



Food and beverage industries' participation in health scientific events: considerations on conflicts of interest

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ABSTRACT

Several sectors of the industry (pharmaceutical, food, and other) often occupy a prominent position in scientific meetings on health. The aim of this article is to discuss the participation of food and beverage industries (Big Food and Big Soda) in events organized by scientific institutions in health and nutrition, highlighting potential conflicts of interest in such partnerships. As an example, the authors report the case of a Brazilian national event organized by a nutrition scientific association in 2011. Focused on the theme "Evidence-based Nutrition," the event's scientific program was largely influenced by corporate sponsors. For example, a symposium at this congress was organized by a beverage company known worldwide for its sugar-sweetened products and classified as the "diamond sponsor" of the event. While debating the adoption of healthy lifestyles in the current scenario of rising occurrence of obesity, the rationale for health promotion was reduced to providing information that would

motivate rational individual choices, thus ignoring any political, economic, cultural, marketing, and social factors involved in the global process of nutrition transition. The authors conclude that conflicts of interest are present in the participation of food and beverage industries in health scientific events. The industries' strategy attempts to grant legitimacy to the production and marketing of their products through an association with adequate health practices. Health professionals and policy-makers should reflect on such partnerships because their main purpose is to generate profit, not the promotion of public health.

Key words: conflict of interest; food industry; soft drink industry; Brazil.

There is consistent evidence in the literature on the existence of spurious combinations of interests between the scientific and the commercial areas of health and the pharmaceutical, tobacco, and alcohol industries. Historically, these industries have made use of their relationships with scientific institutions, associations, and medical professionals to leverage the marketing of their products through investments in research, honoraria, advisory services, or donations, or by financing scientific events with sponsorships. In addition, these industries have employed many marketing strategies to showcase apparent public health benefits while aiming, in fact, to serve mainly their own economic interests (1, 2).

Scientific events in the health sector are often supported by various sectors of industry that use them as opportunities to reach thousands of professionals and students (3). This practice can result in ethical and political conflicts because private interests may motivate or interfere with evaluation and dissemination of information, thus undermining the integrity of scientific discussion (4).

The debate about partnerships in health science with food and beverage industries is relatively recent, but the practice is well consolidated (5). With a huge and concentrated market power, transnational companies in this sector are present in the academic environment and among health policy-makers worldwide (6). Furthermore, it is well known that fresh and minimally processed foods have been progressively replaced by ultra-processed food, with a clear association with the rising occurrence of obesity. In developed countries, ultra-processed foods have already taken over a substantial proportion of the market. However, in developing countries like Brazil, the consumption of ultra-processed foods represents only 27% of daily caloric intake, with a great potential for growth (7, 8). In the global scenario of nutrition transition,

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partnerships established by food and beverage industries, such those in health scientific events, may therefore represent important strategic marketing actions within the context of political and economic disputes.

The aim of this article is to discuss the participation of food and beverage industries (so-called Big Food and Big Soda) in events organized by scientific institutions in health, highlighting the potential conflicts of interest in such partnerships and the consequences for public health. Toward this end, a so-called “evidence-based” event in nutrition held in Brazil is presented as an example to examine the relationship between sponsors and scientific entities. Conflicts of interest are defined throughout the article as situations in which personal or financial relationships influence professional decisions in ways detrimental to the best interest of clients or the public (9).

“EVIDENCE-BASED” SCIENTIFIC EVENTS: THE INTERFERENCE OF INTERESTS OF THE FOOD AND BEVERAGE INDUSTRIES

The field of nutrition provides some good examples of the influence of the food and beverage industries in health scientific events. The case presented here was a biannual national congress held in Brazil. In 2011, the Brazilian Society of Food and Nutrition (*Sociedade Brasileira de Alimentação e Nutrição*, SBAN) (São Paulo), a scientific entity in the field of nutrition, organized a congress on “evidence-based nutrition” that aimed to “expose how scientific evidence should be determined.” Reasoning that it would not be feasible to hold an event without sponsorships, support from companies was sought during its organization and then categorized according to the invested amounts. A world-renowned corporation and manufacturer, retailer, and marketer of nonalcoholic beverage concentrates and syrups was ranked as a “diamond” sponsor, the highest category of financial contribution, while three other transnational food and beverage companies and two pharmaceutical companies were classified as “gold” sponsors. Four of these companies belonging to the food and beverage branch were responsible for the four satellite symposia held at the event, establishing a structural and direct relationship between sponsorship and inclusion in the scientific program.

