- Stuckler, D., McKee, M., Ebrahim, S., & Basu, S. (2012). Manufacturing epidemics: The role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol and tobacco. *PLoS Medicine*, 9(6), 695.
- Swinburn, B., & Wood, A. (2013). Progress on obesity prevention over 20 years in Australia and New Zealand. *Obesity Reviews*, 14(S2), 60-68.
- Wiist, W. (2011). The corporate play book, health and democracy: The snack food and beverage industry's tactics in context. In D. Stuckler & K. Siegel (Eds.), *Sick societies: Responding to the global challenge of chronic disease* (pp. 204-216). Oxford University Press.
- Winson, A. (2013). *The industrial diet: The degradation of food and the struggle for healthy eating*. UBC Press.