
Viewpoint

The food industry and conflicts of interest in nutrition research: A Latin American perspective

Joaquin Barnoya^{a,b,*} and Marion Nestle^c

^aResearch Department, Unidad de Cirugía Cardiovascular de Guatemala, 5a Av 6-22 zona 11, Guatemala 01011, Guatemala.

^bDivision of Public Health Sciences, Department of Surgery, Washington University in St. Louis, 660 S. Euclid Av., St. Louis, MO 63110, USA.

^cDepartment of Nutrition, Food Studies, and Public Health, New York University, New York, USA.

*Corresponding author.

Abstract Conflicts of interest arise when corporations marketing harmful products establish financial relationships with research institutions, researchers, or public health organizations. As obesity becomes a worldwide epidemic, such relationships threaten to jeopardize the integrity of scientific research. Latin America, a region undergoing rapid development, is particularly vulnerable to such conflicts. Here, we provide examples of how food and beverage companies are funding nutrition-focused research and institutions in Latin America, putting their credibility at risk. Public health organizations and institutions should take measures to identify, manage, and limit (or eliminate) conflicts of interest caused by partnerships with food companies making and marketing unhealthful products.

Journal of Public Health Policy advance online publication, 29 October 2015;
doi:10.1057/jphp.2015.37

Keywords: conflict of interest; food industry; low/middle income countries

On 23 July 2015, the Central American Bottling Corporation (cbc), the largest beverage distributor in Guatemala and bottler for PepsiCo, announced a new partnership with the Guatemala-based Institute of Nutrition of Central America and Panama (INCAP) to manufacture and distribute a ‘ready-to-use supplemental food’ (RUSF), Mani+, to chronically malnourished children in rural areas.¹ Mani+ is a sugar-sweetened, peanut butter-based, nutrient-fortified snack product intended to prevent malnutrition in children up to age three.² INCAP will provide technical support and evaluation as a basis for expanding the distribution of Mani+ to neighboring countries.¹

INCAP does not disclose this partnership on its website. Because one purpose of the partner companies is to sell sugar-sweetened beverages to anyone who will buy them, this alliance raises questions of conflict of interest and challenges INCAP's credibility as a promoter of public health.

Since 1949, INCAP has led Latin American efforts to conduct research and training to reduce the prevalence of chronic and acute protein-energy malnutrition. As the region's population undergoes the 'nutrition (or epidemiologic) transition' from chronic malnutrition to widespread obesity and its consequent non-communicable diseases (NCDs), INCAP has been devoting substantial resources to research aimed at curbing this emerging epidemic.³ But cbc and PepsiCo widely produce, bottle, and market sugar-sweetened beverages throughout the region. These drinks are by now well established as major contributors to obesity and NCDs.⁴ In Guatemala, for example, where the prevalence of chronic malnutrition is among the highest in the world, overweight is on the rise, a problem attributed to the widespread availability, pervasive child-oriented marketing, and high consumption of sugar-sweetened beverages such as the ones distributed and marketed by cbc.^{5,6}

Conflicts arise when corporations marketing harmful products establish financial relationships with research institutions, researchers, or public health organizations. Such conflicts are well recognized in research studies funded by the tobacco, pharmaceutical, or chemical industries, and are increasingly recognized in those funded by food and beverage companies.^{7,8} Conflicts that arise from industry partnerships and alliances with health organizations are less apparent. In the early 1990s, for example, the tobacco industry organized 'The Latin Project', to encourage scientists to minimize secondhand smoke as a health hazard and to lobby against smoke-free workplaces.⁹ At the time, the industry's role in steering the science and obstructing public health did not elicit nearly the level of critical scrutiny it deserved.

To further protect product sales in Latin America and to deflect criticism of their marketing practices, the food and beverage industries fund research, research institutes, health professional conferences, and academic journals. The partnership with INCAP is one example of a strategy aimed at research institutes. Many other examples exist. The Sociedad Latino Americana de Nutrición (Latin American Nutrition Society (SLAN)) organizes the major regional nutrition conference sponsored by companies such as Nestlé,



Unilever, Quaker Oats, Kellogg, and Coca-Cola who contribute US\$14 000 each.¹⁰ Among other benefits, these sponsors are allowed to place their logos in all the plenary sessions and to conduct one free satellite symposium. The conference does not require speakers and abstract presenters to disclose conflicts of interest. With respect to journals, the University of Chile's Instituto de Nutrición y Tecnología (Institute of Nutrition and Food Technology, INTA) acknowledges the support of Nestlé and Danone on the website of its publication, *Nutrición y Vida (Nutrition and Life)*.¹¹

The food industry lobbies and uses the courts to oppose legislation aimed at educating the public to reduce consumption of unhealthy food products. What is happening in Chile is a good example. This country was able to control problems of undernutrition during the early 1990s by implementing prevention policies that promoted use of established health services and educational infrastructure. Now, to prevent NCDs, Chilean health authorities are attempting to use regulatory approaches, such as an easy-to-use front of package labeling system (a stop sign) to inform consumers about the excess content of sugar, sodium, or fat in packaged foods. Furthermore, those products that exceed specific nutritional criteria will be banned from schools and not allowed to be advertised to children. The food industry, however, challenged this system in the World Trade Organization.¹²

Although none of these industry strategies is new or particular to Latin America, conflicts of interest are of special concern for this region for at least four reasons:

1. The academic environment is, for the most part, not research-oriented and faculty promotions are not necessarily merit-based.
2. Funding is uncertain. Guatemala has an especially low public and private investment in research, so industry funding is more attractive. INCAP used to be funded by the Pan-American Health Organization but now must rely on grants from agencies in the United States and Canada.
3. Latin American countries do not, as standard practice, require researchers (or politicians for that matter) to disclose sources of funding. Countries are at different stages of the epidemiologic transition – the shift from infectious diseases to NCDs as leading causes of death – and several still struggle with the double disease burden of undernutrition and NCDs.

