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Balancing the benefits and risks of public–private partnerships to address the global double burden of malnutrition

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Abstract

Objective: Transnational food, beverage and restaurant companies, and their corporate foundations, may be potential collaborators to help address complex public health nutrition challenges. While UN system guidelines are available for private-sector engagement, non-governmental organizations (NGO) have limited guidelines to navigate diverse opportunities and challenges presented by partnering with these companies through public–private partnerships (PPP) to address the global double burden of malnutrition.

Design: We conducted a search of electronic databases, UN system websites and grey literature to identify resources about partnerships used to address the global double burden of malnutrition. A narrative summary provides a synthesis of the interdisciplinary literature identified.

Results: We describe partnership opportunities, benefits and challenges; and tools and approaches to help NGO engage with the private sector to address global public health nutrition challenges. PPP benefits include: raising the visibility of nutrition and health on policy agendas; mobilizing funds and advocating for research; strengthening food-system processes and delivery systems; facilitating technology transfer; and expanding access to medications, vaccines, healthy food and beverage products, and nutrition assistance during humanitarian crises. PPP challenges include: balancing private commercial interests with public health interests; managing conflicts of interest; ensuring that co-branded activities support healthy products and healthy eating environments; complying with ethical codes of conduct; assessing partnership compatibility; and evaluating partnership outcomes.

Conclusions: NGO should adopt a systematic and transparent approach using available tools and processes to maximize benefits and minimize risks of partnering with transnational food, beverage and restaurant companies to effectively target the global double burden of malnutrition.

Transformative systems change is needed to resolve global public health nutrition challenges(1) including the double burden of malnutrition — a worldwide phenomenon representing the coexistence of maternal and child undernutrition (i.e. wasting, stunting and underweight) and micronutrient deficiencies (i.e. iron, vitamin A, iodine and zinc) with child or adult overweight, obesity and non-communicable diseases (NCD) in affected households, communities or populations(2–6).

An estimated 925 million people worldwide are hungry or malnourished(7). Child undernutrition and micronutrient deficiencies cause approximately 8 million deaths in children under 5 years of age, contribute to child and adult morbidity(8,9), and prevent more than 200 million young children from reaching their full developmental potential(10). At the other end of the global malnutrition spectrum, about 43 million pre-school children under 5 years(11) and approximately 155 to 200 million school-aged
children worldwide are overweight or obese. In 2008, an estimated 1.46 billion men and women worldwide were overweight and more than half a billion adults were obese. Two-thirds of the 57 million global deaths were attributed to lifestyle-related NCD, of which 80% were in low- and middle-income countries (14,15).

The double burden of malnutrition will place tremendous pressure on resource-constrained health systems (14,15). An estimated $US 10–12 billion annually is required to scale up thirteen proven nutrition interventions in thirty-six countries to prevent and treat undernutrition (16) and $US 9 billion annually to implement five priority actions to reduce NCD risks globally (14).

**Partnerships addressing global nutrition challenges**

Developing transformative systems change to tackle these global nutrition challenges will require new stakeholder engagement approaches and governance structures that support public- and private-sector participation (11,17). UN system organizations (7,16,18–20) and public health experts (21,22) have encouraged governments, non-governmental organizations (NGO) (23) and civil society organizations (24,25) to collaborate with the private sector using public–private partnerships (PPP) to address complex public health challenges (Table 1).

The WHO defines a PPP as a collaboration between public- and private-sector actors within diverse arrangements that vary according to participants, legal status, governance, management, policy setting, contributions and operational roles to achieve specific outcomes (25). Many PPP are social alliances designed to achieve common goals benefiting society and all partners (26,27). Partnership relationships are defined by engagement level, strategic value of the alliance to each partner’s mission, resource investments and managerial complexity (28).

PPP take place within a context of governments being publicly accountable for protecting and promoting the nutritional health of populations. Since the 1980s, governments have increasingly relied on market-driven solutions to address public health nutrition challenges. This trend has been reinforced by WHO in policy documents emphasizing the global double burden of malnutrition (Fig. 1)(5), including

their corporate foundations, may be potential collaborators to address global hunger and food insecurity (32), infant and early childhood undernutrition and micronutrient deficiencies (30,55,56), and obesity and NCD (27,55).