The satellite symposia took place at lunchtime or in the evening and included boxed lunches/dinners and “happy hours”⁵ along with presentations on topics of interest to the sponsoring companies, namely: 1) “Strategy for the adoption of healthy lifestyles”; 2) “Understanding the action of calcium and vitamin D on bone health”; 3) “Major food sources of sodium—targets for a strategy to reduce consumption”; and 4) “Soybeans—from allergy and intolerance to a healthy option: an update on childhood diets.”

Various industry sectors are often present at scientific events held in lush exhibition space where some activities are provided along with the scientific

program (3), ensuring public acknowledgments to the sponsors and media for dissemination of trademarks and logos on materials produced for distribution among the attendees (10). In general, food and beverage industries have taken on prominent roles in the organization and facilitation of scientific and professional meetings in health.

While some initiatives have been proposed and/or used by scientific entities to address the ethics of industry participation in these types of events, they have had limited success (11). Possible examples of such attempts would be the strict disclosure of potential conflicts of interest involving the participation of the speakers in a given event, and the inclusion of an Ethics Committee along with the organizing committees with full authority to determine rules for partnerships and regulate activities, awards, and the display of any products or trademarks. Despite these efforts, a scientific program will hardly be objective and impartial when proposed and organized by entities composed of members with extensive conflicts of interest (3) who often invite and accept their own sponsors and favor their participation. An example of industry influence on the content of events was the cancellation of a debate on childhood obesity during the 16th World Congress of Food Science and Technology (August 5–9, 2012, Foz do Iguaçu, Paraná State, Brazil) after the president of the meeting argued that the issue “would cause inconvenience to potential sponsors” (12). Adding citations to identify affiliations with or information from private industry does not mitigate the potential influence of private industry on research findings. Despite mythologized claims of scientific neutrality, health-related concepts can be distorted by the conflicts of interest, regardless of whether references are added to identify private-sector sources and affiliations (13).

Thus, it can be argued that partnerships with entities in the health sector provide legitimacy to practices and products of food and beverage industries. With these partnerships, it is possible to buy credibility, create bonds between brands and positive emotions attributed to the partner organization, and gain loyalty from health professionals who act as opinion leaders. The companies with economic power to pay for spaces in scientific events are literally seeking to establish and increase their market share, according to current market rules (1, 14).

In addition, financial support provided by industries through research funding may influence the study results as well as their publication and dissemination. Occasionally, industries tailor findings from scientific studies to support their own scientific evidence and strengthen their narratives related to health promotion and the well-being of the population (1, 15). Scientific events are therefore often used for the distribution of materials such as theses and executive summaries and the presentation of papers resulting from research funded by industry to disseminate results that could encourage consumption of their products (9, 16).

⁵ Free alcoholic and non-alcoholic drinks and hors d’oeuvres.

THE ROLE OF THE FOOD AND BEVERAGE INDUSTRIES AS “HEALTH PROMOTERS”

As the “diamond” sponsor of the above-mentioned event on nutrition in Brazil, the sugar-sweetened beverage company promoted the following at the satellite symposium: the theme “Adoption of Healthy Lifestyles,” with the slogan “Health and Well-being: Two Words That Are Part of Our History ... and Yours Too.” Even though this activity had already been included in the official program, a special invitation was distributed to event attendees, with information on special attractions such as the distribution of boxed lunches/dinners and raffle giveaways.

The two speakers of this symposium were professionals well known in both academia and the media—one speaker is currently affiliated with his state’s health department and the other is a professor in a public university in Brazil. Both of them openly support, in scientific journals and vehicles of mass communication, partnerships with the private sector, stating that they receive or have received private funding for their own research (17, 18). In general, speakers invited by the food and beverage industries are not just experts but are also opinion leaders able to influence their audience in such events (19).