Because the causes of chronic undernutrition are more social and political than nutritional, it serves the purpose of food companies to take the lead in promoting product-based strategies such as RUSFs. Not all countries, however, benefit from RUSF approaches. From the Chilean experience, policies rather than product approaches helped alleviate undernutrition. Even if RUSF products are effective in some instances, the food industry remains the main driver of the worldwide obesity epidemic.

Dealing with food-industry conflicts of interest is a frequent topic of debate among US professional organizations, although there is little consensus about how (if at all) to accept industry funding while maintaining integrity and credibility. This debate should be expanded to include funding agencies receiving grant applications from individuals or organizations paid by food companies or their trade associations. Professional journals also need more serious attention to this debate. Even though they increasingly require disclosure of conflicts of interest, this is only a necessary first step to limit the undue influence of corporations on science and public health. It does not fully solve the problem. Until Latin American researchers and research organizations can find a 'gold standard' to deal with food-industry funding, they must at the very least identify, limit, and manage (or eliminate) the apparent and real conflicts that inevitably arise from this practice.

At a minimum, INCAP should publicly disclose its relationship with cbc/PepsiCo while making it clear that it recognizes sugar-sweetened beverages as a leading cause of obesity and, therefore, supports policies to restrict their marketing and sales. Furthermore, as an institution dealing with conflict of interest INCAP should follow the recommendations of the US Institute of Medicine and establish conflict-of-interest policies that require disclosure and management of both individual and institutional financial ties to industry.¹³ INCAP's board of trustees (or the equivalent governing body) should critically review its financial relationships for conflicts of interest with the organization's primary mission.¹³ Failing to do so sends a message that sugar-sweetened beverage consumption is supported by an important health research organization, a misunderstanding that can have devastating public health consequences for a region already in dire need of evidence-based health practices and policies.



About the Authors

Joaquin Barnoya, MD, MPH, is the Research Director at the Cardiovascular Unit of Guatemala and an Assistant Professor at the Division of Public Health Sciences of the Department of Surgery at Washington University in St. Louis. In Guatemala he is the Director of the Chronic Disease Control Research Fellowship Program. His research on second-hand smoke and the tobacco industry has been instrumental in supporting tobacco control policies in Guatemala and Latin America. Currently he is conducting research on snack food advertising and food labeling in Guatemala.

Marion Nestle, PhD, MPH, is the Paulette Goddard Professor of Nutrition, Food Studies, and Public Health at New York University and the author of several prize-winning books, among them *Food Politics* (2002); *Safe Food* (2003); *What to Eat* (2006); *Why Calories Count* (2012); *Eat, Drink, Vote: An Illustrated Guide to Food Politics* (2013); and *Soda Politics: Taking on Big Soda (and Winning)* in 2015. She blogs almost daily at www.foodpolitics.com and is on Twitter @marionnestle.

References

1. elPeriodico. (2015) cbc co. Unidos contra la desnutricion. *INCAP, cbc y Fundacion Cristiana Shalom Firman Convenio* 23(July): 9.
2. Nutriplus. (2015) Mani+. Guatemala: The shalom foundation and INCAP. <http://www.maniplus.org/welcome/>, accessed 29 July 2015.
3. Institute of Nutrition of Central America and Panama. (2015) INCAP areas of work, <http://incap.int/index.php/en/about-incap/incap-shortly/basic-functions>, accessed 28 July 2015.
4. Singh, G.M. *et al* (2015) Estimated global, regional, and national disease burdens related to sugar-sweetened beverage consumption in 2010. *Circulation*, advance online publication 29(June), doi:10.1161/CIRCULATIONAHA.114.010636.
5. Singh, G.M. *et al* (2015) Global, regional, and national consumption of sugar-sweetened beverages, fruit juices, and milk: A systematic assessment of beverage intake in 187 countries. *PLoS One* 10(8): e0124845.
6. Chacon, V., Letona, P., Villamor, E. and Barnoya, J. (2015) Snack food advertising in stores around public schools in Guatemala. *Critical Public Health* 25(3): 291–298.
7. O'Connor, A. (2015) Coca-Cola funds scientists who shift blame for obesity away from bad diets. *New York Times* 9 August.
8. Nestle, M. (2001) Food company sponsorship of nutrition research and professional activities: A conflict of interest? *Public Health Nutrition* 4(5): 1015–1022.
9. Barnoya, J. and Glantz, S. (2002) Tobacco industry success in preventing regulation of secondhand smoke in Latin America: The 'Latin project'. *Tobacco Control* 11(4): 305–314.
10. Sociedad Latinoamericana de Nutricion. (2015) XVII Congreso Latinoamericano de Nutricion (SLAN), <http://www.slan2015.com/patrocinio.html>, accessed 29 July 2015.



11. Instituto de Nutricion y Tecnologia (INTA). (2015) Nutricion y Vida, <http://nutricionyvida.cl>, accessed 29 July 2015.
12. Duarte, N. (2015) Canada, EEUU y Mexico demandan a Chile ante la OMC por nuevo rotulado nutricional. *La Tercera* 17 July.
13. IOM (Institute of Medicine). (2009) *Conflict of Interest in Medical Research, Education, and Practice*. Washington DC: National Academy Press.

Disclaimer We have no conflicts of interest to declare. JB receives funds from an unrestricted grant from the American Cancer Society and the Foundation for Barnes & Jewish Hospital. MN's salary from New York University supports her research and manuscript preparation. She also earns royalties from books and honoraria from lectures to university and health professional groups about matters relevant to this Viewpoint.