NGO are important stakeholders to advocate for and implement direct-service programmes reaching disadvantaged populations and protect public health interests by monitoring government and industry actions (28). However, NGO partnerships with global companies have encountered controversy over discordant values, questionable motives, inadequate management of conflicts of interest, endorsement of branded products and marketing strategies, perceived co-option of public health goals by commercial interests, lack of distinction between public- and business-interest NGO, and weak safeguards to protect public health interests (29,36–42). NGO partnerships with companies have attracted negative attention that diminishes public trust for an NGO’s brand (43,44). While UN system guidelines are available for private-sector engagement (18,45,46), NGO have limited guidelines to navigate and proactively manage the diverse opportunities and challenges presented by partnering with these companies.

In the present paper we describe PPP used to address the global double burden of malnutrition; explore special opportunities and challenges of NGO partnering with transnational food, beverage and restaurant companies; and discuss approaches to help NGO balance the benefits and risks of PPP to effectively target the global double burden of malnutrition.

**Methods**

We conducted a search of electronic databases (i.e. Academic Search Complete, Health Source and MEDLINE), UN system organization websites and grey literature to identify resources about partnerships and alliances used to address components of the double burden of malnutrition. The authors were also referred to relevant articles and reports by colleagues. We use a narrative summary to present the synthesized evidence acquired from the interdisciplinary literature representing business, public health, nutrition sciences, public policy, risk analysis and ethical perspectives.

**Results**

PPP are used to tackle health inequalities, alleviate poverty and promote social innovation for health (47,48), expand services for HIV/AIDS, tuberculosis and malaria (49); distribute vaccines and medications (50); mitigate global hunger and food insecurity (51,52,53); and strengthen community disaster response (54). Partnerships are also used to target the causal links and leverage points for life-cycle susceptibilities associated with the global double burden of malnutrition (Fig. 1)(5), including

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* The terms NGO and CSO (civil society organization) are often used interchangeably to represent legally constituted entities that are independent from government and the private sector, representing registered charities, community groups, faith-based organizations, professional associations, industry or business groups, trade unions, coalitions or advocacy groups. Table 1 defines key terms.
undernutrition and micronutrient deficiencies targeted by the UN Millennium Development Goals (MDG)\(^{20,49,54–57}\), overweight and obesity targeted by WHO’s Global Strategy on Diet, Physical Activity and Health\(^{31}\); and chronic diseases targeted by WHO’s Global Strategy to Prevent and Control Noncommunicable Diseases\(^{50}\).

Evaluations of PPP benefits suggest they can raise the visibility of nutrition and health on policy agendas; mobilize funds and advocate for research; strengthen health-policy and food-system processes and delivery systems; facilitate technology transfer; establish treatment protocol standards; expand target populations’ access to free or reduced-cost medications, vaccines, healthy food and beverage products; and distribute ‘essential packages’ of nutrition assistance during humanitarian crises\(^{50,99–61}\).

### Features of effective partnerships

Donors, governments, transnational companies, corporate and private foundations, NGO and academic institutions can address global malnutrition through diverse interactions, institutional commitments, joint research efforts and multi-sectoral programmes. PPP imply mutuality and equality between partners. Partnerships can be described on a continuum ranging from networking to coordination, cooperation and collaboration\(^{62}\). Austin\(^{26}\) describes three types of partnerships – philanthropic, transactional and transformative, discussed below and in Tables 2 and 3.

Partnerships may generate tension among the institutional cultures of government, industry and NGO and involve risk taking to produce meaningful change at scale\(^{63}\). Private-sector partners are often independent of...
the political mandates of national, state or local governments and they may mobilize more specific expertise and greater capital more efficiently and cost-effectively than public-sector partners. However, private-sector solutions are driven by commercial imperatives to generate profits, can produce inequities and may not reach vulnerable groups. Indeed, corporations have no intrinsic motivation to address existing health or social inequities that are priorities for governments and civil society. These are important tensions to acknowledge when considering a PPP approach.