Despite evidence of the worldwide nutrition transition and the strong association of the consumption of sugar-sweetened beverages, such as soda, with obesity and chronic diseases (7, 20), food and beverage industries attempt to improve their public image and increase political influence in order to block regulations counter to their interests, among other objectives (21). As a result of the scientific evidence, the same company that makes soda has been shifting its production line and its marketing strategies toward products such as bottled mineral water and fruit nectars. To preserve and expand their sales, the aim of this marketing strategy is to link the company’s business image to healthy lifestyles and the prevention of chronic diseases. In addition, using the promotion of healthy lifestyles strategy (e.g., encouraging physical activity as means of maintaining good health), the company simplifies health issues and minimizes the importance of political, economic, marketing, and social elements that influence individual consumer choice (1, 22).

The logic behind the use of the “Health and Well-being” slogan described above is based on the ostensible availability of information that enables individuals to make better rational choices, considering all related risk factors. Adopting a healthier lifestyle based on educationally formed attitudes would therefore be solely the individual’s responsibility, “free” of socioeconomic factors and other environmental determinants. The logical thinking behind this recommendation based only on individual informed choices is devoid of historicity and socially de-contextualized (23).

The narratives about “healthy lifestyles” promoted by food and beverage industries emphasize “the freedom and the ability of individuals to control the events that affect their lives, being thus largely responsible for

their own success or failure” (24). Accordingly, the individual is the only one responsible for the occurrence of obesity, for example, because ostensibly he or she has had access to enough information to avoid such disease. Health becomes therefore a “right to be bought and sold, to be selected or rejected based on individual choices” (24). In this scenario, where individuals are placed in the center of the responsibility for their behavior, the influence of social determinants on health, such as socioeconomic status, is merely peripheral (13). Despite evidence of social determinants of health and disease that are often directly related to a lack of regulation of the food and beverage industries, these companies underscore the individual’s “freedom of choice” in order to obstruct legislative initiatives aimed at regulating the production, marketing, and advertising of their products (1, 21).

ELEMENTS FOR REFLECTION

Although many scientific entities claim to have limited resources and thus require private financial support to meet their organizational goals (25, 26), some scientific events have been fully financed by public institutions and registrations, resulting in relative independence from any industry sectors with conflicts of interest in health (27).

However, some scientific entities consider private funding of their activities as natural or normal and as a result are subject to spurious and clearly conflicting partnerships. In these cases, the organizations often deviate from their stated goals and lose their impartiality, with potential impact on 1) the professional conduct of the organization members responsible for organizing scientific events and 2) the dissemination of appropriate health information and recommendations to the general public (5). Therefore, scientific entities and their organizing committees for events should consider whether their goals are compatible with the objectives of the food and beverage industry. Key questions that should be posed include: 1) “Are there any alternative sources of support that would not generate conflicts of interest in scientific events?”; 2) “What potential interests are driving the participation of food and beverage industries in the events?”; and 3) “Have conflicts of interest emerged in other events or scientific spheres as a result of the participation of the prospective sponsors?”

According to the scientific literature, themes and information disseminated at scientific events are some of the many manifestations of conflicts of interest resulting from private-sector involvement in the health sector. Therefore, a broader debate on the influence of private interests in empirical and theoretical formulations in health and nutrition is needed. Given the current scenario of strong influence from private interests in most societies, the power of the food and beverage industries could extend beyond the scope of scientific events and the dissemination of “evidence” to pressure on the criteria and definitions used in dietary recommendations, health and science professionals’ performance, and proper operation of regulatory agencies,

as well as avoidance of regulation of the production and advertising of their products. Thus far, self-regulation has proved to be an insufficient strategy for regulating these types of partnerships and the product marketing they often entail (28).