Effective partnerships develop trusting relationships to share information, technology and promote innovation; leverage financial or in-kind resources, expertise, influence, networks and distribution systems; and manage legitimacy and the collaborative structure to ensure that organizational assets are aligned with common missions, goals and objectives to reach populations with larger-scale activities than each partner can deliver on its own\(^{26,27,53,64–67}\).

**Philanthropic partnerships**

Philanthropic partnerships involve limited engagement, reciprocity and activities that are peripherally important to each partner’s mission. A philanthropic partnership occurs when a company gives a charitable financial or food donation to an NGO either through an anonymous or acknowledged donation accompanied by media coverage for each partner\(^ {51,59,68,69}\).

**Transactional partnerships**

Transactional partnerships build mutually beneficial relationships to advance each partner’s agenda through compatibility among organizational values, missions and goals\(^ {20}\). These partnerships involve higher levels of interaction and resource investments compared with philanthropic partnerships. Table 1 defines terms (i.e. contributions-in-kind, co-branded sponsorships and cause marketing)\(^ {70–72}\) that are revenue-raising instruments used by NGO to implement programmes. While transactional partnerships may enhance a company’s brand reputation, they can adversely affect an NGO’s reputation\(^ {43,44,59}\). Examples of transactional partnerships\(^ {39,73–82}\) are provided in Tables 2 and 3.

**Transformational partnerships**

Transformational partnerships involve the highest level of engagement, resource investment, managerial complexity and relationships built over time to mutually influence the institutional cultures and practices of each partner. Transformational partnerships involve many partners to stimulate large-scale social or policy changes\(^ {51} \) to address the double burden of malnutrition (Fig. 1). Examples of aspiring transformational partnerships\(^ {54,56,83,84}\) are discussed below and in Tables 2 and 3. Thereafter, we present certain conceptual, practical and ethical challenges.

**Maternal and child health integrated programmes to address undernutrition**

In 2008, the US government funded the Maternal Child Health Integrated Program (MCHIP) to accelerate progress towards MDG 4 (reduce infant and child mortality) and MDG 5 (improve maternal health) in thirty priority countries\(^ {57}\). MCHIP uses partnerships with governments...
Table 2: Examples of public-private partnerships that address global nutrition challenges (adapted from references 26, 54, 55, 59, 68-69, 73–82 and 85)

<table>
<thead>
<tr>
<th>Nature of the relationship</th>
<th>Philanthropic</th>
<th>Transactional</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of engagement</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Importance to each partner’s mission</td>
<td>Peripheral</td>
<td>More important</td>
<td>Central</td>
</tr>
<tr>
<td>Resource investment</td>
<td>Small</td>
<td>Medium</td>
<td>Substantial</td>
</tr>
<tr>
<td>Scope of activities</td>
<td>Narrow</td>
<td>Focused</td>
<td>Broad</td>
</tr>
<tr>
<td>Level of interaction</td>
<td>Infrequent</td>
<td>Moderate</td>
<td>Intensive</td>
</tr>
<tr>
<td>Strategic value to each partner</td>
<td>Minor</td>
<td>Moderate</td>
<td>Highly complex</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More salient</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of partnership</th>
<th>Philanthropic</th>
<th>Transactional</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Charitable financial donations that enhance each partner’s brand image</td>
<td>Co-branded sponsorships</td>
<td>Joint, multi-institutional research initiatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Large-scale national or global food-fortification programmes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Large-scale humanitarian relief and emergency nutrition programmes in response to natural disasters and civic conflicts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Healthy-lifestyles programmes to prevent obesity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MCHIP partners with governments and NGO (i.e. Jhpiego, Save the Children and John Snow International) to promote integrated maternal, infant and young child nutrition in 30 priority countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GAIN partners with NGO, governments and many food and beverage companies to address micronutrient deficiencies through national and global food-fortification programmes in 25 countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Multi-sectoral government agencies, NGO and several companies partner to implement specific humanitarian-relief programmes that address the nutrition needs of malnourished populations resulting from conflicts and natural disasters (i.e. Indonesian tsunami and Haitian earthquake)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ten food and beverage companies partner with NGOs to support global healthy-lifestyles programmes to prevent obesity and NCD through the IFBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The HWCF is a US industry coalition of 170 food, beverage and food retailer companies that partners with BINGO (i.e. industry trade associations), PINGO (i.e. direct service and health promotion organizations), private foundations (i.e. Partnership for a Healthier America) and the federal government (Let’s Move!) to implement healthy-lifestyle interventions and programmes in the marketplace, at worksites and schools to prevent obesity by promoting energy balance and a healthy weight</td>
</tr>
</tbody>
</table>

Examples:

- Yum! Brands Inc. and Burger King donate funding or food to NGO to implement programmes that address domestic or global hunger and emergency relief.
- PepsiCo and Kraft Foods partner with Save the Children to address child malnutrition in Asia.
- PepsiCo partners with the WFP and The Coca-Cola Company partners with the International Federation of the Red Cross and Red Crescent Societies to support disaster response and preparedness for global humanitarian relief.
- Yum! Brands Inc. partners with the WFP to provide food to people affected by disasters through the company’s annual World Hunger Relief Campaign.
- McDonald’s Corporation sponsors Ronald McDonald houses for parents of children who are hospitalized.
- Food, beverage and restaurant companies sponsor athletic events including the Olympics and the World Cup.
- Cadbury partnered with UNICEF Canada to sell co-branded chocolate and candy to raise funds supporting children’s education in Africa.

NGO, non-governmental organization; WFP, World Food Programme; MCHIP, Maternal Child Health Integrated Program; GAIN, Global Alliance for Improved Nutrition; NCD, non-communicable diseases; IFBA, International Food & Beverage Alliance; HWCF, Healthy Weight Commitment Foundation; BINGO, business-interest non-governmental organization; PINGO, public-interest non-governmental organization.
Table 3 Profiles of transnational food, beverage and restaurant companies that use public–private partnerships to address global nutrition challenges (adapted from references 56, 83–84, 87, 89, 90, 134–148)

<table>
<thead>
<tr>
<th>Company (source)</th>
<th>Headquarters (city, US state/country)</th>
<th>Estimated annual revenue* in SUS billions (year)</th>
<th>No. of countries where company supports commercial enterprises</th>
<th>Supports hunger alleviation, food security or microenterprise initiatives or new business development</th>
<th>GAIN Business Alliance member(56,87)</th>
<th>IFBA member(83,89)</th>
<th>HWCF member(84,89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burger King (2009)(134)</td>
<td>Miami, Florida</td>
<td>2-5 (2009)</td>
<td>74</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Cargill (2010)(135)</td>
<td>Minnetonka, Minnesota</td>
<td>108 (2010)</td>
<td>66</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>General Mills (2011)(137)</td>
<td>Minneapolis, Minnesota</td>
<td>16 (2010)</td>
<td>100</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Heinz (2009)(138)</td>
<td>Pittsburgh, Pennsylvania</td>
<td>10 (2009)</td>
<td>50</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>McDonald's Corporation (2010)(142,143)</td>
<td>Oak Brook, Illinois</td>
<td>24 (2010)</td>
<td>100</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>The Coca-Cola Company (2010)(146)</td>
<td>Atlanta, Georgia</td>
<td>32 (2009)</td>
<td>200</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Yum! Brands (2009)(149)</td>
<td>Louisville, Kentucky</td>
<td>10-8 (2009)</td>
<td>110</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

GAIN, Global Alliance for Improved Nutrition; IFBA, International Food & Beverage Alliance; HWCF, Healthy Weight Commitment Foundation.

*Estimated annual revenue represents income that a company receives from its normal business activities from the sale of goods and services to customers. Revenue figures are derived from each company’s annual or corporate social responsibility report and/or website.
Public–private partnerships and global malnutrition

and NGO to implement programmes at scale to improve maternal and child nutrition and health\(^{(57,85)}\). In 2011, a global PPP, Saving Lives at Birth, was launched by the US government, private funders, Grand Challenges Canada and the World Bank\(^{(86)}\).