Conclusions

Conflicts of interest occur in partnerships between food and beverage industries and scientific entities. The participation of private companies in health and scientific events tends to confer legitimacy to the companies' products and their marketing through the resulting association with adequate health practices. Ignoring conflicts of interest inherent to the participation of food and beverage industries in health scientific events can damage the ethical dissemination of scientific evidence and negatively affect public health. Therefore, it is time to critically discuss this scenario in graduate courses, boards of scientific associations, regulatory agencies, and other contexts to analyze the effects of such practices and rethink strategies to avoid private-sector influence on opinion leaders and practitioners in health. To avoid conflicts of interest of any kind, health professionals should reflect on partnerships with food and beverage industries, given that the main purpose of these industries is to generate profit, not the promotion of public health.

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RESUMEN

Participación de las industrias de la alimentación y las bebidas en acontecimientos científicos sobre temas de salud: consideraciones sobre conflictos de intereses

Diversos sectores de la industria (farmacéutico, alimentario y otros) a menudo ocupan una posición prominente en las reuniones científicas sobre temas de salud. El objetivo de este artículo es tratar sobre la participación de las industrias de la alimentación y las bebidas (*Big Food and Big Soda*) en acontecimientos organizados por instituciones científicas del ámbito de la salud y la nutrición, señalando los potenciales conflictos de intereses que surgen de tales asociaciones. Como ejemplo, los autores comentan sobre el acontecimiento nacional organizado el año 2011 en el Brasil por una asociación científica del ámbito de la nutrición. El programa científico de este acontecimiento, dedicado al tema de "La nutrición basada en datos probatorios", se vio influido en gran parte por sus patrocinadores corporativos. Por ejemplo, un simposio de este congreso fue organizado por una empresa productora de bebidas, conocida a escala mundial por sus productos azucarados y clasificada como "patrocinador diamante" del acontecimiento. Mientras se debatía sobre la adopción de modos de vida saludables en el contexto actual de incremento de los casos de obesidad, el ámbito de promoción de la salud se redujo a suministrar información que incitara a elecciones individuales racionales, sin que se tuvieran en cuenta los factores políticos, económicos, culturales, mercadotécnicos y sociales que el proceso mundial de transición nutricional involucra. Los autores concluyen que los conflictos de intereses existen en la participación de las industrias de la alimentación y las bebidas en acontecimientos científicos sobre temas de salud. La estrategia de las industrias intenta dar legitimidad a la producción y comercialización de sus productos mediante una asociación con prácticas de salud adecuadas. Los profesionales de la salud y las instancias normativas deben reflexionar sobre tales asociaciones, ya que su principal finalidad no es la promoción de la salud pública sino la generación de beneficios.

Palabras clave: conflicto de intereses; industria de alimentos; industria de bebidas gasificadas; Brasil.

REFERENCES

1. Brownell KD, Warner KE. The perils of ignoring history: Big Tobacco played dirty and millions died. How similar is Big Food? *Milbank Q.* 2009; 87(1):259–94.
2. Rothman DJ. Consequences of industry relationships for public health and medicine. *Am J Public Health.* 2012;102(1):55.
3. Ioannidis JP. Are medical conferences useful? And for whom? *JAMA.* 2012;307(12):1257–8.
4. World Association of Medical Editors. Conflict of interest in peer-reviewed medical journals. Winnetka, IL: WAME; c2009 [updated 25 July 2009]. Available from: <http://www.wame.org/about/conflict-of-interest-in-peer-reviewed-medical> Accessed on 23 May 2013.
5. Bodini C, Martino A, McCoy D, Bozorgmehr K, Nascimento D, Giugliani C, et al. How to stop public health conferences becoming trade fairs. *Public Health Nutr.* 2009;12(9):1581–3.
6. PLoS Medicine Editors. PLoS Medicine series on Big Food: the food industry is ripe for scrutiny. *PLoS Med.* 2012;9(6):e1001246.
7. Monteiro CA, Moubarac JC, Cannon G, Ng SW, Popkin B. Ultra-processed products are becoming dominant in the global food system. *Obes Rev.* 2013;14 Suppl 2:21–8.
8. Canella DS, Levy RB, Martins AP, Claro RM, Moubarac JC, Baraldi LG, et al. Ultra-processed food products and obesity in Brazilian households (2008–2009). *PLoS One.* 2014;9(3):e92752.
9. Woteki CE. Ethics opinion: conflicts of interest in presentations and publi-