Evaluations of child survival programmes suggest that countries achieve the greatest impact by developing strategic PPP supporting mutual programme objectives; responding to each country’s specific cultural factors; leveraging each partner’s technical expertise and resources to meet clear objectives; and implementing high-impact interventions through scaled-up programmes for broad population coverage\(^{(57)}\).

Global Alliance for Improved Nutrition to address micronutrient deficiencies

Global Alliance for Improved Nutrition (GAIN) is an international alliance that addresses poor health and malnutrition among vulnerable groups by improving their diet quality\(^{(55,56)}\). GAIN is the major convening vehicle for governments, international NGO and private-sector stakeholders to promote food fortification. GAIN reports ‘scaling up 36 large collaborations in 25 countries since 2002 to reach 400 million people with nutritionally enhanced products’\(^{(87)}\). GAIN aspires to mobilize US 700 million of private-sector investment through a Business Alliance\(^{(55,56)}\). GAIN supports partnerships with global food and beverage companies to stimulate market-based solutions that address malnutrition, produce commercial benefits for companies, and encourage economic development in low- and middle-income countries\(^{(55,56,87)}\).

Evaluations of food fortification programmes in low-income countries suggest that cost-effective and sustainable results are feasible when there is close collaboration among the public sector to improve population health; the private sector, with expertise in food production, technology, marketing communications and consumer reach; and NGO that deliver programmes and services to vulnerable groups\(^{(88)}\). Independent evaluations of GAIN’s Business Alliance are needed to understand the benefits and challenges of using a PPP approach to address micronutrient malnutrition.

International Food & Beverage Alliance and the Healthy Weight Commitment Foundation to prevent obesity

The WHO Global Strategies\(^{(51,58)}\) acknowledge that private-sector partners should play a central role in promoting healthy food and eating environments to prevent NCD. In 2008, eight leading food and beverage companies founded the International Food & Beverage Alliance (IFBA) in response to rising obesity rates\(^{(83)}\). In 2009, ten IFBA members with a combined annual revenues of US$ 350 billion\(^{(55)}\) shared a report with WHO\(^{(89)}\), suggesting progress had been made to: (i) reformulate and develop new products to improve diets; (ii) provide clear nutrition information to consumers; (iii) extend responsible advertising and marketing pledges to children globally; (iv) raise awareness about balanced diets and increasing physical activity; and (v) support partnerships to promote healthy lifestyles. Independent evaluations have not confirmed IFBA’s self-reported progress.

In 2009, the Healthy Weight Commitment Foundation (HWCF) was formed in response to the US obesity epidemic as an industry coalition comprised of food, beverage and food retail companies that partners with business-interest NGO (i.e. industry trade associations) and public-interest NGO. The HWCF partners have pledged to make measurable changes to reformulate and expand healthier products in the marketplace, to support worksite wellness, and to promote energy balance education to children in schools\(^{(84,90)}\). In 2010, the HWCF members partnered with private foundations and government through First Lady Michelle Obama’s Let’s Move! obesity prevention campaign\(^{(91)}\). An independent evaluation is underway by academic groups, funded by the Robert Wood Johnson Foundation, to assess the coalition’s progress in making changes in the three settings.

Assessing partnership risks and challenges

All stakeholders involved in PPP are confronted with dilemmas that threaten their goals. PPP evaluations have identified risks that can undermine the appropriateness, effectiveness and credibility of alliances due to: displacing donor priorities with those of recipient countries; excluding certain stakeholders from decision making; neglecting to effectively address conflicts of interest and biases; raising insufficient resources to implement partnership activities and sustain alliances; and inadequately managing human resources\(^{(61,92)}\).

Six challenges discussed below must be addressed to reduce risks to all partners: (i) balancing private commercial interests with public health interests; (ii) managing conflicts of interest and biases; (iii) ensuring that co-branded activities support healthy products and healthy eating environments; (iv) complying with ethical codes of conduct; (v) undertaking due diligence to assess partnership compatibility; and (vi) monitoring and evaluating partnership outcomes.

Balancing commercial and public health interests

Collaborative partnerships provide companies with commercial advantages, yet private commercial interests often conflict with public interests\(^{(92)}\) and balancing win–loss outcomes is tough. A win–win outcome may be possible to address global food insecurity\(^{(32,52)}\), develop inexpensive and high-quality commercial, complementary food products and integrated marketing communications campaigns that address young child undernutrition in emerging markets\(^{(33,93)}\); drive product innovation for new consumers\(^{(66)}\); build community disaster resilience\(^{(53)}\); improve the systematic delivery of humanitarian assistance\(^{(59)}\);
and provide comprehensive integrated packages of nutrition interventions to reach malnourished populations during complex emergencies (60). However, even these partnerships can have unintended consequences and not produce benefits for every partner or target population (20,36). It is arguable whether markets can deliver both short-term financial returns for companies and long-term social, economic and health benefits to address the spectrum of global malnutrition challenges (20).

Current agribusiness-sector models are more comparable with producing and distributing food as a response to hunger and food insecurity than reducing portion sizes proportionately affected by obesity and NCD in emerging markets (36,40,95). Risks arise when NGO facilitate companies’ access to consumers and influential groups and when partners fail to monitor and evaluate partnership processes and outcomes.

PPP are influenced by global and national government structures. The Codex Alimentarius Commission uses international standards and strong intergovernmental oversight to protect consumer health by promoting global food safety and ensuring fair food trade practices (96). Global PPP may identify advantages within the regulatory environment to enhance outcomes, such as providing standards to foster a competitive environment to move industry practices and entire food or beverage product portfolios towards desirable targets to achieve population health benefits (26,97). Examples include the World Action on Salt & Health, a voluntary global initiative that engages governments, industry and NGO to implement strategies to reduce the salt content of processed foods and Na consumption in populations (98), and the Flour Fortification Initiative (99), an international network of public and private organizations in the specific context of it encouraging government-regulated and voluntary quality-control systems for Fe fortification of wheat flour to benefit populations in certain countries (100).

Partners must develop mutual trust and open communication to assess where profit-driven activities and public health benefits overlap or conflict. NGO and private-sector companies could dedicate staff and sufficient resources to nurture and sustain partnerships that balance social and health investments with business profits (26). Partners must also anticipate unintended consequences and collaborate to improve the nutrition and health outcomes of targeted populations.

Managing conflicts of interest and biases

NGO and partnering food, beverage and restaurant companies should seek to effectively manage conflicts of interest and biases to establish trustworthy relationships, allay public concerns about compromised partner integrity, reduce the risks to each partner’s reputation and minimize unintended consequences for programmes or targeted populations.

Conflicts of interest may arise when NGO staff receive personal gifts or in-kind resources from companies to influence decision making, research or public positions (92,101–104). Further, it is arguable that NGO may be susceptible to ‘white hat bias’ (105), a tendency to disregard facts and distort the truth to serve righteous ends.

Private-sector partners face challenges arising from managing self-dealing conflict of interest. A company’s commercial activities may benefit from research generated through a partnership funded by the company’s foundation, which may be legally required to act at arms length. Public trust and credibility may be diminished due to the apparent duplicity of private foundations’ investments. For example, the Bill & Melinda Gates Foundation has generously supported programmes targeting global health and undernutrition. At the same time, the Foundation has generated a portion of its wealth through direct investments in companies that produce and market products linked to rising obesity and NCD rates, including McDonald’s Corporation and The Coca-Cola Company, and indirect investments in Coca-Cola, Kraft Foods and Nestlé through Berkshire Hathaway (92).

These considerations do not necessarily preclude PPP but should rather be viewed as opportunities to be addressed to strengthen partnerships. Private-sector partners would be better able to address conflicts of interest by disclosing and improving their accountability for labour, environmental and health-related policies, practices and performance. NGO must be able to independently criticize a private-sector entity for issues unrelated to the partnership to fulfil an important watchdog function to hold governments and industry accountable for public health commitments by exposing non-compliance and inaction (24,29).