- cations and dietetics research. *J Am Diet Assoc.* 2006;106(1):27–31.
10. Nestle M. Food company sponsorship of nutrition research and professional activities: a conflict of interest? *Public Health Nutr.* 2001;4(5):1015–22.
 11. Blumenthal D. Doctors and drug companies. *N Engl J Med.* 2004;351(18):1885–90.
 12. Saldaña P, Balmant O. Por patrocínio, evento veta obesidade infantil. São Paulo: Grupo Estado; 2012. Available from: <http://www.estadao.com.br/noticias/impreso,por-patrocinio-evento-veta-obesidade-infantil-,899117,0.htm> Accessed on 23 May 2013.
 13. Barthes R. *Mitologias.* São Paulo: Difusão Europeia do Livro; 1972.
 14. Freedhoff Y, Hébert PC. Partnerships between health organizations and the food industry risk derailing public health nutrition. *CMAJ.* 2011;183(3):291–2.
 15. Bes-Rastrollo M, Schulze MB, Ruiz-Canela M, Martinez-Gonzalez MA. Financial conflicts of interest and reporting bias regarding the association between sugar-sweetened beverages and weight gain: a systematic review of systematic reviews. *PLoS Med.* 2013;10(12):e1001578.
 16. Rowe S, Alexander N, Clydesdale F, Applebaum R, Atkinson S, Black R, et al. Funding food science and nutrition research: financial conflicts and scientific integrity. *Nutr Rev.* 2009;67(5):264–72.
 17. Priore SE, Franceschini SCC, Fisberg M. Consumo de cálcio e vitamina D na infância: resultados do Nutri-Brasil infância (Estudo multicêntrico do consumo alimentar de pré-escolares). Paris: Danone Health Affairs, Saúde & Nutrição, Danone Research Centre Daniel Carasso; 2009. Pp. 1–4.
 18. Matsudo V. The role of partnerships in promoting physical activity: the experience of Agita São Paulo. *Health Place.* 2012;18(1):121–2.
 19. Moynihan R. Key opinion leaders: independent experts or drug representatives in disguise? *BMJ.* 2008;336(7658):1402–3.
 20. Hu FB, Malik VS. Sugar-sweetened beverages and risk of obesity and type 2 diabetes: epidemiologic evidence. *Physiol Behav.* 2010;100(1):47–54.
 21. Gómez L, Jacoby E, Ibarra L, Lucumí D, Hernandez A, Parra D, et al. Sponsorship of physical activity programs by the sweetened beverages industry: public health or public relations? *Rev Saude Publica.* 2011;45(2):423–7.
 22. Yach D, Khan M, Bradley D, Hargrove R, Kehoe S, Mensah G. The role and challenges of the food industry in addressing chronic disease. *Global Health.* 2010;6:10.
 23. Arouca S. O dilema preventivista: contribuição para a compreensão e crítica da Medicina Preventiva. São Paulo: Editora UNESP; 2003. 173 pp. Available from: <http://www.prppg.ufpr.br:8080/saudecoletiva/sites/default/files/processoseletivo2015/politicas/AROUCA,%20Sergio%20-%20O%20dilema%20preventivista.pdf>
 24. Vasconcelos EM. Educação popular e a atenção à saúde da família. São Paulo: Hucitec; 1999. 75 pp.
 25. Tobin DS, Dwyer J, Gussow JD. Cooperative relationships between professional societies and the food industry: opportunities or problems? *Nutr Rev.* 1992;50(10):300–6.
 26. Ruano-Ravina A. Sociedades científicas y su relación económica con la industria. Situación en España. *Med Clin (Barc).* 2012;138(14):614–6.
 27. Castro IR. World Nutrition Rio 2012 [editorial]. *Rev Nutr.* 2011;24(2):205–8.
 28. Grande D. Limiting the influence of pharmaceutical industry gifts on physicians: self-regulation or government intervention? *J Gen Intern Med.* 2010;25(1):79–83.

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