Guidelines have been proposed to minimize conflicts of interest and biases related to industry-sponsored research with commercial applications (103). Organizations could make partnership terms, outcomes and benefits more transparent and explicit through clearly written contracts; incorporate guidelines for managing conflicts of interest into governing bodies’ bylaws; and widely promote written policies and an institutionalized process to standardize expectations for employees to disclose financial and non-financial industry relationships (92,101,104).

Public health professionals and NGO staff who receive industry funding could reject payment or withdraw from institutional decision making (92,101), decline to give industry-sponsored presentations, avoid ghost-writing publications,
Table 4 A tool to assess partnership compatibility between non-governmental organizations (NGO) and transnational food, beverage and restaurant companies to address global nutrition challenges (adapted from reference 27)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Assess partnership compatibility</th>
<th>Potential benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>Is involvement in a partnership or social alliance expressing the company’s mission or vision?</td>
<td>Shared priorities</td>
</tr>
<tr>
<td>Resources</td>
<td>Is the cause addressed by the partnership part of the NGO’s core mission?</td>
<td>Dependence and differential advantage</td>
</tr>
<tr>
<td>Management</td>
<td>Does each partner have resources that the other needs and would have difficulty accessing themselves?</td>
<td>Managerial engagement and support</td>
</tr>
<tr>
<td>Workforce</td>
<td>Are resources vital to create an advantage for each partner?</td>
<td>Enhancing organizational identification</td>
</tr>
<tr>
<td>Target market</td>
<td>Do the leaders of the company and NGO have personal chemistry?</td>
<td>Providing volunteer support</td>
</tr>
<tr>
<td>Product or cause</td>
<td>Is there a fit between the company’s workforce and the cause such that it has or will develop an affinity for the cause?</td>
<td>Providing volunteer support</td>
</tr>
<tr>
<td>Cultural fit and values</td>
<td>Is the compatible positioning between the company and the NGO based on strategic similarity?</td>
<td>Creating value through co-branding</td>
</tr>
<tr>
<td>Cycle</td>
<td>Can the NGO’s constituents influence the company’s brand or products?</td>
<td>Ease of implementation and management</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Are the business cycles of the company and fundraising cycles of the NGO partner aligned?</td>
<td>Timing congruence</td>
</tr>
<tr>
<td></td>
<td>Have partners specified how they will measure the effectiveness of the alliance?</td>
<td>Shared perception of success</td>
</tr>
<tr>
<td></td>
<td>Can partners support each other’s primary measure of success?</td>
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and turn down consulting arrangements unless governed by clearly written contracts\(^{104,100}\).

**Using co-branded activities to support healthy products and healthful diets**

Co-branding is apparent in all types of partnerships. NGO should develop criteria and systems for accepting company donations and contributions in-kind that are appropriate to their mission, adhere to standard healthy nutritional guidelines, support local sustainable markets and food systems, align with desirable items distributed through their programmes, and require minimal handling or transportation costs\(^{79,72}\).

NGO may be attracted by food and beverage company sponsorship and cause marketing to secure unrestricted funds to support professional societies and conferences\(^{42,101,107}\), nutrition research\(^{103,108}\), programmes\(^{109}\) and sporting events\(^{110}\). Sponsorship is a commercial activity to promote a company’s brand, not a philanthropic gift\(^{70,71}\). Risks arise when partners either fail to effectively manage conflicts of interest or engage in duplicative activities such as concurrent lobbying of legislators to support issues that undermine public health goals\(^{111,112}\).

One approach to facilitate decision making about co-sponsoring events is to appoint a brand advisory committee to use a risk-assessment framework with specific criteria to assess the brand, nutrient and event profiles; company marketing and distribution practices; and contextual relevance\(^{113}\). Obtaining accurate proprietary information about a company’s marketing and distribution practices is an ongoing challenge.

Public perceptions about global food, beverage and restaurant company sponsorship favour branded products that have healthy nutritional profiles compared with products with less healthy profiles (i.e. hamburgers, pizza, chocolate bars, salty snacks and sweetened beverages)\(^{110}\). NGO and other partners could develop clear criteria about co-sponsored arrangements and align all integrated marketing communications with sponsored products or events to consistently promote public health goals\(^{110}\).

**Complying with ethical codes of conduct**

Codes of conduct raise and maintain public awareness about specific issues, build public pressure to change practices that are detrimental to society, and encourage debate about appropriate standards for corporate conduct\(^{114}\). Most global food and beverage companies have generally complied with legally binding treaties, such as the UN Convention on the Rights of the Child\(^{115}\), and voluntary codes of conduct, such as industry self-regulatory programmes to advertise or market responsibly to children\(^{116}\) and the International Code of Marketing of Breast-Milk Substitutes\(^{117}\). In the latter case, there are notable exceptions documented by independent groups when certain companies’ marketing practices continuously violate the Code\(^{118-120}\) while industry-supported,
third-party verification mechanisms confirm company compliance. These issues cause tension, erode public trust and respect for partners, and diminish the effect of voluntary codes.

Several company pledges have been deemed inadequate to protect children's health and well-being. Many companies' current marketing practices promote unhealthy products that undermine children's right to a healthy diet. Independent evaluations have documented questionable marketing practices of global companies participating in GAIN, IFBA and HWCF (Table 3) that have not yet been adequately addressed by industry self-regulatory programmes or individual companies, or dealt with in a coordinated way among public-interest NGO. Companies have used their own nutrition guidelines for product reformulation and varied nutrition standards to define healthy products; applied more lenient nutrition criteria for products they manufacture; varied self-regulatory marketing pledges between countries and regions; lacked clear policies on marketing to children and adolescents; excluded packaging, point-of-sale materials, in-school marketing, contributions in-kind and new media from pledges; and made no commitments to stop marketing unhealthy products to children through their parents.

Shared principles have been proposed for stakeholders to promote infant and young child nutrition and reduce the commercial promotion of unhealthy products to children and adolescents. Industry self-regulatory programmes are likely to be effective when they establish and widely promote transparent regulatory standards with input from diverse stakeholders, develop meaningful objectives and benchmarks, institute a mandatory public reporting mechanism to show compliance with voluntary codes, and allow evaluations to be conducted by independent groups. The timing is crucial for all stakeholders to implement, monitor and evaluate these principles given WHO's global resolution recommending that Member States substantially reduce marketing...
practices that promote unhealthy food and non-alcoholic beverage products to children and adolescents⁴.⁵.

**Conducting due diligence to assess partnership compatibility and evaluate outcomes**

Frameworks and tools are available, including compatibility assessment criteria (Table 4) and a benefit-risk decision-making pathway (Fig. 2), to help NGO conduct due diligence to select appropriate partnerships for collaborations that promote synergy, transparent decision making and accountability for specific outcomes⁶.⁷.⁸.

NGO may already have developed corporate social responsibility profiling, partnership criteria and institutionalized guidelines governing how they partner with companies that manufacture socially unacceptable products (i.e. weapons, tobacco) or engage in egregious practices (i.e. child exploitation, gambling and extractive mining). NGO should also develop partnership profiling, guidelines and criteria to evaluate the totality of partnership activities with transnational food, beverage and restaurant companies, including their compliance with voluntary codes⁹.¹⁰ and ensure that PPP are harmonized with country strategies, institutions and processes.

**Conclusions**

The current paper describes partnership opportunities, benefits and challenges; and tools and approaches to help NGO engage with the private sector to effectively address global nutrition challenges. While partnerships may present certain benefits, not all PPP will produce benefits for every partner or target population. PPP challenges include: balancing private commercial interests with public health interests; managing conflicts of interest and biases; ensuring that co-branded activities support healthy products and healthy eating environments; complying with ethical codes of conduct; conducting due diligence; and evaluating partnership compatibility and outcomes. NGO should adopt a systematic and transparent approach using available tools and processes to maximize benefits and minimize risks related to partnering with transnational food, beverage and restaurant companies to effectively target the global double burden of malnutrition.

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**References**


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516 VI Kraak

et al.

95. Taylor FC, Satija A, Khurana S


developing world.


2010).


83. International Food & Beverage Alliance (2011) Collaborating,


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